David Kolb and Experiential Learning

Heather Hodge

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Dr. Jeffrey Foley

Colorado State University
DAVID KOLB AND EXPERIENTIAL LEARNING

David Kolb is an American educational theorist and social psychologist. Born in 1939, Dr. Kolb received his BA from Knox College in 1961. He went on to earn his MA from Harvard University in 1964 and his PhD from Harvard in 1967, both in social psychology (Smith, 2010). Dr. Kolb was a professor of organizational behavior and management at the MIT Sloan School of Management and at Case Western Reserve University’s Weatherhead School of Management, where he is currently Emeritus Professor of Organizational Behavior (Kolb, n.d.). He is also the chairman of Experience Based Learning Systems, which he founded in 1980 to further research on experiential learning. Dr. Kolb’s notable contributions to teaching and learning are the Experiential Learning Theory (ELT) and the Kolb Learning Style Inventory (LSI).

Experiential Learning Model (ELT)

While the general concept of experiential learning has been around for ages, it wasn’t until the early 1970’s that Dr. Kolb began developing the modern theory of experiential learning. Kolb’s theory is explicitly based on the work of Jean Piaget, Kurt Lewin and John Dewey. A high level overview of their models are as follows.

The Lewinian Model of Action Research and Laboratory Training

In Kurt Lewin’s model, the action research and laboratory training begin with a “here-and-now experience” which is followed by data collection and observations about that experience (Kolb, p. 21). Once the data is analyzed, feedback is given to the test subjects so that they can consider modifying their behavior. Lewin’s model is depicted below:

Figure 1: The Lewinian Experiential Learning Model (Kolb, p. 21)
Lewin’s model influenced Kolb in two important ways. One, was the emphasis on the concrete (“here-and-now”) experience, which was used to validate and test abstract concepts. The second was the emphasis on feedback as it pertains to helping create valuable goal-directed learning.

**Dewey’s Model of Learning**

Dewey’s model is very similar to Lewin’s except that it is more explicit in the developmental nature of learning “by describing how learning transforms the impulses, feelings and desires of concrete experience into higher-order purposeful action” (Kolb, p. 22). In other words, and as depicted by Dewey’s model below, the more impulses (experiences) the learner has will allow for more observation, which will increase knowledge and judgment and ultimately make purpose.

![Dewey's Model of Experiential Learning](Figure 2: Dewey's Model of Experiential Learning (Kolb p. 23))

**Piaget’s Model of Learning and Cognitive Development**

Piaget’s work mainly focused on what he identified as the four major stages of cognitive growth, starting with the sensory-motor stage (age birth to 2 years) and going to the stage of formal operations (age 12-15 years), as depicted in the figure below.

![Piaget's Model of Learning and Cognitive Development](Figure 3: Piaget's Model of Learning and Cognitive Development (Kolb p. 25))
Piaget’s model basically says that we move through four stages of cognitive development, each building on the previous stage. In the final stage (ages 12-15 and into adulthood), we are back at the active orientation stage that we had as a baby, but it is now “modified by the development of the reflective and abstract power that preceded it” (Kolb p. 24). His four stages of cognitive development forms the basis for the adult basic learning process.

**Kolb’s Experiential Learning Model**

According to Kolb, “ideas are not fixed…but are formed and reformed through experience” (Kolb, p. 26). While it is clear that Kolb’s model is explicitly based on the work of Piaget, Dewey and Lewin, it is Kolb who is credited with the creation of a modern experiential learning theory. Not to be confused with the self-managed experiential learning that takes place every day, Kolb took the themes of concrete experiences, abstract concepts, feedback/reflection and application from Piaget, Lewin and Dewey and developed his experiential learning model. He states that in order for learners to be effective, they must have four abilities. Each ability is followed by a brief description.

- **Concrete experience abilities (CE)** – Involve themselves fully in a new experience
- **Reflective observation abilities (RO)** – Reflect on and observe from many perspectives
- **Abstract conceptualization abilities (AC)** – Create concepts that integrate their observations into sound theories
- **Active experimentation abilities (AE)** – Use the theories to make decisions and solve problems (Kolb, p. 30)

Kolb’s model is graphically represented below:
What is interesting about Kolb’s model is that while it is a spiral of the learning process, you can start with any of the four abilities, although it is obviously best to start with a concrete experience. A learner will likely encounter each stage in varying degrees and may show a preference to one of the abilities. Kolb’s Learning Style Inventory, which is discussed later, is based on this preferred ability.

In his landmark 1984 publication entitled, *Experiential learning: experience as the source of learning and development*, Kolb states that there are common characteristics among the major traditions of experiential learning (Lewin, Dewey and Piaget):

- Learning is best conceived as a process, not in terms of outcomes
- Learning is a continuous process grounded in experience
- The process of learning requires the resolution of conflicts between dialectically opposed modes of adaption to the World
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- Learning is a holistic process of adaption to the World
- Learning involves transactions between the person and the environment
- Learning is the process of creating knowledge (Kolb, pp. 26-36)

It is under the section about conflicts that Kolb lays out his model. He suggests that learning is a result of conflict between the four abilities. Kolb emphasizes that learning is an adaptive process and that there is a need to integrate the four abilities in order to reach the highest stages of development.

**Kolb’s Learning Style Inventory**

To assess individual orientations towards the four abilities (modes) of his experiential learning theory, Kolb developed the Learning Style Inventory (LSI). Kolb’s LSI is an exam that assesses learning style and helps individuals find the best way they learn from experience. It is different from other learning style exams because, according to Kolb and Kolb, it “draws upon a comprehensive theory of learning and development” (as cited on the ICELS website).

Kolb’s LSI was created to help learners understand their approach to learning and as a research tool for validating his ELT. It identifies four learning styles: diverging, assimilating, converging, and accommodating. The preferred learning style is dependent on the learner’s two dominant modes of the four phases (abilities) of the learning cycle. Kolb and Kolb (as cited on the ICELS website) describe the four learning styles as follows:

**Diverging Learning Styles**

- CE and RO as dominant learning abilities
- View concrete situations from different points of view
- Tend to have broad cultural interests and like to gather information
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- Interested in people, tend to be imaginative and emotional, and often specialize in the arts.
- Like working in groups, appreciate diverse viewpoints, and like receiving personal feedback

Assimilating Learning Styles

- AC and RO as dominant learning abilities
- Best at understanding a wide range of information and putting it into concise, logical form
- Less focused on people and more interested in ideas and abstract concepts
- Effective in information and science careers
- Like attending lectures, readings, having time to think things through, and exploring analytical models

Converging Learning Style

- AC and AE as dominant learning abilities
- Best at finding practical uses for ideas and theories
- Able to problem solve and make decisions by seeking appropriate solutions to questions or problems
- Effective in specialist and technology careers
- Learn best when given simulations, practical applications, lab work, and opportunity to experiment with new ideas

Accommodating Learning Styles

- CE and AE as dominant learning abilities
- Have the ability to learn from primarily “hands-on” experience
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- Enjoy carrying out plans and involving themselves in new and challenging experiences
- Prone to acting on “gut” feelings rather than on logical analysis.
- Tend to be effective in action-oriented careers such as marketing or sales
- Enjoy setting goals, working with others, and using different approaches for completing a project

Impact on Education

Ultimately, Kolb defined experiential learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combinations of grasping and transforming experience" (Cherry, n.d.). Experiential learning theory offers a different viewpoint than the traditional cognitive and behavioral theories by emphasizing a more “holistic” (a term used by Kolb himself) approach that underscores how experiences rather than mental processes influence learning.

Following Kolb’s publication of his ELT in 1984, there has been an increase in the literature based on experiential learning theory which indicates greater attention to the theory by practitioners, particularly in the area of adult education and organizational management. Considering that there was also a lot of criticism of this theory because it wasn’t grounded in research, this is a positive development. Because adults have a variety of experiences, this theory is important in adult education for both the learner and instructor. This is especially true in professional education, such as medicine and law, where experiences and reflecting on experiences help to shape future ways of doing things. Reflection also helps individuals retain what they have learned. It is very important in adult learning situations for the instructors to
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acknowledge the experiences of the learners and in some cases, to allow those experiences to serve as the basis for others to learn.
References


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