

# Adult Learning Theory & Leadership Development

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**Abstract:** This article addresses the natural, yet overlooked link between leadership development and adult learning theory. The article begins with a summary of four adult learning theories: Behaviorism, Cognitivism, Social Learning Theory and Constructivism. Each theory is described and its potential application to leadership development is discussed. The article concludes with a discussion of Jay Conger's four categories of leadership development programming and their link to theories of adult learning.

Adult learning theory is an important factor in leadership development. However, it receives only cursory mention by leadership scholars (Conger & Benjamin, 1999; Goleman, Boyatzis & McKee, 2002). Like adult development, adult learning is a personal process. Merriam & Caffarella (1999) assert that "the context of adult life and the societal

context shape what an adult needs and wants to learn and, to a somewhat lesser extent, when and where learning takes place” (p. 1).

Merriam & Caffarella (1999) highlight a number of adult learning theories. This article will focus on four: *behaviorism*, *cognitivism*, *social learning* and *constructivism*. Behaviorism’s primary purpose is to elicit behavioral change in a new and desired direction. While behaviorists are concerned with behavioral change, cognitivists focus on developing “capacity and skills to learn better” (p. 264). Proponents of social learning examine the intersection of the social context and the learner. Finally, constructivists are concerned with the learners’ construction of reality and how individuals make meaning from experiences. This article provides a brief description of each theory and links its application to leadership development. I also discuss “transfer of learning” – an important element in any leadership development initiative.

### **Behaviorism**

According to the behaviorists, thinking and feeling have little to do with learning because each cannot be measured. Advocates of this paradigm have three common points of agreement. First, behaviorists study current behavior and are not concerned with the past. Second, proponents suggest that only that which can be measured and observed is important. Finally, behaviorists believe in “specifying the desired results of instruction in measurable terms before it takes place” (Rothwell and Sredl, 1992, p. 326). As a result, behaviorism is frequently used in skills and job training. Early behaviorists included Edward Thorndike, Ivan Pavlov, Clark Hull and B.F. Skinner

Edward Thorndike began researching how animals learn in 1898. Thorndike suggested that new learners were like blank slates responding to stimuli in a haphazard way. Edward Thorndike and others published the first research on the topic of adult learning in 1928. In his research, “people were tested under timed conditions on various learning and memory tasks” (Merriam, 2001, p. 3). Thorndike developed a great deal of theory surrounding stimulus and response and suggested, “A specific response is *connected* to a specific stimulus when it is rewarded...the stimulus, S, is entirely under the control of the experimenter (or teacher), and in a large measure so is the response, R, for all the experimenter has to do to connect the particular R to a particular S is to reward the R when the organism happens to make it” (Knowles, et al., 1998, p. 24-25).

Thorndike developed a number of laws surrounding learning of animals and humans but, according to Knowles et al. (1998), three that stand out were the *law of readiness*, the *law of exercise*, and the *law of effect*. The *law of readiness* focuses on the physical conditions surrounding the learning experience and how these affect learning. The *law of exercise* encourages extensive repetition of experiential activities to master skills or techniques. The *law of effect* has to do with the consequences of the newly learned information. Did the intervention work? Did the intervention fail? Collectively, these three factors will determine if the new information is valued and/or retained.

Around this time, Ivan Pavlov developed the terms *classical conditioning* and *operant conditioning*. Classical conditioning is best explained using the classic example of

Pavlov's dog. Pavlov linked a bell with food which, when rung, caused salivation in the dog. Generally speaking, it forms an association between two stimuli. Operant conditioning forms an association between behavior and a consequence. There are four possible consequences to any behavior:

- Something good begins.
- Something good ends.
- Something bad begins.
- Something bad ends.

Others terms introduced by Pavlov include *reinforcement*, *extinction*, *generalization* and *differentiation*. Reinforcement occurs when a stimulus is continually linked with a positive response. Extinction occurs over time when certain stimuli are eliminated and a former response is eliminated. *Generalization* occurs when a "conditioned reflex to one stimulus can also be elicited by other stimuli, not necessarily similar to the first" (Knowles, et al., 1998, p. 26). Finally, *Differentiation* occurs when "the initial generalization is overcome by the method of contrast in which one of a pair of stimuli is regularly reinforced and the other is not; in the end, the conditioned reflex occurs only to the positive (reinforced) stimulus and not to the negative (non-reinforced) stimulus" (Knowles, et al., 1998, p. 26).

Clark Hull developed more than 100 hypotheses about learning that he subsequently tried to prove through laboratory experiments. Like other behaviorists, Hull believed that all learning was a connection between stimulus and response. According to Rothwell and Sredl (1992), Hull's theory can be summarized as, "The response potential of a given stimulus is the result of multiplying such intervening variables as *habit strength* (the number of previous and reinforced pairings of a stimulus and a response), *drive* (the need to meet certain requirements of the body), *stimulus dynamism* (the strength of the stimulus), and *incentive* (the strength of a reward that will meet body requirements)" (p. 328). The authors continue with the following example, "A rat will learn to master a maze if the previous efforts to do so have been rewarded, the reward met the rat's needs, the rat recognizes the relationships between the maze and the reward, and the reward is sufficiently worthwhile to induce effort" (Rothwell and Sredl, 1992, 328). Although relevant for its time, the work of Hull may not be relevant today; for instance, it is known that not *all* learning can be connected to a stimulus and response. According to Hilgard, "its primary contribution may turn out to lie not in its substance at all, but rather in the ideal it set for a genuinely systematic and quantitative psychological system far different from the schools which so long plagued psychology" (Knowles, et al., 1998, p. 27).

Behavioral learning theorists use *objectives-centered* instruction when creating learning opportunities. Leadership theories that focus on leader competencies (such as emotional intelligence) may benefit from this approach. However, creating an environment where behaviors and actions are measured and observed can be a complex proposition. Moreover, behaviorists feel that what is being learned should be reinforced quickly and undesirable performance should be corrected immediately. In addition, repetition and testing should occur on a regular basis. As a result, leadership development programs should incorporate a number of "real time" opportunities for learners to practice and

perform new behaviors. This real time practice includes coaching from independent observers or others and offering immediate feedback to participants. In addition, designers of leadership development programs utilizing this learning theory may consider linking the subject being taught (in this case leadership development) to some form of prestige or desirable outcome. For instance, a promotion, a degree, a certificate or some other reward will motivate learners to incorporate and internalize new behaviors.

Hull argued that learners should be placed in situations that elicit anxiety so they have incentive to learn and master a given topic or skill. According to Rothwell and Sredl (1992), Hull suggested “learning will only occur when the learner wants something, must do something and sees learning as a way to achieve what he or she wants” (p. 335). When applied to leadership development, designers may incorporate activities that stretch the learners and remove them from their comfort zones. Further, the activities and learning moments must be tied to the goals and dreams of learners. McCall, Lombardo & Morrison (1988) would likely agree based on their research findings.

*Objective-centered* instruction is relevant to much of the training that exists within organizations (and potentially the foundation upon which the American education system rests), because departments and divisions are constantly pressured to show concrete (many times financial) results for their efforts. Leadership development programs face these same challenges and a program design with *objectives-centered* outcomes will likely appease those funding leadership development programs. After all, some feel that a part of developing leaders rests upon the ability for the education to shape new and more productive behaviors; behaviors that have a positive effect on one’s abilities.

Instructors hoping to utilize this method of teaching should: encourage repetition of acts performed correctly; give frequent examinations to gather feedback on the learning process; state objectives clearly in advance; provide many different variations of the same stimuli (because each stimulus-response bond is unique); vary subjects so learners do not become fatigued; avoid punishment; make learning experiences as individualized as possible; measure behavioral change; create an environment of anxiety and allow learners to reward themselves for their accomplishments (Rothwell and Sredl, 1992).

In general, behaviorists believe learning is driven by stimulus and response. Behaviorism takes a very mechanistic approach to learning and, at times, seems very cold – excluding feelings or anything that cannot be observed. As a result, “learning occurs through observable and measurable behavior. A change in external behavior produces changes in internal attitudes, beliefs and values. Human beings are shaped by their surroundings” (Rothwell & Sredl, 1992, p. 329). Thus, learners simply respond to stimuli developed by things external to themselves (teachers, classmates, etc.).

### **Cognitivism**

Unlike behaviorism, cognitivism focuses on the internal aspects of learning. Cognitivists view people as a *part* of their environment; having potential to influence the environment around them. Cognitive theory has a heavy foundation in Gestalt psychology.

Wolfgang Kohler was the founder of cognitivism and hypothesized that learning occurs when an individual has insight that shows a relationship between two distinct components of a larger system or problem. Gestalt theorists view learning as a uniquely individual event that is about discovering relationships between things. According to Rothwell and Sredl (1992), Gestalt theorists propose six principles about the nature of perception:

- *The Principle of Direction:* Stimuli that appear to be meaningful and form a pattern will stand out against a neutral background. Observers will perceive this pattern.
- *The Principle of Contiguity:* Stimuli that are close together tend to be perceived as grouped together.
- *The Principle of Embeddedness:* A large figure with a great number of stimuli will stand out from small figures with a lesser number of stimuli.
- *The Principle of Likeness:* Similar objects will tend to be perceived together.
- *The Principle of Joint Destiny:* Objects that move together will tend to be perceived together.
- *The Principle of Closure:* The mind will tend to perceive as complete otherwise incomplete experiences or patterns (p. 330).

Kohler emphasizes the notion that only part of the information will remain in the learner's mind. As a result, the teacher must be sure to revisit "the whole" and place the smaller parts in context; allowing the parts to take on a new meaning. Once this has occurred, the teacher must move this information from short- to long-term memory. Kohler suggests that this occurs through "active learning." Active learning involves students in the learning experiences and allows them the opportunity to instruct and practice new skills or behaviors. Further, repetition aids in transfer to long-term memory and, after time, students arrive at an "automatic stage" where the student no longer needs to consciously think about each step. Only at this point can additional higher level information be introduced. For instance, once a young girl has mastered how to ride a bike, she will better comprehend discussions surrounding bike safety or bike maintenance. To discuss these topics first would be premature and potentially out of context.

In a similar vein, Jerome Brunner developed a theory of learning that includes three processes. The first is that the learner *acquires new information that refines what was previously known*. For learning to occur, it is important that this new information be counter to previously known information or viewpoints. The second is *transformation* which is the manipulation of new information into action. The final process is an *evaluation* process whereby the learner determines if the new information is adequate for the task at hand.

Another proponent of cognitivism was Kurt Lewin. Lewin was influenced by phenomenology, which is the belief that people interpret experience and that interpretation is central to their existence. To Lewin, an individual experiences life through external and internal stimuli and how they interpret these events defines how they make meaning of their world. This is central to understanding an individual's behavior. Lewin also developed what he called field theory and "conceptualized each individual as existing in a *life space* in which many forces are operating...learning occurs as a result of a change in cognitive structures produced by changes in two types of forces: (1) change in the structure of the cognitive field itself, or (2) changes in the internal needs or motivation of the individual" (Knowles, 1988, p. 30).

According to the cognitivists, *experienced-centered instruction* is based on Gestalt theory. Program architects who promote this orientation to learning suggest that instruction needs to focus on participants having an "understanding" rather than a behavioral change (Rothwell and Sredl, 1992). In other words, one goal is for participants to be more in tune with their own processes and ways of knowing are the primary goals. When introducing a process or new way of conducting business, a step-by-step model should be introduced and related to the whole. In addition, cognitivists suggest that a focus on real life problems that have immediate importance will better assist learners in solving problems that have immediacy "because unsolved problems create uncomfortable ambiguity for learners" (Rothwell & Sredl, 1992, p. 335-336). As learners search for solutions and develop theories, learning will occur. As it relates to leadership development, architects of developmental experiences may develop case studies that encourage learners to move through complex problem solving activities and challenge them to think in new ways. Finally, learning must take place in a safe and comfortable environment that will assist participants in solving problems and provide them with opportunities to test assumptions through activity.

Proponents of cognitivism posit that learning is much more than simple behavior change. They suggest that learners develop new insights and ways of understanding the world around them. Further, cognitivists assert that learning opportunities should involve opportunities for learners to be actively involved in the process; at times developing their own goals and activities.

### **Social Learning Theory**

Albert Bandura (1977) is the founder of *social learning theory* which suggests that individuals learn behavior (e.g., leadership, aggression) based on modeling in their environments. Bandura (1977) suggests "Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (p. 22).

Therefore, learning is a relationship between the learner and the environment. Merriam & Caffarella (1999) suggest, “Behavior is a function of the interaction between the person with the environment. This is a reciprocal concept in that people influence their environment, which in turn influences the way they behave” (p. 260). Interestingly, Charbonneau, Barling, & Kelloway (2000) explain leadership development through a social learning framework. The authors found that adolescents tend to mirror behavior displayed by their fathers and in turn, display these characteristics with their peers. Additionally, Zacharatos, Barling & Kelloway (2000) found that, if attributes of transformational leadership exist in youth, this may have a major effect on later leadership in adulthood. In their research, the authors determined that children who perceived their parents to be transformational tended to display these behaviors. These same adolescents were more likely thought of as transformational by their peers and coaches.

Social learning theory is an important learning theory for leadership development. First, leadership is contextual; what works in one situation may not work in another. Leadership development opportunities should help participants better understand their environment and how it affects those within in it. After all, people are products of their environment and have learned what is, and is not, socially acceptable within their organization. At times, the real culture is different from the espoused culture. A culture that promotes communication, honesty, ethical behavior, and transparency may not accept individuals with differing values (and vice versa).

In addition, social learning underscores the importance of congruence between leadership development and the corresponding culture. For example, Moxley & O’Conner-Wilson (1998) suggest that, “one organization’s leadership development program focused on helping people develop the skills needed to effectively operate in a flatter, more team-based environment. Yet, the performance appraisal and compensation system put more emphasis on individual performance. The reward system undermined the goal of developing a team-based work environment” (p. 229). Leadership development initiatives that do not align with the “real” organizational culture encounter challenges from the outset. Mixed messages likely occur and, in the end, the individual is forced (or encouraged) to act in a manner congruent with the organization’s theory-in-use rather than the espoused theory.

On a more individualized level, social learning emphasizes the need for leaders or teachers to exemplify the desired behavior(s). Proponents of social learning assert that teachers or leaders who do not model the desired behavior undermine efforts to effect lasting change. For instance, supervisors who promote one course of action, yet do not themselves exemplify this behavior, likely undermine their own efforts.

To summarize, people learn behavior(s) based on modeling in their environment; this concept can either help or hinder leadership development initiatives depending on the cultural context once participants return to their work environments.

### **Developmentalism/Transformative Learning**

While behavioral approaches to adult learning focus on skill and competency building and social learning theory focuses on one's environment, developmentalism closely examines the learner's meaning-making system (similar to cognitivism). Linked closely to the concepts of Kegan's constructivist/developmental theory, perhaps the best known theory of developmentalism is Mezirow's transformative learning (also known as transformational learning).

Transformative learning occurs when individuals critically reflect upon their environment and learning. Through intense reflection, individuals transform their thinking and view of the world. Jack Mezirow introduced the topic of transformative learning in 1978. Central to the theory of transformative learning is the notion that adults make new meaning of their experiences. In the words of Mezirow (2000), "That is why it is so important that adult learning emphasize contextual understanding, critical reflection on assumptions, and validating meaning by assessing reasons. The justification for much of what we know and believe, our values and our feelings, depends on the context – biographical, historical, cultural – in which they are embedded. We make meaning with different dimensions of awareness and understanding; in adulthood we may more clearly understand our experiences when we know under what conditions an expressed idea is true or justified" (p. 4-5).

For Mezirow, adult learning is about developing autonomous thinking which aligns nicely with the objectives of many leadership development programs. According to Mezirow (2000), learning occurs in the following ways: by elaborating existing frames of reference, by learning new frames of reference, by transforming points of view, or by transforming habits of mind. Learning occurs when meaning structures (also known as a "frame of reference") change. Frames of reference are displayed in two distinct ways: in a habit of mind and in a point of view. A habit of mind may be a political stance such as liberal or conservative, a preference for introversion or extroversion and other orientations or world views. A point of view is the habit of mind expressed and "arbitrarily determines what we see and how we see it – cause-effect relationships, scenarios of sequences of events, what others will be like and our idealized self image" (Mezirow, 2000, p. 18).

Imel asserts (1998), "perspective transformation explains how the meaning structures that adults have acquired over a lifetime become transformed" (n.p.). Mezirow and others reinforce the need for critical reflection for transformative learning to occur. Critical reflection assists learners in confronting their political, economic, social, cultural, and religious viewpoints; allowing individuals to become more aware of how these (and others) affect their view of the world. Regarding critical reflection, Brookfield (1996) asserts, "education is centrally concerned with the development of a critically aware frame of mind, not with the uncritical assimilation of previously defined skills or bodies of knowledge" (p. 17). For example, encouraging adults to better understand the reasoning behind policies, procedures, and cultural norms assists in helping the organization grow and troubleshoot problems or areas of concern.



Another central theme of Mezirow's work is the concept of a "disorienting dilemma." A disorienting dilemma is a life event or crisis that forces individuals to see their world, their relationships, and/or their lives in different and new ways. As an aside, it does not necessarily have to be one event; a disorienting dilemma can be a string of events or combination of events that cause people to change their views. Transformative learning fosters a critical change in an individual's meaning structures and, as a result, individuals develop new frames of reference. In a way, transformative learning provides the "how" to Kegan's constructivist/developmental theory of development.

As individuals' frames of reference and meaning-making develop, so do their views and perspectives of the world. As a result, this method may help participants increase their self-awareness, which is a major theme in leadership development literature. For instance, Goleman et al. (2002) assert that "self-awareness means having a deep understanding of one's emotions, as well as one's strengths and limitations and one's values and motives" (p. 40). Personal growth and self-awareness permeate the literature on leadership development. Personal growth programs are "based, generally, on the assumption that leaders are individuals who are deeply in touch with their personal dreams and talents and who will act to fulfill them" (Conger, 1992, p. 45-46).

Learning based on developmentalism is heavily influenced by stage theorists. For example, Piaget might suggest that instructors be aware of the learners' cultural backgrounds and developmental stages and learning should be tailored to the needs of the individual needs of participants. As a result, architects of leadership development programs must be aware of these factors as they progress through their learning. Further, learning will be maximized when it is tailored to an individual's developmental level.

Transformative learning occurs when individuals critically reflect upon their environment and learning. Through intense reflection, individuals transform their thinking and view of the world.

### **Transfer of Learning**

An important concept from the adult learning literature is transfer of learning. Transfer of learning is a crucial piece of leadership development often left unplanned. Caffarella (2002) defines transfer of learning as "the effective application by program participants of what they learned as a result of attending an education or training program" (p. 204). On balance, if the education does not result in perspective transformation, learning, or change in behavior, it could be argued that the investment was a poor one. According to Phillips, Jones, and Schmidt (2000), learning does not transfer to the job in 90 percent of cases. If true, this is a staggering number for those involved in leadership development. Caffarella (2002, p. 212) devotes an entire chapter to this topic and highlights a number of enhancers and barriers to transfer of learning. She also compares these barriers and enhancers at a number of levels. These levels include:

- Program Participants
- Program Design and Execution
- Program Content

- Changes Required to Apply Learning
- Organizational Context
- Community or Societal Forces

Planning for transfer of learning at all levels of programming is a crucial step in the leadership development process. For example, I recently taught an introduction to business course for undergraduates. When discussing a “matrix organizational structure” or “human resources functions,” a natural barrier is that there is little match between the learning environment and the application context. In fact, a student may not have an opportunity to experience this context for years. Therefore, it is a foreign concept and will likely be lost by the time the undergraduate experiences it first hand. On the other hand, if I were working with adult students who work in a matrix organization and interacted with human resources on a regular basis, a different learning experience would exist.

Of course, this short article only scratches the surface when it comes to transfer of learning. However, it is an important concept often overlooked by architects of leadership development interventions. Again, if the assertion made by Phillips, Jones, and Schmidt holds (2000) (learning does not transfer to the job in 90 percent of cases), then there is much work to be done.

### **Adult Learning Theory & Leadership Development**

An example of how adult learning theory aligns with leadership development may be found in the work of Jay Conger. In his book *Learning to Lead*, Conger (1992) outlines four types of leadership training. Based on his qualitative research, leadership development programs (or aspects of programs) fall into four categories: *personal growth, conceptual understanding, feedback and skill building*. Each of these categories aligns nicely with one or more of the adult learning theories mentioned in this article.

*Personal growth* programs are “based, generally, on the assumption that leaders are individuals who are deeply in touch with their personal dreams and talents and who will act to fulfill them” (Conger, 1992, p. 45-46). Essentially, the purpose of these programs is to increase self-awareness and emphasize self-exploration. Conger notes that four organizations/movements spawned the growth of these types of programs – National Training Laboratories, the humanistic psychology movement, Outward Bound and The Peace Corps. Such programs naturally align with the tenets found in cognitivism and developmentalism.

The second category is *conceptual understanding* which primarily focuses on theories of leadership. Conger notes that these have traditionally occurred in universities, although in the late 80’s and 90s programs such as Kouzes and Posner’s Leadership Challenge brought some of this thinking to the mainstream. Similar to *personal growth* programs, cognitivism and developmentalism may serve as a guide for designing the learning intervention.

Leadership development through *feedback* is the third category. Feedback instruments such as the MBTI and 360-degree instruments are utilized in the majority of leadership development programs. These are used in an effort to help individuals locate areas for improvement. A program with *feedback* as a primary objective may incorporate any number of learning theories depending on the objectives of the feedback intervention.

Conger's final category is *skill building*. According to Conger, this is the most common method utilized in leadership development training and has grown increasingly difficult to teach as our thinking about leadership has progressed. However, to do it right, these programs take a great deal of time and must be reinforced back on the job; Conger (1992) notes that "a four or five-day program can introduce the basics of a skills set to participants, but cannot truly develop it for most of them" (p. 179). A natural fit for a program hoping to build the skills of participants is *behaviorism* which emphasizes trial and error along with intense feedback.

## **Conclusion**

Although there are no all-encompassing theories of adult learning, it is important to be aware of what each of the primary theories proposes. Merriam and Caffarella (1999) suggest that "learning is a personal process...the context of adult life and the social context shape what an adult needs and wants to learn and, to a somewhat lesser extent, when and where learning takes place" (p. 1). A leadership development program that incorporates the thinking of behaviorists, cognitivists, social learning theorists and developmentalists will not only involve learners at a higher level, it will help architects of leadership development programming design and implement interventions and environments more conducive to learning. And it seems to me, that it what we are trying to do – create interventions and learning opportunities that are truly transformative in nature.

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