

Adult learning theory

Evolution and future directions

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Introduction

While everyone knows at some level that adults learn throughout their lives, learning has become so associated with formal classes and "school," that adults often don't recognize or acknowledge that they are continually learning. Learning is, as Jarvis writes, "the essence of everyday living and of conscious experience; it is the process of transforming that experience into knowledge, skills, attitudes, values, and beliefs" (1992, p. 11). It wasn't until the early twentieth century that learning in adulthood was systematically studied, and then it was by behavioral and cognitive scientists who were most interested in memory, intelligence, and information processing, and in particular, how age impacted these processes. These early studies spawned different theoretical approaches to learning and adult learning, approaches which still frame research about adult learning today.

Beginning in the mid-1960s, adult educators themselves began studying adult learners which generated several models, theories, and frameworks explaining how adult learners could be distinguished from children. These contributions gave rise to adult education achieving its own identity as a field of practice separate from childhood education. We now know quite a bit about

adult learners, how context shapes adult learning, and how noncognitive factors play a role in adult learning. This article begins with a review of what I call the three foundational adult learning theories: andragogy, self-directed learning, and transformative learning. Each of these theories focuses on the individual adult learner. A second section discusses the shift to attending to the context of adult learning that took place in the later decades of the twentieth century and remains central to understanding adult learning today. The third section reviews the most recent work in theory building in adult learning – that of considering the important place of emotions, the body, and the spirit in learning. Also discussed in this final section is the growing influence of non-Western perspectives in learning.

Foundational theories of adult learning

While there's always been at least an implicit understanding that adults can and do learn, it wasn't until the twentieth century that research attention was paid to learning in adulthood. The earliest research on adult learning was conducted by behavioral psychologists in the early decades of the century. These early studies were most often conducted in laboratory settings with an interest on how age affected the learning process. Based in behavioral psychology, learning was seen as a change in observable behavior, principles of which are still present in training programs in business and industry, the military, instructional technology, self-help programs, and "evidence-based practice" in health and medical arenas.

However, by the mid-twentieth century, interest in adult learners from a humanistic psychology perspective focused more on how adulthood could be distinguished from childhood learning. A humanistic perspective on learning emphasizes personal growth and development rather than the more mechanistic change in behavior. And it was this research and writing on adult learning that resulted in adult education becoming a recognized field of practice with its own professional associations, journals, and conferences. The three major "foundational" theories of adult learning that emerged during this time – andragogy, self-directed learning, and transformative learning – are firmly lodged in humanistic learning theory. Each theory or framework is associated with an adult educator who wanted to define what is characteristic of the learning of *adults* versus that of children. Each theory has a robust research base and has, for the most part, withstood the test of time.

Andragogy

Andragogy is a European concept (indeed, even today there are academic departments of andragogy in several Central and Eastern European countries) imported to the U.S. by Malcolm Knowles in the late 1960s. He introduced it as "a new label and a new technology" distinguishing adult learning from children's learning

or pedagogy (1968, p. 351). Knowles proposed the following set of assumptions about adult learners:

1. As a person matures, his or her self-concept moves from that of a dependent personality toward one of a self-directing human being.
2. An adult accumulates a growing reservoir of experience, which is a rich resource for learning.
3. The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.
4. There is a change in time perspective as people mature – from future application of knowledge to immediacy of application. Thus, an adult is more problem centered than subject centered in learning (Knowles, 1980; pp. 44–45).
5. Adults are mostly driven by internal motivation, rather than external motivators.
6. Adults need to know the reason for learning something (Knowles, 1984).

These principles or assumptions actually tell us more about the characteristics of adult learners than about the nature of learning itself. Eventually shying away from calling andragogy a “theory” of adult learning, Knowles came to believe there was a continuum ranging from teacher-directed pedagogy on the one end, to student-directed learning (andragogy) on the other end, and both approaches are appropriate with adults and children depending on the situation. Using these assumptions about adult learners, Knowles’s (1980) program planning model attends to, for example, making the adult classroom a place suitable for adults both physically and psychologically. Further, since adults direct their lives in family, work, and civic arenas, they can also (and often want to) direct their own learning.

Self-directed learning

Appearing about the same time that Knowles introduced andragogy, self-directed learning (SDL), a second major adult learning theory, further helped to distinguish adult learners from children. The first assumption of andragogy above, that as a person matures they become more independent and self-directing, in fact speaks to the self-directed nature of adult learners. The impetus for SDL becoming a major theory of its own came from Tough’s (1971) research into the self-planned learning projects of Canadian adult learners. He found that 90% of his participants had engaged in an average of 100 hours of self-planned learning projects the previous year, and that this learning was deeply embedded in their everyday lives. Over 45 years of research in North America and Europe has substantiated that most adults are engaged in self-directed learning projects, that this learning occurs as part of everyday life, is undertaken in a systematic way, yet is not dependent upon an instructor or a classroom.

The key to understanding SDL is to recognize that SDL does not mean sitting in a room alone, learning something; rather SDL is all about the learner *taking control* of her or his own learning. A self-directed learner wanting to learn something could decide, for example, that she wants to take a class, find a mentor, or join an online discussion group. SDL can be found throughout the contexts of adult life, including the workplace, continuing professional education, health and medical fields, higher education, and in online contexts where research suggests that the more successful online learners are also more self-directed (Merriam and Bierema, 2014). SDL is often incorporated into formal instructional situations such as in higher education or continuing professional education, that is, a component of instruction might be to undertake a SDL project. The voluminous literature on SDL contains numerous models of the process, sample learner contracts, and assessment tools that measure the extent of a learner's self-directedness. There is an annual self-directed learning conference, now in its 30th year, and an international journal devoted to SDL (see www.sdlglobal.com for information on both the conference and the journal).

Transformative learning

Of the three foundational theories of adult learning, transformative learning is the most recent and most written about. Instead of focusing on the adult learner's characteristics, as andragogy and to a large extent self-directed learning do, transformative learning focuses on the cognitive process of meaning making. This type of learning is considered an adult learning theory because transformative learning is dependent on adult life experiences and a more mature level of cognitive functioning than found in childhood. Mezirow, who studied the experiences of women returning to college, is considered the main architect of this theory (1978) though since his early contribution many frameworks, definitions, and theories have been proposed. Learning in adulthood is often more than just adding information. It is also making sense of our experience and can result in a change in a belief, attitude, or perspective. A perspective transformation is central to this type of learning.

Mezirow's (2000) ten-step transformational learning process still frames much of today's research. The process is usually initiated through a sudden or dramatic experience (a "disorienting dilemma" in Mezirow's term) wherein adults are challenged to examine their assumptions and beliefs that have guided meaning making in the past, but now are no longer adequate. From an examination of current beliefs, the learner moves to exploring new ways of dealing with the dilemma which may lead to a change in a belief, attitude, or an entire perspective. The new perspective is more inclusive and accommodating of a wider range of experiences than the previously held perspective. While Mezirow focused on personal, individual transformation, he readily acknowledged the influence of Brazilian educator, Paulo Freire. Freire (1970) wrote of the need for transformational learning to address oppression and bring about social change.

Currently, transformative learning is probably the most researched and studied area in adult learning theory:

There are hundreds of articles and chapters and dozens of books, the most recent being the 600-page *The Handbook of Transformative Learning* (2012), a journal devoted to this type of learning (*Journal of Transformative Education*), and biannual international conferences on transformative learning.
(Merriam and Bierema, 2014, p. 83)

For a recent discussion of the development of transformative learning theory and a proposal to consider transformative learning as a metatheory "incorporating diverse perspectives into an overall understanding of transformational phenomena" see Hoggan (2016, p. 72).

Context-based models of adult learning

Andragogy, self-directed learning, and transformative learning all focus on how *individual* adults learn. While each of these theories has contributed to our understanding of adult learning, each has also been critiqued for its lack of attention to the social and political context in which learning takes place. How self-directing can one be in their learning in an oppressive social context? Can transformative learning take place if one is not exposed to alternative ways of thinking about an issue or problem? In the latter decades of the twentieth century, attention to the role of context in shaping adult learning became prominent and remains an important component in understanding adult learning today. There are at least two strands of research and writing that attend to the context of adult learning: critical perspectives and situated cognition or "contextual learning."

Critical social science perspectives

At the heart of a critical social science perspective is shifting attention from the individual learner to the social context where learning takes place. Drawing from Marxism, critical theory, critical race theory, queer theory, feminist theory, and multiculturalism, this perspective asks questions about how race, class, and gender impact the structures in society, who holds power, and how the powerful shape society to reinforce their status.

Brookfield and Holst (2014) point out that from a critical perspective, there are three problems with the individual orientation of andragogy, self-directed learning, and much of transformative learning. First, "the self cannot stand outside the social, cultural and political streams within which it swims." Second, "self-direction as a form of learning emphasizing separateness leads us to equate it with selfishness, with the narcissistic pursuit of private ends, regardless of the consequences of this pursuit for others." Third, "a view of learning that regards

people as self-contained, volitional beings scurrying around in individual projects is also one that works against collective and cooperative impulses" (p. 7).

The most prominent adult education writer from a critical theory perspective is Brookfield (2005). He has proposed a theory of adult learning that has "at its core an understanding of how adults learn to recognize the predominance of ideology in their everyday thoughts and actions and in the institutions of civil society (2001, p. 21). There are seven "learning tasks" embedded in a critical learning theory: (1) Challenging ideology. This is "the basic tool for helping adults learn to penetrate the givens of everyday reality to reveal the inequity and oppression that lurk beneath" (Brookfield, 2005, p. 42); (2) Contesting hegemony. Hegemony is the notion that "people learn to accept as natural and in their best interest an unjust social order" (p. 43); (3) Unmasking power. "Part of becoming adult is learning to recognize the play of power in our lives and ways it is used and abused" (p. 47); (4) Overcoming alienation. "The removal of alienation allows for the possibility of freedom, for the unmanipulated exercise of one's creative powers" (p. 50); Learning liberation. Adults need to learn to liberate themselves, individually and collectively, from the dominant ideology; (6) Reclaiming reason. "A major concern of critical theory is to reclaim reason as something to be applied in all spheres of life" (p. 56); (7) Practicing democracy. Adults must learn to live with the contradictions of democracy, "learning to accept that democracy is always a partially functioning ideal" (p. 65).

While Brookfield is the major theorist with regard to a critical theory perspective on adult learning, a critical social science perspective is very much embraced by many researchers and writers in adult education and human resource development today. While there are numerous theoretical perspectives couched in complex language and concepts, the theme underlying these perspectives is that the context where learning takes place matters, and it is important to relentlessly challenge the inequities of the learning context.

Situated cognition/contextual learning

A second arena of theory-building related to the context where learning takes place is called situated cognition or contextual learning. Coming from educational psychology rather than social science philosophy, this theory posits that the particular learning that takes place is a function of three factors in the context where it occurs: the people in the context, the tools at hand (tools can be objects like a whiteboard, language, or symbols), and the particular activity itself. Probably the most famous example of situated cognition comes from research by Lave who is considered the major architect of this theory. She asked adults to determine which of two products in a grocery store was a "best buy." Those who actually went to a grocery store, talked with people in their group, and physically handled various items to compare sizes and shapes, got 98% of the math problems correct. Those who were given the same math problems in a paper and pencil test got 59% correct (Lave, 1988). Many of us who visit other countries

or even unfamiliar places in our own country, learn within the context how to negotiate the transportation system, shop for groceries and other items, and so on. We ask people who know, make use of signs and symbols, and engage in the activity itself. In another example, Kim and Merriam (2010) investigated how older Koreans learned to use computers. The physical setting of the classroom, the "tools" of computer terminals, whiteboards, and the teacher's notes, and the culturally defined interactions between teacher and students and among students themselves shaped the learning that took place.

Because a major component of understanding learning as a function of the context in which it occurs nearly always involves other people, the notion of learning communities or communities of practice is a direct outgrowth of this perspective on learning. Communities of practice are groups of people who share a common interest and who learn within that sphere of common interest. We all belong to several communities of practice whether it is our family, our co-workers, a professional association, a neighborhood group, or a social website such as Facebook. In some communities we might have quite a bit of knowledge and thus be more "core" members; in others we may be more on the periphery. Wenger (1998), who is most often associated with communities of practice, makes the point that learning is central to these communities, whether it happens serendipitously, or whether it is designed into the "social infrastructures" (p. 225). In his theory, a community of practice becomes a learning community when learning is "not only a matter of course in the history of its practice, but at the very core of its enterprise" (pp. 214–215).

There is an ever-growing body of literature on communities of practice and learning communities, including a journal, *Learning Communities Journal*. While communities of practice are most often implemented in organizational settings, and learning communities in educational settings, online environments, and community organizations, the terms are being used somewhat interchangeably. Precise terminology is less important than understanding that the emphasis of both situated or contextual learning and critical social science perspectives is that the *context* of adult learning is as important as identifying characteristics of adult learners and the cognitive processes involved in learning.

Recent theory building in adult learning

Learning is more than a cognitive process, but because for centuries the West has viewed the mind as separate from the body, and because learning has been so connected with formal schooling, the activity is almost always framed from a rational, cognitive perspective. However, recent work in the West and growing knowledge of how other cultures think of learning have revealed that learning can be through pathways other than those dominated by our brain. Our body, our emotions, and our spirit (what is often referred to as holistic learning), are also important avenues for learning or knowledge construction. Work in holistic learning is coming from educators, psychologists, and neuroscientists.

Embodied or somatic knowing

Embodied or somatic learning is learning through the body. Whether or not we acknowledge the body as a site of learning matters little because we have all experienced embodied knowing. The brain itself is a physical organ, a part of our body, thus separating the brain from the body makes little sense. Indeed, it is the brain that processes signals coming through our body. These signals include our emotions which we “feel” as well as intuitive or tacit knowing. In writing about the link between the rational mind and the emotional body, Mulvihill (2003, p. 322) says:

there is no such thing as a behavior or thought, which is not impacted in some way by emotions. There are no neurotransmitters for “objectivity” ... during both the initial processing and the linking with information from the different senses, it becomes clear that there is no thought, memory, or knowledge which is “objective,” or “detached” from the personal experience of knowing.

Embodied learning is highly intuitive. Intuitive or tacit knowledge is knowledge we have all felt but rarely articulate: “It is knowing that we experience rather than think about” (Merriam & Bierema, 2014, p. 130). Embodied or somatic knowing involves our senses (think of times when our body reacts in a “knowing” way to something in our environment – like feeling threatened or nervous or excited before we know the cause of these feelings). It is also intuitive. This is the emotional component to embodied learning that Dirkx (2008) writes about with reference to adult learning. “Learning itself is an imaginative, emotional act and that really significant learning, learning that involves ‘big words or concepts, such as Truth, Power, Justice, and Love’” (Dirkx, 2001, p. 69) is inconceivable without emotion and feelings.

The body is an instrument for learning, whether beneath our conscious awareness as in tacit or intuitive knowing, or manifested in our emotional connections to the learning. Embodied learning has been explored in a variety of adult education settings including literacy programs, the workplace, community settings, higher education, and even online environments (Dirkx, 2008; Lawrence, 2012). Embodied learning has received quite a bit of attention in social work, psychotherapy, and nursing. The body is central to healthcare of course, and as Wright and Brajtman (2011) write, “recognition of every person as an embodied being-in-the-world is fundamental to ethical nursing practice” (p. 25).

Fortunately, the false dichotomy between the mind and the body which can be traced back to the seventeenth century philosopher Descartes’ famous dictum, “I think, therefore I am” is being challenged by researchers in the social sciences as well as neuroscientists who study brain functioning (Johnson and Taylor, 2006). Understanding how the brain, body, and emotions are interconnected is contributing significantly to our knowledge of how learning occurs.

Spirituality and learning

A holistic approach to learning also includes acknowledging the spiritual dimension of human beings. While spirituality is not the same as religion, it is often associated with religious beliefs and practices, which is probably why there has been some reluctance to accept the role spirituality can have in learning. However, for many, spirituality is "an awareness of something greater than ourselves" (English, 2005, p. 1171) and is about *connection* to something outside of ourselves, whether it be to others, to the earth, or to a life force. Spirituality relates to adult learning through meaning-making:

Spirituality is one of the ways people construct knowledge and meaning. It works in consort with the affective, the rational or cognitive, and the unconscious and symbolic domains. To ignore it, particularly in how it relates to teaching for personal and social transformation, is to ignore an important aspect of human experience and avenue of learning and meaning-making. (Tisdell, 2001, p. 3)

Thus the key to understanding the role of spirituality in learning is through the notion of meaning-making. Tisdell (1999) explains how spirituality, meaning-making, and adult learning are interrelated. First, it is important as adult educators to recognize and acknowledge that our learners have a spiritual dimension to their lives which "is connected to how we create meaning in our relationships with others. It is in our living and loving" (p. 93). Second, adults come into a learning context with a meaning-making agenda even if it is not articulated in quite this way. Third, meaning-making is the process of knowledge construction, a process that uses images and symbols (language is made up of symbols for example), "which often emanate from the deepest core of our being and can be accessed and manifested through art, music, or other creative work" (p. 93).

Studies from primary school through higher and adult education can be found in the growing literature on spirituality. With regard to adult learners, studies on spirituality have been conducted in reference to adult developmental processes, especially identity development (Tisdell, 2008), social justice and social action initiatives (English, 2005), and the workplace. Somewhat surprisingly, the majority of research on spirituality and learning seems to be based in the workplace. Adults spend a great portion of their lives at work, and we bring our whole self to work—body, brain, and spirit:

There have been literally dozens of popular books and articles and upwards of two hundred studies on this topic in the last twenty years. There is an online resource center, The Association for Spirit at Work (www.spiritatwork.com), and a journal published by Routledge, *Journal of Management, Spirituality and Religion*. Karakas (2010) speculates that this burgeoning interest may be due to a paradigm shift from seeing the workplace as a controlled environment

with a solely economic focus "to a balance of profits, quality of life, spirituality, and social responsibility" (p. 89).

(Merriam and Bierema, 2014, p. 140)

Non-Western perspectives on learning

Never before has the world been so interconnected. Globalization, the movement of goods, services, people, and information across local and national boundaries, combined with communications technology and the Internet have resulted in a growing awareness of other cultures, other ways of thinking, and other ways of learning. And there is no longer any doubt that learning is indeed a lifelong necessity. Another byproduct of this interconnectedness is the growing awareness that how and what people learn is shaped by one's history and culture. Acknowledging and understanding other systems of knowing and learning expands our repertoire and hopefully effectiveness as adult educators.

In this section on recent contributions to adult learning theory, the influence of non-Western perspectives is briefly reviewed. The use of the terms "Western" and "non-Western" is of course problematic (setting up dichotomies is itself a very Western activity). However, these terms are commonly used due to lack of better categories, as well as the fact that the adult learning theories and models reviewed above have evolved in the West and dominate the thinking, research, and writing on adult learning theory. Historically, the formalization and institutionalization of Western knowledge systems has ignored even indigenous knowledge systems in the West. However, this is changing due to the forces mentioned above. And as part of our increasing interconnectedness through travel, study, and living outside our home cultures, we are much more aware of other ways of thinking and learning.

Non-Western perspectives on knowledge and learning can be presented through several lenses including looking at indigenous knowledge systems (local or community knowledge embracing spiritual values, traditions, and practices passed down through generations), and religious, philosophical, and spiritual systems different from ones predominantly found in the West. However, most of these systems have the following themes in common: learning is a communal activity, it is lifelong and predominantly informal, and learning is holistic in nature (Merriam and Kim, 2011).

The first theme – that learning is communal – positions the benefit to the community over individual development and gain. Focusing on learning for individual development is considered immature, and as Nah (2000) found in a study of self-directed learning in Korea, "a person becoming independent of his or her parents, teachers or other people, tends to be considered threatening to the stability of a community he or she belongs to" (p. 18). One's identity is seen as a communal one as illustrated by the African proverb, "There Is No Me Without You," or the Native American saying, "We are, therefore I am" (Merriam, Caffarella, and Baumgartner, 2007). Learning is the responsibility of all members of the community for the benefit of the community.

Non-Western systems value learning that is lifelong and informal, that is learning is embedded in everyday life, throughout life. As Fasokun, Katahoire, and Oduaran (2005) point out, lifelong learning in African cultures focuses on informal learning through life experiences rather than learning in formal educational settings. While formal learning is valued in non-Western societies, and we know that the vast majority of adult learning in the West takes place informally, the perception of how learning takes place and what is acknowledged and rewarded favors informal learning in non-Western societies and formal, institutionally based learning in the West.

Finally, a third theme that characterizes non-Western perspectives on learning and knowing is that learning is holistic. While the West continues to see learning as primarily a cognitive process residing in the brain:

if there's anything that non-Western systems of learning and knowing have in common, it's the notion that learning involves not only the mind but the body, the spirit, and the emotions. There is no separation of the mind from the rest of our being.

(Merriam and Kim 2011, p. 384)

While the holistic nature of learning is receiving more attention in the West (see above), such a perspective is firmly embedded in non-Western traditions where equally important to developing the mind "is developing a moral person, a good person, a spiritual person, who by being part of the community uplifts the whole" (p. 384).

In summary, globalization and communications technology have exposed and influenced all cultures to different worldviews about the nature of learning and knowledge construction. With regard to adult learning theory, exposure to non-Western perspectives on learning and knowing has contributed to expanding our understanding of learning in adulthood, as well as how to maximize the effectiveness of instruction with adults.

Implications for future theory-building and practice in adult learning

It is clear from this review of theory building in adult learning that there is no one theory or set of principles that can capture the full range of what we know about adult learning. Rather what we have is an expanding mosaic of theories, models, principles, and insights that together make up what we know about adult learning at any one point in time. Systematic investigations into adult learning began in the West in the early decades of the twentieth century and were dominated by a behavioral and cognitive framing of learning. Much interest in this period centered on how increasing age impacted performance on learning tasks and intelligence scores.

However, by the mid decades of the twentieth century, attention shifted to studying adult learning as a way of differentiating the field of adult education

from childhood education. Three major streams of adult learning theory emerged in this period: andragogy, self-directed learning, and transformative learning. These three "foundational" theories reflect a more humanistic psychological perspective that focuses on individual growth and development. Such a perspective is congruent with the field of adult education itself, particularly in the West where individualism, competency, and self-development are highly valued. This focus on the individual began to be questioned and critiqued as attention turned to the context where adult learning takes place. In particular, critical theory and all of its variations (Marxist theory, feminist theory, critical race theory, etc.) questioned how much autonomy an individual really had to learn and develop. Writers from this perspective pointed out that society's structures and who held the power to make decisions about what learning consisted of and who had access to this learning greatly impacted an individual's ability and access to learning. This perspective on adult learning is still an important framework for research and theory-building in adult learning.

Also with regard to the shift in attention to the context of adult learning, but coming from a much different perspective, is the work of cognitive and educational psychologists on what is called situated cognition or context-based learning. The idea behind this strain of research is that learning is a function of the context in which it takes place. The richness of the context, the "tools" and the people in the context, and the particular learning activity itself all come together to structure the learning. Communities of practice and learning communities are an outgrowth of this perspective.

The most recent work in adult learning theory has been centered in more holistic conceptions of learning; that is, learning is viewed as more than just the cognitive processing of information. Learning also involves our emotions, body, and spirit. These holistic conceptions merge well with our increasing understanding of non-Western perspectives on learning and knowing. Non-Western views of learning emphasize the communal nature of learning, its lifelong and informal nature, and the fact that learning is also more than just a cognitive process – it involves the body, spirit, and emotions.

The more we know about how adults learn, the better we can design learning activities that facilitate learning and the better we can prepare adults to live full and engaging lives in today's world. For example, given our fast-changing world in which information overload is a fact of everyday life, we need to be promoting self-directed lifelong learners. From work in situated learning, we also know that learning is maximized in contexts that are as "authentic" as possible such as through internships, simulations, and so on. We also need to be developing critical thinking skills to foster examinations of inequities and how interlocking systems of power structure what learning opportunities are available and for whom they are available. Finally, what we are learning about holistic and non-Western perspectives on learning and knowing broadens our repertoire for structuring and facilitating adult learning in a myriad of ways.