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The Changing Landscape of Adult Learning Theory

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Since the founding of the field of adult education, the task of explaining how adult learners learn has been a major one on the part of both researchers and practitioners. Adult learning, after all, is the glue that holds together an otherwise widely disparate field, a field that ranges from adult basic education (ABE) to human resource development, and from educational gerontology to continuing professional education. The variety of settings in which adult education occurs, the range of curricula, and the diversity of the students have caused the field to be a sprawling—some would say incoherent—entity, united in the one common goal of facilitating adult learning. After some 80 years of study, we have no single answer, no one theory or model of adult learning. What we have instead is a colorful mosaic of theories, models, sets of principles, and explanations that combined create the knowledge base of adult learning. At the center of these theories and models is the adult engaging in formal and informal learning activities that address some perceived need or interest. Whether enrolled in an ABE class, participating in a management training session at work, or learning to trace his or her family history, the adult is engaged in learning. The more we know about the identity of the learner, the context of this learning, and the learning process itself, the better able we are to design effective learning experiences.

The development of this knowledge base can be divided into three periods. Early research on adult learning focused on answering the question of whether adults could learn. By midcentury, adult educators became concerned with the question of how adult learning could be differentiated from the way in which children learn. Finally, since the mid-1980s, adult learning theory has expanded to incorporate several new approaches from disciplines outside the field of adult education. The contributions of each of these periods make up the current landscape of adult learning theory.

FOUNDATIONS:
CAN ADULTS LEARN?

From anecdotal evidence, philosophical musings, and storied narratives, we have known for centuries that adults learn as part of their daily lives. However, human learning was not studied systematically by behavioral scientists in controlled settings until the early decades of the 20th century. Also, perhaps because learning had by then become associated with schooling, the assumption that adults could learn became something to be questioned, tested, and documented. In *Adult Learning* (Thorndike, Bregman, Tilton, & Woodyard, 1928), the first book to report the results of research on this topic, the authors claimed that "teachers of adults of age 25 to 45 should expect them to learn at nearly the same rate" (p. 178) as 20-year-olds. Thorndike and others approached adult learning from a behavioral psychological perspective, testing learners of all ages under timed conditions on various learning and memory tasks.

Because much of this early research pitted older adults against young people under timed conditions, it appeared that as one aged, the ability to learn declined. It was later pointed out that adult test scores were related to previous education and skills, not to age per se, and that when time pressure was removed, adults up to age 70 did as well as younger adults (Lorge, 1944, 1947).

Intelligence testing was another major focus of this early research. As with learning tasks, older adults did not score as well as younger adults, who in turn did not do as well as young students. The introduction of more sophisticated research designs combined with multifactor models of intelligence challenged the notion that intelligence necessarily declined with age. Rather, it appeared that some aspects of intelligence declined with age, whereas others increased, resulting in a fairly stable composite mea-

sure of intelligence throughout adulthood (Schaie & Willis, 1986). Schaie (1996) noted that the way intelligence has been studied involves "a natural hierarchy . . . leading from information processing, through the products measured in tests of intelligence, to practical and everyday intelligence" (p. 266). Currently, multifactor models are thought to present a more accurate picture of intelligence. The most prominent are Cattell's (1963) theory of fluid and crystallized intelligence, Guilford's (1967) structure of intellect, Gardner's (1993) theory of multiple intelligences, and Sternberg's (1996) work on practical intelligence.

Other aspects of human learning, such as problem solving, information processing, and memory, have engaged educational psychologists, gerontologists, and cognitive psychologists since the early decades of the 20th century. If adults are included in this research, investigators tend to frame the research in terms of how advancing age affects the learning activity (Bee, 2000). Because much of this research has been conducted in laboratories and other artificial settings, it is difficult to make generalizations from it or to apply it to real-life situations. Furthermore, deficits and declines are often shown to be functions of noncognitive factors, such as level of education, training, health, and speed of response (Merriam & Caffarella, 1999).

Another stream of research begun in the early decades of the 20th century that continues to this day has focused less on whether adults could learn and more on the learning process itself. Specifically, cognitive development—that is, how one's cognitive structure changes with age—was investigated first by Piaget. Piaget's (1966) stages of cognitive development became the foundation for other models, some of which deal more explicitly with adults. Perry (1981), for example, working with data on young adult college students, proposed nine positions (rather than stages) of development that move from relatively simple thinking patterns to highly complex ways of perceiving and evaluating knowledge. Drawing from Perry and others, Belenky, Clinchy, Goldberger, and Tarule (1986) grouped women's ways of knowing into five major categories, ranging from silence, in which women are passive, mindless, and voiceless, to constructed knowledge, in which women view knowledge as contextual and themselves as creators of knowledge, thus having both a mind and voice. Kegan (1994) argued that our thinking must continue to evolve through five levels of consciousness to navigate "the mental demands of modern life." Proponents of yet another model suggest that mature thought is a dialectic process entailing the ability to accept inherent contradictions and ambiguities (Basseches, 1984; Riegel, 1973). Finally, Sternberg (1990),

among others, posited that wisdom, though culturally and contextually bound, is the epitome of cognitive development.

Implicit in the foundational work on intelligence, information processing, memory, and cognitive development was the question of whether adults could learn. And, depending on how learning was measured, it was discovered that they could learn as well as young people. Most of the research on these topics was—and still is—behaviorist in design, often placing adults in the same test conditions as children. More recently, however, these same topics have been investigated from a perspective that takes the adult's life situation, life experiences, and social and cultural influences into consideration. Even the investigation of wisdom, considered by many to be the pinnacle of cognitive development and the culmination of a lifetime of learning, is being studied from a sociocultural perspective (Sternberg, 1990).

THE DEVELOPMENT OF ADULT LEARNING THEORY

Until about the 1950s, adult educators relied on research in psychology and educational psychology for an understanding of adult learning. But as part of the drive to professionalize the field, adult educators recognized the need to have their own unique knowledge base. Thus, a second period in the development of adult learning theory can be identified. In particular, it became important to differentiate the nature of adult learning and adult education from learning in childhood and from school-based education. By midcentury, attempts were being made to develop models, principles, and theories to explain adult learning as uniquely adult, needing its own instructional methods and strategies. Three major contributions—andragogy, self-directed learning, and transformational learning—form the cornerstones of adult learning theory today.

Andragogy

Andragogy is probably the best-known theory of adult learning both within and outside the field of adult education. Proposed by Knowles in 1968 as "a new label and a new technology" (p. 351) by which to distinguish adult learning from preadult schooling, andragogy became a rallying point for adult educators wanting to distinguish their field from that of education in general. This new "art and science of helping adults

learn" (Knowles, 1980, p. 43) was based on five assumptions about the adult learner. An adult learner is someone who (a) has an independent self-concept and who can direct his or her own learning, (b) has accumulated a reservoir of life experiences that is a rich resource for learning, (c) has learning needs closely related to changing social roles, (d) is problem centered and interested in the immediate application of knowledge, and (e) is motivated to learn by internal rather than external factors. Working from these assumptions, Knowles (1980) proposed a program-planning model wherein students and facilitators jointly design, implement, and evaluate the educational experience. Knowles and Associates (1984) reported on what was by then the widespread appeal of andragogy, giving accounts of its use in diverse settings, ranging from General Electric and Lloyds Bank to the Archdiocese of Detroit to colleges and universities, continuing professional education, adult religious education, and ABE.

Much writing, debate, and discussion ensued about the validity of andragogy as a theory of adult learning. Davenport and Davenport (1985, p. 157) pointed out that andragogy has been variously classified "as a theory of adult education, theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of assumptions." Hartree (1984) questioned whether there was a theory at all, suggesting that perhaps these were just principles of good practice, or descriptions of "what the adult learner *should* be like" (p. 205). Knowles (1989) stated that andragogy is less a theory than "a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory" (p. 112).

Andragogy has also been challenged on the basis of whether its assumptions are true only of adult learners. Some adults are not particularly self-directed, for example, and rely heavily on the teacher for structure and guidance; conversely, some children exhibit independence and self-direction in their learning. Adults and children can be internally or externally motivated to learn. Even the obvious difference—that adults have more life experience—does not necessarily translate into the learning situation. Knowles (1980) conceded that andragogy and pedagogy would be better thought of as poles on a continuum rather than opposing strategies and that each approach had value for both children and adults, depending on the situation.

Recent discussions in the literature on andragogy have centered on its philosophical underpinnings and usage worldwide, as well as on its lack of attention to the context in which learning takes place. For example, the term *andragogy* is widely used in eastern and central European countries

to mean what British and Americans broadly refer to as adult education (Draper, 1998). Knowles' (1980) theory has come under the most severe attack for its emphasis on the individual learner as free, autonomous, and in control of his or her learning. There is no acknowledgment of the context in which learning takes place; a person's history, culture, and surrounding social institutions and structures define the nature of the learning transaction. As Grace (1996) pointed out, Knowles never considered "the organizational and social impediments to adult learning; he never painted the 'big picture.' He chose the mechanistic over the meaningful" (p. 386).

Certainly andragogy is here to stay as one of the major landmarks in the development of adult learning theory. Although not really a theory of adult learning, andragogy captures general characteristics of adult learners, and it offers some guidelines for practice. As Pratt (1993) observed, "Andragogy has been adopted by legions of adult educators around the world. . . . Very likely, it will continue to be the window through which adult educators take their first look into the world of adult education." However, "while andragogy may have contributed to our understanding of adults as learners, it has done little to expand or clarify our understanding of the process of learning," and it has not achieved the status of a "theory of adult learning" (p. 21).

Self-Directed Learning

One of the assumptions underlying andragogy is that an adult has an independent self-concept and that with maturity he or she becomes increasingly self-directed. Knowles (1975) in fact wrote a book in which he explained self-directed learning and proposed the use of learning contracts as a way to implement it. However, the major impetus for this model of adult learning came from Tough's (1971) research with Canadian adult learners. He found that 90% of the participants had engaged in an average of 100 hours of self-planned learning projects in the previous year. These projects dealt with specific tasks and problems on the job (e.g., a lawyer learning about aviation law), home and personal responsibilities (e.g., a home improvement project), and leisure time interests (e.g., playing a musical instrument). The uncovering and documenting of these learning projects—projects embedded in everyday life that involved planning but did not depend on an instructor or a classroom—generated one of the major thrusts of research in the field of adult learning.

Thirty years of research in the United States and Europe (Straka, 1997, 2000) on self-directed learning has focused on verifying its widespread

presence among adults, documenting the process by which it occurs, and developing assessment tools to measure the extent of individuals' self-directedness. How one actually works through a self-directed learning experience has generated a number of models of the process. The first models, proposed by Tough (1971) and Knowles (1975), are the most linear. In these models the learner begins by self-diagnosing learning needs, then identifies resources and instructional formats, implements the plan, and, finally, evaluates the outcome. Models developed in the late 1980s and 1990s are less linear and more interactive, taking into account the learner, the context in which learning takes place, and the type of learning. Spear (1988), for example, presented a model that takes into account opportunities for learning found in one's environment, past or new knowledge, and chance occurrences. These opportunities cluster into what Spear and Mocker (1984) called the "organizing circumstance." As another example, Cavaliere (1992) studied how the Wright brothers learned to fly and identified five stages of their learning project. Critical to their success was recognizing and maximizing opportunities and resources within their own environment. The most recent model, proposed by Garrison (1997), incorporates dimensions of self-management (controlling the context), self-monitoring (a cognitive response), and motivational factors to explain the self-directed learning process.

   In addition to research on the extent of self-directed learning and the process it involves, interest has centered on the desired goals of this type of learning. Implicit in both Tough's (1971) and Knowles' (1975) work is the humanist goal of personal growth and self-development. Others have suggested the goal should be learning that brings about a transformation in one's thinking that is effected by critical reflection. "Such self-knowledge," Mezirow (1985) argued, "is a prerequisite for autonomy in self-directed learning" (p. 27). Still others argued that self-directed learning should be employed as a means of emancipation and social action. An example is a recent study of the self-directed learning projects of women on welfare (Andruske, 2000). The author found that women became "political change agents as they attempt[ed] to control and to initiate change in their everyday worlds in response to oppressive external structures" (p. 11).

   The development of self-directed learning theory is at a point of reassessment. Despite annual symposiums on self-directed learning, Brockett's (personal communication, September 28, 2000) analysis of the literature between 1980 and 1998 found a steady decline in the number of articles on the subject since the mid-1980s. He attributed this decline in part to the shift away from a focus on the individual learner to a greater

emphasis on the sociopolitical context of adult education. However, rather than abandoning 30 years of scholarship, Brockett suggested that researchers and educators focus on defining the quality of the learning experience, developing another instrument to measure self-directed learning, and investigating ethical questions about the use or misuse of self-directed learning. How ethical is it, for example, for a corporate training center to require workers to learn new skills outside of company time via self-directed learning packets?

Transformational Learning Theory

The third major theory-building effort in adult learning is transformational learning. Anecdotal and testimonial reports have long supported the notion that people can be profoundly changed through learning. However, it was not until Freire's (1970) and, more recently, Mezirow's (1991, 2000) work in this area that transformational learning has achieved the status of a major theory of adult learning. In fact, the 1990s might be called the transformational learning decade in terms of its move to center stage as the focus of scholarly activity in adult learning.

Andragogy, and to some extent self-directed learning, is largely about the personal attributes of adult learners as opposed to children. Transformational learning is more about the cognitive process of learning. The mental construction of experience, inner meaning, and reflection are common elements of this approach. Scholars and researchers are interested in documenting how we make meaning in our lives and how we come to change the cognitive structure through which we make meaning. Transformational learning is considered an adult learning theory as it is dependent on adult life experiences and a more mature level of cognitive development than is found in childhood.

Mezirow (1991, 2000) is considered the primary architect of transformational learning, although he readily acknowledged Freire's influence on his thinking. Freire emphasized the need for this type of learning to deal with oppression and to bring about social action, but Mezirow focused more on delineating the process of transformation and its relationship to adult development. For Mezirow, the learning that takes place in adulthood is not just added on to what we already know. It is also "the process of using a prior interpretation to construe a new or a revised interpretation of the meaning of one's experience in order to guide future action" (Mezirow, 1996, p. 162). In short, learning is making sense of our experiences, and to make sense of our experiences, we may need to make a change in one of

our beliefs or attitudes or in our entire perspective. A change in our entire perspective—the lenses through which we make sense of the world—is key to transformational learning. Both the process and the outcome of transformational learning are developmental. That is, the ability to reflect critically, which is mandatory to effecting a transformation, is itself developmental; the outcome, a changed perspective, is developmental in that we are able "to deal with a broader range of experience, to be more discriminating, to be more open to other perspectives" (Mezirow, 1990, p. 14; also see chapter 5 in this book, "Applying Constructive–Developmental Theories of Adult Development to ABE and ESOL Practices").

Mezirow (1991) outlined a 10-step process that is initiated by a disorienting dilemma—that is, a life experience that evolves into a personal crisis. This crisis leads the individual to examine and critically reflect on the assumptions and beliefs that have guided meaning making in the past but no longer seem adequate. Such an assessment leads the person to explore new ways of dealing with the dilemma, often with help from others. It is at this point in the process that we test our new understandings, our new perspective, in dialogue with others. Mezirow (1995) drew heavily from German philosopher Jurgen Habermas's notions of the ideal conditions for this dialogue or discourse, a discourse "that aims toward more sensitive, respectful, non-dominating, and non-distorting communication" (p. 54). A plan of action is then formulated and put into motion. The result is a new, transformed perspective. The new perspective is "more inclusive, discriminating, permeable, and integrative" (Mezirow, 1990, p. 14) than the previous perspective.

The burgeoning body of work in transformational learning is of two types: published papers that debate the theoretical underpinnings of the theory and empirical studies of some aspect of the theory itself. With regard to the theoretical discussion, Mezirow's (2000) theory has been challenged for its lack of attention to context, its emphasis on rationality, its lack of a strong social action agenda, and the ethical issues involved in promoting this type of learning. These critiques are somewhat interrelated. For example, a social action agenda raises ethical questions about the role of the adult educator in tampering with the worldview of learners and about the sometimes unintended consequences of such an intervention. This body of research is also long on critique and short on illustrations of how to implement this type of learning in the instructional setting. Only recently have authors attended to practice to foster this type of learning (see, e.g., Cranton, 1996; E. W. Taylor, 2000b; and K. Taylor, Marienau, & Fiddler, 2000).

Empirical studies on transformational learning are expanding our understanding of adult learning in general. After reviewing published articles and more than 45 dissertations on Mezirow's (2000) theory, E. W. Taylor (2000a) asserted that transformative learning theory "is much more complex and multifaceted than originally understood" (p. 287). Still to be investigated, Taylor believed, is the relationship of transformational learning to age, the role of emotions, the behavioral outcomes of a perspective transformation, the role of social support in working through transformations, the role of context and culture in shaping this type of learning, and ethical questions involved for both facilitators and learners.

To summarize this period of theory building in adult learning, andragogy and self-directed learning were the first two attempts by adult educators to define adult education as a unique field of practice in which adult learning could be differentiated from learning in general and to differentiate adult education from childhood education in particular. Freire's (1970) seminal work and Mezirow's (1978) early thinking on perspective transformation also appeared at this time. Currently, transformational learning theory holds center stage in terms of ongoing research and writing. However, andragogy and self-directed learning dominate in the real world of practice, perhaps because of their humanistic rather than critical theoretical underpinnings or because transformational learning, although powerful when it occurs, is more difficult to plan for, implement, and assess. All three theories have been criticized for a myopic focus on the individual learner at the expense of the larger sociopolitical context in which learning takes place. As explored in the next section, many of the newer additions to the adult learning knowledge base are more focused on the context of learning.

RECENT CONTRIBUTIONS
TO ADULT LEARNING THEORY

Although the familiar theories of andragogy, self-directed learning, and transformational learning remain prominent features of the adult learning landscape, several new ways of thinking about adult learning are drawing attention to other aspects of the learning process. This third period of adult learning theory development is characterized in part by adult educators once again turning to other fields and disciplines to illuminate their understanding of adult learning. Discussed here are context-based learning;

critical perspectives on learning; and learning through emotions, body, and spirit.

Context-Based Learning

In moving from the individual learner to the context in which learning takes place, we come to understand learning as a social, constructed phenomenon. In a provocative article titled "Learning in School and Out," Resnick (1987) highlighted ways the two learning environments differ. In school, she argued, each learner is evaluated on the basis of what he or she can do alone, whereas outside school, learning typically takes place in a social system, with the learner interacting with other people. In school one is expected to solve problems without the benefit of tools (e.g., maps, computers, printed materials) used in real-life problem solving. In school one deals with symbols of the real thing (e.g., numbers representing amounts). In real life we more often use objects found in the context of the learning. Finally, school learning is generalized, whereas learning outside school is situation specific.

Resnick's (1987) thinking illustrates a theory of learning emerging from cognitive psychology that is known loosely as *situated cognition.* The theory suggests that learning cannot be understood only as an individual, internal cognitive process; rather, learning is what is constructed by the interaction of people in a particular situation with particular tools or artifacts (including language, signs, and symbols). Research (Lave, 1988, 1996; Lave & Wenger, 1991) has demonstrated that the context in which learning takes place is crucial to the nature of the learning, as are the tools in that setting and the social interaction with others. Understanding human cognition means examining it in situations of *authentic activity,* in which actual cognitive processes are required, rather than in situations of simulated activity typical of school. Lave's (1988, 1996) experiments with grocery shoppers is a good example of the difference in learning in an authentic versus simulated activity. Study participants were considerably more accurate in efforts at comparison pricing when actually shopping (98% correct answers) than when doing identical calculations on a paper-and-pencil test in the classroom (59% correct answers).

The notion of situated cognition resonates well with what we already know about adult learning, from Lindeman's (1926) statement that experience is "the adult learner's living textbook . . . already there waiting to be appropriated" (p. 7) to Knowles' (1980) principle of using an adult's life experiences as learning resources. Locating learning in the real-life

experiences of adults has long been promoted as good adult education practice. Schön (1987, 1996) is noted for promoting contextually based reflective practice. Knowledge gained in school is not enough to make a reflective practitioner. One must also engage in the actual practice; it is in the doing of activities rather than the application of principles that one comes to know. This knowing in action goes beyond reflection on action. It is through reflection in action that our practice is reshaped (Schön, 1987). Others recommended apprenticeships, internships, and practicums where one can learn through modeling, coaching, trial and error, shadowing, site visits, and job-embedded learning activities.

Much of context-based learning occurs in the workplace where individuals enter into relationships with other learners, thereby becoming members of a learning community. This learning community can be considered a *community of practice,* a term coined by Lave and Wenger (1991) and recently further developed by Wenger (1998). Communities of practice are groups of people who share insights and ideas and who help one another solve problems and develop a common practice. All people belong to communities of practice through formal learning environments, civic organizations, or family structures. Most communities of practice do not have a name, but they are quite familiar to us. We know who belongs. The concepts of practice are both explicit and tacit. They include the language, documents, images, symbols, roles, procedures, regulations, subtle cues, rules of thumb, sensitivities, embodied understandings, underlying assumptions, and shared worldviews that are crucial to the success of the community.

Learners in a community of practice have different levels of mastery. Some have more knowledge than others and have been more effective in adopting the behaviors and attitudes, or norms, of the group; however, "mastery resides not in the master but in the organization of the community of practice of which the master is a part" (Lave & Wenger, 1991, p. 95). Newcomers, by engaging with others in the community, learn what they need to know to move from the periphery to the center of practice.

Communities of practice constitute a theoretical framework for understanding the information sharing that goes on in social practice and the ways in which this information sharing changes individuals' level of participation and their identity within the community. Above all, according to Wenger (1998), belonging to such a community involves a learning process, a form of collective meaning making—of interpreting, acting, and reflecting on action. Meanings are negotiated through participation in the community. Communities of practice can be considered shared histories of learning.

Situated cognition posits that learning is context bound, tool dependent, and socially interactive. The place in which situated cognition occurs is the community of practice, which might be a family, a classroom, a workplace, an online community, a town, or a corporation. This approach contextualizes learning, uncoupling it from a preoccupation with the individual learner.

Critical Perspectives

Once the spotlight has moved away from the individual learner to the context in which learning takes place, numerous questions can be asked about this context, and that is precisely what those who come from a critical orientation do—they ask questions about the structural and historical conditions of society, the culture and institutions that shape learning, what counts as knowledge, who has power, and so on. For example, one might ask why medical doctors go on cruises for their continuing professional education, whereas public school teachers meet after hours in the school cafeteria. One might also ask why a certificate of general educational development is not valued as highly by employers as the traditional high school diploma, or why male students are called on more often than female students in classroom discussions. Questions such as these draw from philosophical and theoretical knowledge in critical theory, Marxist theory, multiculturalism, postmodernism, poststructuralism, and feminist theory. This questioning and assessing of the assumptions underlying the practice of adult education has major implications for the teaching–learning transaction.

The three themes that characterize the critical perspective are (a) race, class, and gender; (b) power and oppression; and (c) knowledge and truth (Merriam & Caffarella, 1999). These themes are interrelated in that it is impossible "to talk about racism, classism, sexism, and other 'isms' without reference to power and oppression; nor can power be considered apart from issues surrounding knowledge construction" (p. 342).

Several writers have used the critical perspective framework to explore the teaching–learning transaction. Ellsworth's (1989) now famous article "Why Doesn't This Feel Empowering? Working Through the Repressive Myths of Critical Pedagogy" recounted her experience in a college class designed to examine issues of race, privilege, power, and oppression. She discovered that these issues could not be examined in the abstract and that the class itself was reproducing the very power relationships she sought to critique. In another article, deMarrais (1991) used the hypothetical case of

John to illustrate the idea that no matter how much John himself tries to better his circumstances, social class norms and the educational system reinforce the relative unworthiness of his accomplishments. Similarly, Sandlin (2000) examined consumer education texts used in adult literacy programs and demonstrated that they promote current social class inequalities by "placing blame for financial failure on learners . . . ignoring larger social, political, and economic contexts" (p. 289). Analyses of the teaching–learning situation using race, class, and gender are also becoming more prevalent in the adult education literature (Brown, Cervero, & Johnson-Bailey, 2000; Fenwick, 2001; Johnson-Bailey & Cervero, 1998). Various feminist theories and critical race theory often frame these studies.

Backed by a voluminous literature in feminist theory, women's learning has been a topic of interest in adult education, especially since the publication of *Women's Ways of Knowing* (Belenky et al.) in 1986. This study identified five categories of knowledge construction ranging from silence, in which women are passive and defined by others, to constructed knowing, in which women see themselves as creators of knowledge. As an outgrowth of feminist theory, feminist pedagogy focuses on the experiences of women in the context of education. Tisdell (1995, 1998), in particular, forged a synthesis of the voluminous feminist theory literature and applied it to the learning context. Here, intellectual and emotional components of learning are seen as embedded in the larger sociopolitical framework of adult education practice. Hayes and Flannery (2000), in a recent in-depth exploration of women as learners, concluded that a case can be made for learning as gender related rather than gender specific—that is, most (but not all) women prefer to learn collaboratively, whereas most (but not all) men prefer to learn independently. These learning preferences appear to be related, but not exclusive, to gender.

Unlike much of critical theory and postmodern literature, the feminist pedagogy literature offers practical suggestions on how to manage learning activities (Hayes & Flannery, 2000). Tisdell (1995, 1998), for example, suggested attending to curriculum materials for implicit messages about women; adopting teaching strategies that decentralize oppressive forces such as patriarchy; designing courses in which the content deals explicitly with power relations based on gender, race, and class; and encouraging adult educators to examine the ways in which their own views and behaviors may be reinforcing or reproducing social inequities. Something as simple as openly acknowledging and addressing "the power disparity between the teacher/facilitator and the students" (Tisdell, 1995, p. 90) can be liberating.

Like the literature on learning in context, the critical literature considers the context in which learning takes place. However, rather than exploring the learning transaction per se, the critical perspective questions assumptions and givens about the sociocultural and historical conditions that shape the context in the first place. Diversity is acknowledged, the status quo is challenged, inclusion is a goal, and emancipation from oppressive social structures makes possible a context in which learning can thrive.

The Emotions, Body, and Spirit in Learning

The newest additions to the adult learning landscape are writings on the role of emotions in learning, on the body as a site of learning, and on the relationship between spirituality and adult learning. Each of these approaches holds potential for further expanding our understanding of adult learning as a holistic and complex phenomenon.

At least in the West, learning has become so connected with schooling that the activity of learning is almost always framed from a rational, cognitive perspective. It is commonly thought that we learn by processing information in the brain. By the time we are adults, learning has come to be understood as a formal and systematic process devoid of any emotional, physical, or spiritual trappings. Scholars writing in this area are attempting to explain and legitimize the role played by emotions, the body, and spiritual dimensions in learning.

Brain research is contributing to the understanding of the importance of emotions in learning. Instinctive behavior, emotions, and abstract coding of symbols, emanating from different parts of the brain, work together when an adult enters a classroom. As Ferro (1993) explained, if the adult experienced failure in school as a child, he or she has worked out behaviors that help protect him or her from that painful memory. "Memories triggered by any new experience include the memory of the feelings and emotions that accompanied the original experience." Thus, if "the original experience caused anxiety or fear and triggered a fight-or-flight response, the reaction to the current situation will also be anxiety or fear" (p. 26).

In a review of emotions and adult learning, Dirkx (2001) argued that learning itself is inherently an imaginative, emotional act and that significant learning is inconceivable without emotion and feelings. It is through emotions that "deeply personal, meaningful connections" (p. 66) are made so that really significant learning can take place. These connections are of two kinds. First, there is the connection to one's own inner experiences; emotions are "gateways to the unconscious and our emotional, feeling

selves" (p. 66). Second, emotions and feelings connect to the "shared ideas within the world" and are "reflected in big words or concepts, such as Truth, Power, Justice, and Love" (p. 64). We learn to understand or make meaning of our experience through engagement with these emotions and the images they evoke.

Somatic, or embodied, learning is closely related to emotional responses in learning. In somatic knowing, we learn through our bodies, as we do when we connect physical manifestations of stress to our psychological situation. The familiar phrase "listen to your body" reflects the idea that our bodies send us messages about various aspects of our lives. Pert (1997) argued that because receptors are found in the body's nerves of all kinds, it follows that emotions can be stored and mediated by parts of the body other than just the brain. "These recent discoveries are important for appreciating how memories are stored not only in the brain but in a *psychosomatic network* extending into the body" (p. 141). Clark (2001) noted that the women's movement in particular advanced the understanding of how the body can be a site for learning. "In consciousness-raising groups," observed Clark, "issues related to the regulation of [women's] bodies and their sexuality were addressed by women as part of their reflection on their oppression" (p. 85). Feminist scholars who conceptualize the body as central to women's experience have advanced this practical work.

More than emotions or the body, the topic of spirituality and its connection to learning have attracted a number of writers in recent years. Spirituality is not the same as religion, which refers to an organized community of faith; rather, "spirituality is more about one's personal belief and experience of a higher power or higher purpose" (Tisdell, 2000, p. 309). Spirituality is connected to adult learning through the construct of meaning making. Aktouf (1992) argued that "the human being is, by definition and necessity, a being whose destiny is meaning, intentions, and projects . . . a subject whose being is meaning and which has need of meaning" (p. 415). We are inveterate meaning makers. Tisdell (1999) made several points about the relationship between spirituality, meaning making, and adult learning. First, educators should recognize that "a search for or an acknowledgment of the spiritual in the lives of adult learners is connected to the search for meaning that gives our lives coherence. For all adults, this is connected to how we create meaning in our relationships with others. It is in our living and loving" (p. 93). It is also connected with "how we understand a higher power or a transcendent being" (p. 93). Second, adults come into classrooms with this agenda (meaning making) whether or not it is articulated. Third, meaning making is knowledge construction that uses

images and symbols that "often emanate from the deepest core of our being and can be accessed and manifested through art, music, or other creative work" (p. 93). Myths, symbols, images, even dreams, although culturally embedded, can be used in an adult learning environment in which students learn about culture and themselves (Dirkx, 1997).

How spirituality is linked to work and how it manifests itself in the workplace are currently popular topics in the organizational and human resource development literature. As with adult education, the purpose of bringing spirituality into the workplace "is not solely to rediscover God at our jobs but to find fulfillment in one's work" (Fisher & Tompkins, 1999, p. 1). Finding fulfillment or meaning and purpose in work involves linking our inner lives to the outer context of the work setting through collaboration, participatory processes, and a sense of community. Spirituality at work is all about creating work environments that are open, friendly, and safe, where people feel connected to others and to their organization.

At the same time that spirituality is emerging as a means of framing meaningful work, others are concerned with effecting a global perspective of spirituality in the service of protecting our planet. Ecologists, feminists, educators, and theologians are calling for more attention to the interconnectedness of peoples across the globe, of humans and the nonhuman world, and of the earth and the universe. O'Sullivan (1999), for example, wrote that "we have lost our spiritual connection to the earth and we are diminishing the growth of our spirit. Our Western cultural horizon is destroying the spiritual dimension of our lives and because of expansive globalization we are destroying the spiritual development of other peoples by intruding ourselves into their cultures and their lives" (p. 262). Given the value placed on material goods and well-being, O'Sullivan said, there is a spiritual vacuum that is sometimes called a hunger of the spirit. "From an educational point of view," he wrote, "our present state is in need of transformation" (p. 263).

The recent contributions to adult learning theory reviewed in this section suggest that adult learning is far richer and more complex than originally thought. Situated cognition has drawn our attention to how learning can be seen as a function of the learner interacting with the context of learning. Critical perspectives take yet another view of the context, asking how aspects of the context, such as race and gender, shape the learning context itself. Finally, in considering the emotional, physical, and spiritual dimensions of a learning experience, we come full circle, back to the learners themselves, who are at the center of the teaching–learning transaction.

ADULT LEARNING THEORY IS
A WORK IN PROGRESS

This chapter has been a journey through the landscape of adult learning theory. There are familiar, easily recognizable shapes, such as behavioral learning theory, memory, intelligence, and cognitive development; there is andragogy, self-directed learning, and transformational learning. And there are newer, more tentative additions within the last 20 years: contextual learning (or situated cognition); critical perspectives, including critical theory, postmodernist theory, and feminist theory and pedagogy; and the role of emotions, the body, and spirituality in learning. The landscape of adult learning theory has changed significantly since the first research on adult learning in the 1920s. No longer is learning seen solely as a cognitive process taking place in the mind of the individual learner, and adult learning is not merely a laundry list of adult learner characteristics. Learning is all of this in conjunction with a better understanding of the cultural, social, economic, and political forces that together shape and inform the learning environment. Work in the role of emotions, the body, and spirituality is also resulting in a view of the adult learner as someone whose connection with learning and other learners is complex and multifaceted. Instructional applications for such learners would seem to be limited only by the imagination.

It is uncertain whether the newer concepts, models, or theories will achieve the status of earlier contributions. The theory-building process in adult learning is dynamic and evolving; some of the newer perspectives reviewed here will become commonplace, others will fade away, and still others will transform the landscape yet again. One thing is fairly certain: It is highly unlikely that there will ever be a single theory that can encompass all that we know about adult learning. A more important consideration is how the numerous approaches to adult learning expand our understanding of this complex phenomenon and how that understanding informs our practice.

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