

INTRO ANDRAGOGY

There has been a general lack of thinking, investigating, and writing about adult learning until recently. This is surprising considering that all of the great teachers of ancient times, Confucius and Laozi of China; Hebrew prophets and Jesus in Biblical times; Aristotle, Socrates, and Plato in ancient Greece; Cicero, Euclid, Quintilian in ancient Rome; all of these were teachers of men, not children. Because their experience was with adults, they came to have a very different concept of the learning/teaching process from the one that later came to dominate formal education. They perceived learning to be a process of active inquiry, not passive reception of transmitted content.

These great teachers invented techniques for actively engaging learners in inquiry. The ancient Chinese and Hebrews invented what we would now call the case method, in which a group leader would describe a situation, often in the form of a parable, and jointly the members of the group would explore its characteristics and possible resolutions. The Greeks invented what we now call the Socratic method (or dialogue), in which the leader would pose a question or dilemma and the group members would pool their thinking and experience in seeking an answer or solution. The method is based on asking and answering questions to stimulate critical thinking and to illuminate ideas. It is a *dialectical* method, often involving a discussion in which the defense of one point of view is questioned; one participant may lead another to contradict himself in some way, thus strengthening the inquirer's own point. Learning in the ancient world was an active process that engaged the learner.

Starting in the seventh century in Europe, schools began being organized for teaching children, primarily for preparing young boys for the priesthood. Since the teachers in these schools had as their principal mission the indoctrination of students in the beliefs, faith, and rituals of the Church, they evolved a set of assumptions about learning and strategies for teaching that came to be labeled "pedagogy"-literally meaning "the art and science of teaching children" (since the term is derived from the Greek words "paid," meaning "child," and "agogus," meaning "leader of"). This model of education persisted through the ages well into the twentieth century and was the basis of organization of our entire educational system. Beginning around the end of World War I there began emerging a growing body of notions about the unique characteristics of adults as learners; but it would take decades before these notions would evolve into a comprehensive theory of adult learning.

Two streams of inquiry are discernible beginning with the founding of the American Association for Adult Education in 1926. One stream we might call the scientific stream and the other the artistic or intuitive stream. The scientific stream seeks to discover new knowledge through rigorous investigation, and was launched by Edward Thorndike. Thorndike was concerned with assessing adults learning ability, and his studies demonstrated that adults could learn and that

they possessed interests and abilities that were different from those of children. Thorndike believed that the ability to learn did not decline until age 35, and only then at a rate of 1 percent per year, going against the thoughts of the time that "you can't teach an old dog new tricks." It was later shown that the speed of learning, not the power of learning, declined with age. When his investigations in the 1920s of adult learning revealed that continued learning ability was determined by inborn personal factors rather than age, adult education was revitalized.

Edward Thorndike is often called the father of modern educational psychology. Educational psychology involves the study of how people learn, including topics such as student outcomes, the instructional process, individual differences in learning, gifted learners and learning disabilities. This branch of psychology involves not just the learning process of early childhood and adolescence, but includes the social, emotional and cognitive processes that are involved in learning throughout the entire lifespan. The field of educational psychology incorporates a number of other disciplines, including developmental psychology, behavioral psychology and cognitive psychology.

The artistic stream of inquiry seeks to discover new knowledge through intuition and the analysis of experience; this stream is concerned with *how* adults learn. This stream was launched by American educator Eduard Lindeman who believed the correct approach to adult education was via the route of situations, not subjects. In conventional education the student is required to adjust himself to an established curriculum; in adult education the curriculum is built around the student's needs and interests. Every adult person finds himself in specific situations with respect to his work, his recreation, his family-life, his community-life, et cetera; situations which call for adjustments. Adult education begins at this point. Subject matter is brought into the situation, is put to work, when needed. Texts and teachers play a new and secondary role in this type of education; they must give way to the primary importance of the learners.

Lindeman believed the resource of highest value in adult education is the learner's experience. If education is life, then life is also education. Too much of learning consists of vicarious substitution of someone else's experience and knowledge. Psychology is teaching us, however, that we learn what we do, and that therefore all genuine education will keep doing and thinking together. Experience is the adult learners living textbook. Small groups of aspiring adults who desire to keep their minds fresh and vigorous; who begin to learn by confronting pertinent situations; who dig down into the reservoirs of their experience before resorting to texts and secondary facts; who are led in the discussion by teachers who are also searcher after wisdom and not oracles; this constitutes the setting for adult education, the modern quest for life's meaning.

Those who accept the classical view of education frequently assert that the great majority of adults are not interested in learning, are not motivated in the direction of continuing education; if they possessed these incentives, they would naturally take advantage of the numerous free education opportunities provided by public agencies; such as those available in libraries and on the internet. Progressive educators claim we will never know how many adults desire intelligence regarding themselves and the world they live in until education escapes the patterns of conformity. Adult education is an attempt to discover a new method and create a new incentive for learning; its implications are qualitative, not quantitative. Adult education is a process through which learners become aware of significant experience. Recognition of significance leads to evaluation. Meanings accompany experience when we know what is happening and what importance the event includes for our personality.

Lindeman conceived of adult education as a process by which the adult learns to become aware of and to evaluate his experience. To do this he cannot begin by studying "subjects" in the hope that some day this information will be useful. On the contrary, he begins by giving attention to situations in which he finds himself, to problems which include obstacles to his self-fulfillment. Facts and information from the differentiated spheres of knowledge are used, not for the purpose of accumulation, but because of need in solving problems. Someone newly diagnosed with astigmatism will study the function of the eye in order to answer questions about their condition, just as someone trying to repair a lawnmower will study the working of the internal combustion engine. A person who is unsure of themselves in social situations can study any number of things so that they are confident about maintaining intelligent conversation with strangers. The knowledge being acquired pertains to situations in the real world.

A study illustrates the importance of knowledge pertaining to real life situations. In 1988, social anthropologist Jean Lave showed that housewives in Irvine, California who could successfully do the mathematics needed for comparison shopping, were unable to do the same mathematics when they were placed inside a classroom environment. Her studies showed that if you put a learner in a real world situation (authentic context) and interact with other people, then learning occurs. Situation learning usually involves engaging in tasks which parallel real world applications. A learning environment is considered authentic if the tasks parallel real world situations. Situation learning theory emphasizes social interactions and authentic learning. Students who work on an authentic learning task learn associated facts and skills because they need to know these things to accomplish the task.

In this adult education process the teachers finds a new function. He is no longer the oracle who speaks from the platform of authority, but rather the guide, the pointer-outer who also participates in learning in proportion to the vitality and relevance of his facts and experiences. None but the humble become good teachers of adults. In an adult class the student's experience counts for as much as the teacher's knowledge. In the best adult classes it is

sometimes difficult to discover who is learning most, the teacher or the students. This two-way learning is also reflected by shared authority. In conventional education the pupils adapt themselves to the curriculum offered, but in adult education the pupils aid in formulating the curricula. Under democratic conditions authority is of the group.

In a day school, there the students are usually children or young adolescents, a learned teacher-ignorant pupil relationship is almost inevitable, and frequently has its advantages. But an adult education situation is entirely different. Here, so far as the class is concerned, the teacher is an authority upon one subject only, and each of the students has, in his own particular field, some skill or knowledge that the teacher does not possess. For this reason, there is a spirit of give-and-take in an adult class that induces a feeling of comradeship in learning, stimulating to teacher and students alike. For instance, in a creative non-fiction class, each of the students will have unique knowledge and perspective to write about and bring to the class discussion.

While the true motivation to learn comes from within not all education is self-education. Teachers can help define procedure, collect resources, indicate the best routes for completing a project, but ultimately it is the learner who must use his or her own head to complete the task. The best method of teaching adults yet his upon is undoubtedly group discussion. The educator who uses the group method of education takes ordinary, gregarious human beings for what they are (social beings), searches out of the groups in which they move and have their being, and then helps them to make their group life yield educational values.