

Purpose

Just as there is no one theory that explains how humans learn, no single theory of adult learning has emerged to unify the field. The best known theory of adult learning is Knowles' andragogy. As a teacher, writer, and leader in the field of adult education, Knowles was an innovator, responding to the needs of the field as he perceived them and, as such, he was a key figure in the growth and practice of adult education throughout the Western world. However, as many critics have noted, both his theory and practice embodied his own value system. It is, as Knowles noted, a set of assumptions providing one piece of the adult learning puzzle. Therefore, despite their limitations, Knowles' ideas still provides a practical instructional guide for all ages, especially adults.

Andragogy

Andragogy is a concept popularized by Malcolm Knowles in his 1970 book, *The Modern Practice of Adult Education*. Knowles' theory of andragogy was an attempt to create a theory to differentiate learning in childhood from learning in adulthood. The term itself was not new. European adult educators had been using it consistently to refer to both the practical aspects of adult teaching and learning and to the academic study of adult education.

In his book, *The Modern Practice of Adult Education: From Pedagogy to Andragogy*, Knowles (1980, p. 43) contrasts andragogy as "the art and science of helping adults learn" with pedagogy, the art and science of helping children learn. The second edition of his book, however, marked a rethinking in Knowles original conception of andragogy as characterizing only adult learners—as indicated in the change in subtitles from *Andragogy Versus Pedagogy* to *From Pedagogy to Andragogy*. His most recent conclusion was that the use of andragogical and pedagogical principles is to be determined by the situation and not by the age of the learner.

Andragogy is essentially a "model of assumptions" (Knowles, 1980, p. 43) about the characteristics of adult learners that are different from the traditional pedagogical assumptions about child learners rather than an actual theory of adult learning. Based on humanistic psychology, Knowles' concept of andragogy presents the individual learner as one who is autonomous, free, and growth-oriented.

Andragogy Dimensions

The two dimensions of andragogy as elaborated by Knowles are its assumptions about the characteristics of adult learners and the process elements of adult education that stem from these characteristics. He initially related four basic assumptions and added a fifth and sixth in later publications.

- 1. **Self-concept:** As people mature, they move being a dependent personality toward being more self-directed
- 2. **Experience**: As people mature, they amass a growing set of experiences that provide a fertile resource for learning
- 3. **Readiness to learn**: As people mature, they are more interested in learning subjects that have immediate relevance to their jobs or personal lives
- 4. **Orientation to learning**: As people mature, their time perspective changes from gathering knowledge for future use to immediate application of knowledge. As such, adult learners become more problem-centered rather than subject-centered (Knowles, 1980)
- 5. **Motivation to learn:** As people mature, they become more motivated by various internal incentives, such as need for self-esteem, curiosity, desire to achieve, and satisfaction of accomplishment
- 6. **Relevance**: As people mature, they need to know why they need to learn something (Knowles, 1984). Furthermore, because adults manage other aspects of their lives, they are capable of directing or, at least, assisting in the planning and implementation of their own learning.



Knowles' Andragogical Assumptions	
Concept of the Learner	During the process of maturation, a person moves from dependency toward increasing self- directedness, but at different rates for different people and in different dimensions of life. Teachers have a responsibility to encourage and nurture this movement. Adults have a deep psychological need to be generally self-directing, but they may be dependent in certain temporary situations.
Role of the Learner's Experience	As people grow and develop they accumulate an increasing reservoir of experience that becomes and increasingly rich resource for learning—for themselves and for others. Furthermore, people attach more meaning to learning they gain from experience than those they acquire passively. Accordingly, the primary techniques in education are experiential ones—laboratory experiments, discussion, problem-solving cases, field experiences, etc.
Readiness to Learn	People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks and problems. The educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their "needs to know." Learning programs should be organized around life-application categories and sequenced according to the learners' readiness to learn.
Orientation to Learning	Learners see education as a process of developing increased competence to achieve their full potential in life. They want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. Accordingly, learning experiences should be organized around competency-development categories. People are performance-centered in their orientation to learning.

Self-direction

About the same time that Knowles introduced andragogy, self-directed learning appeared as another model to help distinguish adult learners from children. Not only did Knowles indicate that self-directed learning is one of the key assumptions of adult learning, but he also contributed to the literature with his book entitled *Self-Directed Learning: A Guide for Learners and Teachers* (1975). His book explains the concept and outlines how to implement it through learning contracts.

According to Knowles (1975), in its broadest sense, self-directed learning describes a process "... in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (p. 18).

Being self-directed signifies that adult students can and should be allowed to participate in evaluating their learning needs, planning and implementing the learning activities, and evaluating those experiences. Knowles further stated that individuals can be assisted in becoming more self-directed when given appropriate learning tools, resources, experiences, and encouragement. For example, educators might provide assistance to individuals or groups of learners in locating resources or mastering alternative learning strategies. The learners would then seek out this assistance through technology or learning centers.

Knowles asserted three reasons for fostering self-direction. First, he argues that convincing evidence reveals that proactive learner, those who take the initiative in learning, learn more and learn better than passive or reactive learners, who wait to be taught by a teacher. "They enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer than do the reactive learners" (1975, p. 14). Next, self-directed learning parallels the natural processes of psychological development.



"An essential aspect of maturing is developing the ability to take increasing responsibility for our own lives—to become increasingly self-directed" (p. 15). Finally, many new developments in education place significant responsibility on the learner to take the initiative in their own learning. "Students entering into these programs without having learned the skills of self-directed inquiry will experience anxiety, frustration, and often failure, and so will their teachers" (p. 15).

Grounded in a humanistic philosophy, Knowles suggested that self-directed learning should have as its goal the development the learner's capacity to be self-directed. Knowles further noted that with the rapidity of change, the continuous creation of new knowledge, and an ever-widening access to information, it is no longer reasonable to define the purpose of education as simply transmitting what is known. Instead, the purpose must be to develop the skills of inquiry (p. 15). Being proactive and responsible for one's own learning underlie his model.

How one actually works through a self-directed learning experience has generated several process models. The earliest models, such as that suggested by Knowles (1975), presented a linear progression from diagnosing and formulating needs to identifying resources and learning strategies to evaluating outcomes. Knowles included numerous resources both for learners and teachers for completing each of the stages. The information on learning contracts and evaluation has proven to be most useful. Later models, such as those suggested by Jack Mezirow (1991), are more interactive. In addition to the learner, the context of the learning experience and the nature of the learning itself are also considered.