3

A Theory of Adult Learning: Andragogy

Considering that the education of adults has been a concern of the human race for a very long time, it is curious that there has been so little thinking, investigating, and writing about adult learning until recently. The adult learner has indeed been a neglected species.

This is especially surprising in view of the fact that all of the great teachers of ancient times—Confucius and Lao Tse of China; the Hebrew prophets and Jesus in Biblical times; Aristotle, Socrates, and Plato in ancient Greece; and Cicero, Evelid, and Quintillian in ancient Rome—were all teachers of adults, not of 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. Accordingly, they invented techniques for actively engaging learners in inquiry. The ancient Chinese and Hebrews invented what we would now call the case method, in which the leader or one of the group members would describe a situation, often in the form of a parable, and jointly they would explore its characteristics and possible resolutions. The Greeks invented what we now call the Socratic dialogue, in which the leader or a group member would pose a question or dilemma and the group members would pool their thinking and experience in seeking an answer or solution. The Romans were more confrontational: They used

challenges that forced group members to state positions and then defend them.

Starting in the seventh century in Europe, schools began being organized for teaching children—primarily for preparing young boys for the priesthood—hence they became known as cathedral and monastic schools. 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.

Starting shortly after the end of World War I, there began emerging both in this country and in Europe a growing body of notions about the unique characteristics of adults as learners. But only in the last two decades have these notions evolved into a comprehensive theory of adult learning. It is fascinating to trace this evolutionary process in this country.

Two Streams of Inquiry

Two streams of inquiry are discernible beginning with the founding of the American Association for Adult Education in 1926 and the provision of substantial funding to it for research and publications by the Carnegie Corporation of New York. One stream we might call the scientific stream and the other the artistic or intuitive/reflective stream. The scientific stream, which seeks to discover new knowledge through rigorous (and often experimental) investigation, was launched by Edward L. Thorndike with the publication of his *Adult Learning* in 1928. The title is misleading, however, for Thorndike was not concerned with the processes of adult learning but rather with learning ability. His studies demonstrated that adults could learn, and this was important, for it provided a scientific foundation for a field that had previously been based on the mere faith that adults could learn. Additions to this stream in the next decade included Thorndike's *Adult Interests* in 1935 and Herbert Sorenson's *Adult Abilities* in 1938. By the onset of World War II, therefore, adult educators had scientific evidence that adults could learn and that they possessed interests and abilities that were different from those of children.

It was the artistic stream, which seeks to discover new knowledge through intuition and the analysis of experience, that was concerned with *how* adults learn. This stream was launched with the publication of Eduard C. Lindeman's *The Meaning of Adult Education* in 1926. Strongly influenced by the educational philosophy of John Dewey, Lindeman laid the foundation for a systematic theory about adult learning with such insightful statements as these:

> . . . the approach to adult education will be via the route of situations, not subjects. Our academic system has grown in reverse order: subjects and teachers constitute the starting-point, students are secondary. 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, 1926, pp. 8-9]

> . . . 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 learner's living textbook. [*Ibid.*, pp. 9-10]

> Authoritative teaching, examinations which preclude original thinking, rigid pedagogical formulae—all these have no place in adult education. . . . 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 searchers after wisdom and not oracles: this constitutes the setting for adult education, the modern quest for life's meaning. [*Ibid.*, pp. 10-11]

> Adult education presents a challenge to static concepts of intelligence, to the standardized limitations of conventional education and to the

theory which restricts educational facilities to an intellectual class. Apologists for the status quo in 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 educational opportunities provided by public agencies. This argument begs the question and misconceives the problem. We shall never know how many adults desire intelligence regarding themselves and the world in which they live until education once more 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 learners are precisely those whose intellectual aspirations are least likely to be aroused by the rigid, uncompromising requirements of authoritative, conventionalized institutions of learning. [*Ibid.*, pp. 27-28]

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 personalities. [*Ibid.*, p. 169]

Two excerpts from other Lindeman writings elaborate on these ideas:

I am conceiving adult education in terms of a new technique for learning, a technique as essential to the college graduate as to the unlettered manual worker. It represents 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. In this process the teacher finds a new function. He is no longer the oracle who speaks from the platform of authority, but rather the guide, the pointer-out who also participates in learning in proportion to the vitality and relevance of his facts and experiences. In short, my conception of adult education is this: a cooperative venture in nonauthoritarian, informal learning, the chief purpose of which is to discover the meaning of experience; a quest of the mind which digs down to the roots of the preconceptions which formulate our conduct; a technique of learning for adults which makes education coterminous with life and hence elevates living itself to the level of adventurous experiment. [Gessner, 1956, p. 160]

One of the chief distinctions between conventional and adult education is to be found in the learning process itself. 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. Both are exchangeable at par. Indeed, in some of 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. This is not an easy lesson to learn, but until it is learned democracy cannot succeed. [*Ibid.*, p. 166]

I am tempted to quote further from this pioneering theorist, but these excerpts are sufficient to portray a new way of thinking about adult learning. Lindeman here identifies several of the key assumptions about adult learners that have been supported by later research and that constitute the foundation stones of modern adult learning theory:

1. Adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are the appropriate starting points for organizing adult learning activities.
2. Adults' orientation to learning is life-centered; therefore, the appropriate units for organizing adult learning are life situations, not subjects.
3. Experience is the richest resource for adults' learning; therefore, the core methodology of adult education is the analysis of experience.
4. Adults have a deep need to be self-directing; therefore, the role of the teacher is to engage in a process of mutual inquiry with them rather than to transmit his or her knowledge to them and then evaluate their conformity to it.
5. Individual differences among people increase with age; therefore, adult education must make optimal provision for differences in style, time, place, and pace of learning.

It is interesting to note that Lindeman did not dichotomize adult versus youth education, but rather adult versus "conventional" education, thus implying that youth might learn better, too, when their needs and interests, life situations, experience, self-concepts, and individual differences are taken into account.

The artistic stream of inquiry which Lindeman had launched in 1926 flowed on through the pages of the *Journal of Adult Education,* the quarterly publication of the American Association for Adult Education, which between February, 1929, and October, 1941, provided the most distinguished body of literature yet produced in the field of adult education. The following excerpts from its articles reveal the growing collection of insights about adult learning gleaned from the experience of successful practitioners.

By Lawrence P. Jacks, principal of Manchester College, Oxford, England:

> Earning and living are not two separate departments or operations in life. They are two names for a continuous process looked at from opposite ends. . . . A type of education based on this vision of *continuity* is, obviously, the outstanding need of our times. Its outlook will be lifelong. It will look upon the industry of civilization as the great "continuation school" for intelligence and for character, and its object will be, not merely to fit men and women for the specialized vocations they are to follow, but also to animate the vocations themselves with ideals of excellence appropriate to each. At the risk of seeming fantastic I will venture to say that the final objective of the New Education is the gradual transformation of the industry of the world into the university of the world; in other words, the gradual bringing about of a state of things in which "breadwinning" and "soulsaving" instead of being, as now, disconnected and often opposed operations, shall become a single and continuous operation. [*Journal of Adult Education I,* 1 (February, 1929), pp. 7-10]

By Charles R. Mann, director of the American Council on Education, Washington, D.C.:

> The most significant fact in American industrial and professional life at present is this steady transformation of industry and the professions into educational institutions. The American people seem to realize that their greatest material success depends upon the degree to which each worker finds the right opportunity for self-education on the job. (*Ibid.,* p. 56)

By David Snedden, professor of education, Teachers College, Columbia University:

> Surely between ages twelve and eighteen schools can, if they will, greatly *idealize* practices of self-education to be systematically entered upon when full-time attendance ceases.
>
> Surely large proportions of the programs of adult education provided by public, philanthropic, or private agencies can in a degree be so constructed as to throw upon the learning individual *considerably greater responsibilities for educative effort on his own behalf than is now the case. . . .*
>
> And why not, in schools attended by young persons from thirteen to eighteen, offer six weeks' courses occasionally under the caption "Short Unit Course M (or N or P)—Training in Powers of Self-Education? . . ."
>
> And should not similar short unit courses be available as a part of a program of adult education, designed to push the *personal* teacher into the background, to push forward the learner's own powers of self-help, and to emphasize also the libraries, bibliographies, analyses and the like upon which these can work? [*Ibid.,* II, 1 (January, 1930), p. 37]

By Robert D. Leigh, president of Bennington College:

> At the other end of the traditional academic ladder the adult educational movement is forcing recognition of the value and importance of continuing the learning process indefinitely. . . . But among the far-seeing leaders of the movement in the United States it is recognized not so much as a substitute for inadequate schooling in youth as an educational opportunity superior to that offered in youth—superior because the learner is motivated not by the artificial incentives of academic organization, but by the honest desire to know and to enrich his experience, and because the learner brings to his study relevant daily experience, and consequently the new knowledge "takes root firmly, strikes deep, and feeds on what the day's life brings it."
>
> There is gradually emerging, therefore, a conception of education as a lifelong process beginning at birth and ending only with death, a

process related at all points to the life experiences of the individual, a process full of meaning and reality to the learner, a process in which the student is active participant rather than passive recipient. [*Ibid.*, II, 2 (April, 1930), p. 123]

By David L. Mackaye, director of the Department of Adult Education, San Jose, California, public schools:

> A person is a good educator among adults when he has a definite conviction about life and when he can present intelligent arguments on behalf of it; but primarily he does not qualify as an adult educator at all until he can exist in a group that collectively disputes, denies, or ridicules his conviction, and continues to adore him because he rejoices in them. That is tolerance, an exemplification of Proudhon's contention that to respect a man is a higher intellectual feat than to love him as one's self. . . .
>
> . . . there is positive evidence that no adult education system will ever make a success of collegiate methods of instruction to adults in the cultural fields. Something new in the way of content and method must be produced as soon as possible for adult education, and probably it will have to grow up in the field. No teacher-training-college hen can lay an adult education egg. [*Ibid.*, III, 3 (June, 1931), pp. 293-294]

By Anne E.M. Jackson, executive secretary, Lecture Division, Extension Department, University of California:

> Agencies for adult education might profitably spend a large part of their time and resources on establishing forums and discussion groups; not for rudderless discussion, but for planned and directed thinking under trained leaders, using every available source for the acquisition of true knowledge. . . . We have indeed many groups modeled on the New School of Social Research scattered around the country in which, under trained leaders, men may discuss trends and theories. These men are not so much being educated as educating themselves. [*Ibid.*, III, 4 (October, 1931), p. 438]

By James E. Russell, dean emeritus, Teachers College, Columbia University:

> It can not be pointed out too often that all education is self-education. Teachers may help define procedure, collect equipment, indicate the most propitious routes, but the climber must use his own head and legs if he would reach the mountaintop. . . . The best method of teaching adults yet hit upon is undoubtedly group discussion. [*Ibid.*, X, 4 (October, 1938), pp. 385-386]

By Maria Rogers, volunteer worker, New York City Adult Education Council:

> "Come and be educated," says the adult education institution. "We have knowledge; you want it. Come and we will give it to you." By the millions, Americans respond. . . .
>
> But millions do *not* respond. Most adult educators are conscious of this fact, and they strive constantly to improve their methods in order to reach more people. . . .
>
> One type of adult education merits particular consideration and wider use by educators seeking new methods. Though meagerly publicized, it has proved effective in numerous instances. It has undertaken a far more difficult task than that assumed by the institutions for adult education which confine their concept of method to the sequence of procedure established for adults who enter classrooms to learn something already set up to be learned. Its prime objective is to make the group life of adults yield educational value to the participants. . . .
>
> The educator who uses the group method of education takes ordinary, gregarious human beings for what they are, searches out the groups in which they move and have their being, and then helps them to make their group life yield educational values. [*Ibid.*, pp. 409-411]

By Mildred J. Wiese, specialist in curriculum and teacher education, and G.L. Maxwell, assistant director, Education Division, Works Progress Administration:

> Teachers want help in planning courses and units of study; in setting up definite objectives consistent with the needs of their students; in keeping their courses flexible and adapted to the developing interests of their students. They want to know how to bring the experiences of their students' daily lives into the framework of a course of study; how to take advantage of spontaneous and unpredictable educational opportunities; how to cut across "subjects" in dealing with the ways of thinking and of acting that are characteristic of everyday adult life.
>
> Teachers want to understand and master the methods of group work and study; to learn how to lead a group without dominating; how to provide opportunity for democratic participation; how to get students

increasingly to accept responsibility for planning their own programs of study and activity; how to help students to broaden their interests; how to conduct the work of a group so that it shall be reflected in the life of the community. . . .

Teacher education at all times should exemplify and demonstrate the teaching methods found most effective with adult groups. Because of the variety of needs to be served, a teacher-education program will give opportunity to utilize many teaching methods: group discussion to solve common problems; discussion by a panel, composed of representatives of community welfare; forums to supply information on public affairs. Group projects, observation, individual study, and lectures may be employed in appropriate situations. If the use of each method is preceded by an examination of its potential values and is followed by an analysis of its effectiveness, every lesson will not only serve its own specific purpose, but will also demonstrate a technique of teaching. [*Ibid.*, XI, 2 (April, 1939), pp. 174-175]

By Ruth Merton, director of the Education Department, Milwaukee Y.W.C.A.:

In a day school, where the students are usually children or young adolescents, a learned teacher-ignorant pupil relationship is almost inevitable, and frequently it has its advantages. But in a night school the 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 a night-school class that induces a feeling of comradeship in learning, stimulating to teacher and students alike. And the quickest way to achieve this desirable state is through laughter in which all can join.

And so I say again that, if we are really wise, we teachers in night schools will, despite taxes or indigestion, teach merrily! [*Ibid.*, p. 178]

By Ben M. Cherrington, chief of the Division of Cultural Relations, United States Department of State:

Authoritarian adult education is marked throughout by regimentation demanding obedient conformity to patterns of conduct handed down from authority. Behavior is expected to be predictable, standardized. . . . Democratic adult education employs the method of self-directing activity, with free choice of subject matter and free choice in determining outcomes. Spontaneity is welcome. Behavior cannot with certainty be predicted and therefore is not standardized. Individual, critical thinking is perhaps the best description of the democratic method and it is here that the gulf is widest between democracy and the authoritarian system. [*Ibid.*, XI, 3 (June, 1939), pp. 244-245]

By Wendell Thomas, author of *Democratic Philosophy* and a teacher of adult education teachers in New York City:

On the whole, adult education is as different from ordinary schooling as adult life, with its individual and social responsibilities, is different from the protected life of the child. . . . The adult normally differs from the child in having both more individuality and more social purpose.

Adult education, accordingly, makes special allowance for individual contributions from the students, and seeks to organize these contributions into some form of social purpose. [*Ibid.*, XI, 4 (October, 1939), pp. 365-366]

By Harold Fields, acting assistant director of Evening Schools, Board of Education, New York City:

Not only the content of the courses, but the method of teaching also must be changed. Lectures must be replaced by class exercises in which there is a large share of student participation. "Let the class do the work" should be adopted as a motto. There must be ample opportunity for forums, discussions, debates. Newspapers, circulars, and magazines as well as textbooks should be used for practice in reading. Extracurricular activities should become a recognized part of the educational process. . . . These are some of the elements that must be incorporated in a program of adult education for citizens if it is to be successful. [*Ibid.*, XII, 1 (January, 1940), pp. 44-45]

By 1940 most of the elements required for a comprehensive theory of adult learning had been discovered, but they had not yet been brought together into a unified theory; they remained as isolated insights, concepts, and principles. During the 1940s and 1950s these elements were clarified, elaborated on, and added to in a veritable explosion of knowledge from the various disciplines in the human sciences. (It is interesting to note that during this period there was a gradual shift in emphasis in research away from the

highly quantitative, fragmentary, experimental research of the 1930s and 1940s to more holistic longitudinal case studies with, in my estimation, a higher yield of useful knowledge).

Contributions from the Social Sciences

Clinical Psychology

Some of the most important contributions to learning theory have come from the discipline of psychotherapy. After all, psychotherapists are primarily concerned with reeducation, and their subjects are overwhelmingly from the adult population.

Sigmund Freud has influenced psychological thinking more than any other individual, but he did not formulate a theory of learning as such. His major contribution was no doubt in identifying the influence of the subconscious mind on behavior. Some of his concepts such as anxiety, repression, fixation, regression, aggression, defense mechanism, projection, and transference (in blocking or motivating learning) have had to be taken into account by learning theorists. Freud was close to the behaviorists in his emphasis on the animalistic nature of man, but he saw the human being as a dynamic animal which grows and develops through the interaction of biological forces, goals, purposes, conscious and unconscious drives, and environmental influences—a conception more in keeping with the organismic model.

Carl Jung advanced a more holistic conception of human consciousness, introducing the notion that it possesses four functions—or four ways of extracting information from experience and achieving internalized understanding—sensation, thought, emotion, and intuition. His plea for the development and utilization of all four functions in balance laid the groundwork for the concepts of the balanced personality and the balanced curriculum.

Erik Erikson provided the "eight ages of man," the last three occurring during the adult years, as a framework for understanding the stages of personality development:

1. Oral-sensory, in which the basic issue is trust vs. mistrust.
2. Muscular-anal, in which the basic issue is autonomy vs. shame.

3. Locomotion-genital, in which the basic issue is initiative vs. guilt.
4. Latency, in which the basic issue is industry vs. inferiority.
5. Puberty and adolescence, in which the basic issue is identity vs. role confusion.
6. Young adulthood, in which the basic issue is intimacy vs. isolation.
7. Adulthood, in which the basic issue is generativity vs. stagnation.
8. The final stage, in which the basic issue is integrity vs. despair.

In fact, the central role of self-concept in human development (and learning) received increasing reinforcement from the entire field of psychiatry as it moved away from the medical model toward an educational model in its research and practice. (See especially the works of Erich Fromm and Karen Horney).

But it is the clinical psychologists, especially those who identify themselves as *humanistic,* who have concerned themselves most deeply with problems of learning. The humanistic psychologists speak of themselves as "third force psychologists." In Goble's words, "By 1954 when Maslow published his book *Motivation and Personality,* there were two major theories dominant" in the behavioral sciences, Freudianism and behaviorism, in which "Freud placed the major motivational emphasis on deep inner drives (and) urges and the behaviorists placed the emphasis on external, environmental influences." But "like Freud and like Darwin before him, the behaviorists saw man as merely another type of animal, with no essential differences from animals and with the same destructive, anti-social tendencies." [Goble, 1971, pp. 3-8.] Third force psychologists are concerned with the study and development of *fully functioning persons* (to use Rogers' term) or *self-actualizing persons* (to use Maslow's). They are critical of the atomistic approach common in physical science and among the behaviorists, breaking things down into their component parts and studying them separately.

> Most behavioral scientists have attempted to isolate independent drives, urges, and instincts and study them separately. This Maslow found to be generally less productive than the holistic approach which holds that the whole is more than the sum of the parts. [*Ibid.*, p. 22]

> Growth takes place when the next step forward is subjectively more delightful, more joyous, more intrinsically satisfying than the previous gratification with which we have become familiar and even bored; that the only way we can ever know that it is right for us is that it feels better subjectively than any alternative. The new experience validates *itself* rather than by any outside criterion. [Maslow, 1972, p. 43]

Maslow placed special emphasis on the role of safety, as becomes clear in the following formulation of the elements in the growth process:

> 1. The healthily spontaneous [person], in his spontaneity, from within out, reaches out to the environment in wonder and interest, and expresses whatever skills he has.
> 2. To the extent that he is not crippled by fear, to the extent that he feels safe enough to dare.
> 3. In this process, that which gives him the delight-experience is fortuitously encountered, or is offered to him by helpers.
> 4. He must be safe and self-accepting enough to be able to choose and prefer these delights, instead of being frightened by them.
> 5. If he can choose these experiences which are validated by the experience of delight, then he can return to the experience, repeat it, savor it to the point of repletion, satiation, or boredom.
> 6. At this point, he shows the tendency to go on to richer, more complex experiences and accomplishments in the same sector (if he feels safe enough to dare).
> 7. Such experiences not only mean moving on, but have a feedback effect on the Self, in the feeling of certainty ("This I like; that I don't for *sure*"); of capability, mastery, self-trust, self-esteem.
> 8. In this never ending series of choices of which life consists, the choice may generally be schematized as between safety (or, more broadly, defensiveness) and growth, and since only that [person] doesn't need safety who already has it, we may expect the growth choice to be made by the safety-need gratified [individual].
> 9. In order to be able to choose in accord with his own nature and to develop it, the [individual] must be permitted to retain the subjective experiences of delight and boredom, as *the* criteria of the correct choice for him. The alternative criterion is making the choice in terms of the wish of another person. The Self is lost when this happens. Also this constitutes restricting the choice to safety alone, since the [individual] will give up trust in his own delight-criterion out of fear (of losing protection, love, etc.).

> 10. If the choice is really a free one, and if the [individual] is not crippled, then we may expect him ordinarily to choose progression forward.
> 11. The evidence indicates that what delights the healthy [person], what tastes good to him, is also, more frequently than not, "best" for him in terms of far goals as perceivable by the spectator.
> 12. In this process the environment (parents, teachers, therapists) is important in various ways, even though the ultimate choice must be made by the individual.
>   a. it can gratify his basic needs for safety, belongingness, love and respect, so that he can feel unthreatened, autonomous, interested and spontaneous and thus dare to choose the unknown;
>   b. it can help by making the growth choice positively attractive and less dangerous, and by making regressive choice less attractive and more costly.
> 13. In this way the psychology of Being and the psychology of Becoming can be reconciled, and the [person], simply being himself, can yet move forward and grow. [Maslow, 1972, pp. 50-51]

Carl R. Rogers, starting with the viewpoint that "in a general way, therapy is a learning process," [1951, p. 132] developed nineteen propositions for a theory of personality and behavior which were evolved from the study of adults in therapy [*Ibid.*, pp. 483-524] and then sought to apply them to education. This process led him to conceptualize *student-centered teaching* as parallel to *client-centered therapy*. [*Ibid.*, pp. 388-391]

Rogers' student-centered approach to education was based on five "basic hypotheses," the first of which was: *We cannot teach another person directly; we can only facilitate his learning.* This hypothesis stems from the propositions in his personality theory that "Every individual exists in a continually changing world of experience of which he is the center," and "The organism reacts to the field as it is experienced and perceived." It requires a shift in focus from what the teacher does to what is happening in the student.

His second hypothesis was: *A person learns significantly only those things which he perceives as being involved in the maintenance of, or enhancement of, the structure of self.* This hypothesis underlines the importance of making the learning relevant to the learner, and puts into question the academic tradition of required courses.

Rogers grouped his third and fourth hypotheses together: *Experience which, if assimilated, would involve a change in the*

organization of self tends to be resisted through denial or distortion of symbolization, and *The structure and organization of self appear to become more rigid under threat; to relax its boundaries when completely free from threat. Experience which is perceived as inconsistent with the self can only be assimilated if the current organization of self is relaxed and expanded to include it.* These hypotheses acknowledge the reality that significant learning is often threatening to an individual, and suggest the importance of providing an acceptant and supportive climate, with heavy reliance on student responsibility.

Rogers' fifth hypothesis extends the third and fourth to educational practice: *The educational situation which most effectively promotes significant learning is one in which (a) threat to the self of the learner is reduced to a minimum, and (b) differentiated perception of the field is facilitated.* He points out that the two parts of this hypothesis are almost synonymous, since differentiated perception is most likely when the self is not being threatened. (Rogers defined undifferentiated perception as an individual's "tendency to see experience in absolute and unconditional terms, to anchor his reactions in space and time, to confuse fact and evaluation, to rely on ideas rather than upon reality-testing," in contrast to differentiated perception as the tendency "to see things in limited, differentiated terms, to be aware of the space-time anchorage of facts, to be dominated by facts, not concepts, to evaluate in multiple ways, to be aware of different levels of abstraction, to test his inferences and abstractions by reality, in so far as possible." [*Ibid.*, p. 144])

Rogers sees learning as a completely internal process controlled by the learner and engaging his whole being in interaction with his environment as he perceives it. But he also believes that learning is as natural—and required—a life process as breathing. His Proposition IV states: *The organism has one basic tendency and striving—to actualize, maintain, and enhance the experiencing organism.* [*Ibid.*, p. 497] This central premise is well summarized in the following statement:

> Clinically I find it to be true that though an individual may remain dependent because he has always been so, or may drift into dependence without realizing what he is doing, or may temporarily wish to be dependent because his situation appears desperate. I have yet to find the individual who, when he examines his situation deeply, and feels that he perceives it clearly, deliberately chooses dependence, deliberately chooses to have the integrated direction of himself undertaken by another. When all the elements are clearly perceived, the balance seems invariably in the direction of the painful but ultimately rewarding path of self-actualization and growth. [*Ibid.*, p. 490]

Both Maslow and Rogers acknowledge their affinity with the work of Gordon Allport (1955, 1960, 1961) in defining growth not as a process of "being shaped," but a process of becoming. The essence of their conception of learning is captured in this brief statement by Rogers:

> I should like to point out one final characteristic of these individuals as they strive to discover and become themselves. It is that the individual seems to become more content to be a *process* rather than a *product.* [1961, p. 122]

Developmental Psychology

The discipline of developmental psychology has contributed a growing body of knowledge about changes with age through the life span in such characteristics as physical capabilities, mental abilities, interests, attitudes, values, creativity, and life styles. Pressey and Kuhlen (1957) pioneered in the collection of research findings on human development and laid the foundation for a new field of specialization in psychology—life-span developmental psychology—which has been built on by such contemporary scholars as Bischof (1969) and Goulet and Baltes (1970). Havighurst (1961) identified the developmental tasks associated with different stages of growth which give rise to a person's readiness to learn different things at different times and create "teachable moments." My own adaptation of Havighurst's concept of developmental tasks (or life problems) is given in Appendix A. A popular portrayal of the "Predictable Crises of Adult Life" was provided by Sheehy (1974) and a more scholarly summary of research findings on adult development and learning by Knox (1977). [See also: Stevens-Long, 1979; Stokes, 1983] Closely related to this discipline is gerontology, which has produced a large volume of research findings regarding the aging process in the later years [Birren, 1964; Botwinick, 1967; Donahue and Tibbitts, 1957; Grabowski and Mason, 1974; Granick and Patterson, 1971; Gubrium, 1976; Kastenbaum, 1964 and 1965; Maas and Kuypers, 1975; Neugarten, 1964 and

1968; Woodruff and Birren, 1975] and their implications for learning and teaching. [Burnside, 1978; Hendrickson, 1973; John, 1987; Long, 1972]

Sociology and Social Psychology

The disciplines of sociology and social psychology have contributed a great deal of new knowledge about the behavior of groups and larger social systems, including the forces which facilitate or inhibit learning and change [Argyris, 1964; Bennis, 1966; Bennis, Benne and Chin, 1968; Bennis and Slater, 1968; Etzioni, 1961 and 1969; Hare, 1969; Knowles and Knowles, 1973; Lewin, 1951; Lippitt, 1969; Schein and Bennis, 1965; Schlossberg, Lynch, and Chickering, 1989; Zander, 1982] and about environmental influences, such as culture, race, population characteristics, and density, on learning. [Barker, 1963, 1968, 1978; Bronfenbrenner, 1979; Moos, 1974, 1976, 1979; Jensen, *et al*, 1964, pp. 113–175; Harris and Moran, 1979; Moran and Harris, 1982]

Philosophy

Philosophical issues have been prominent in the literature of the adult education movement in this country since its beginning. Eduard Lindeman laid the foundation of this theme in his *The Meaning of Adult Education* in 1926 [See also Gessner, 1956], and it was reinforced by Lyman Bryson in his *Adult Education* in 1936 and *The Next America* in 1952. But many of the articles in the periodicals of the American Association for Adult Education between 1926 and 1948 were also philosophical treatises, with the predominant issue being the aims and purposes of adult education as a social movement. The underlying premise of the argument was that we could have a unified and potent adult education movement in this country only if all programs in all institutions were working toward a common goal, one side holding that this goal should be the improvement of individuals, and the other holding that it should be the improvement of society. Two attempts were made in the mid-fifties, under the sponsorship of the Fund for Adult Education of the Ford Foundation, to sway argument in favor of the latter position with the publication of Hartley Grattan's *In Quest of Knowledge* in 1955 and John Walker Powell's *Learning Comes of Age* in 1956, but this issue and arguments over other issues continued to embroil the field.

When Kenneth Benne became the president of the newly formed Adult Education Association of the USA in 1956, he dedicated himself as a professional philosopher to bring some order to the polemics. One of his first acts was to convene a national conference on the "Philosophy of Adult Education," in North Andover, Massachusetts, in which thirteen philosophers and adult educators from across the country spent three days addressing these issues:

- What is the purpose of adult education—adult education for *what*?
- What is the relationship between content and method in instruction?
- Should individual interests and desires prescribe the curricula of adult education, or should the needs of society play a determining role in the creation of educational programs?
- What implications do different theories of knowledge, or of the nature of man and society, have for the planning and operation of adult education programs?

The 1956 conference did not resolve these issues, but in the view of its convener it produced three positive results:

1. It uncovered some tool concepts which would prove useful in working through the strife of tongues and the maze of special interests and moved the emphasis toward areas of genuine agreement and disagreement.
2. It revealed the importance of philosophizing as a necessary and continuing ingredient of all policy formulation and program determination.
3. It furnished an example of the pains and tribulations that men from many disciplines and from many special vantage points in adult education encounter as they venture seriously and thoughtfully to seek common ground in their chosen field. [Sillars, 1958, p. 5]

Clearly, it stimulated continuing discussion of the philosophical issues in adult education, as evidenced by numerous articles in the periodical literature and at least four major books: Benne, 1967; Bergevin, 1967; Elias and Merriam, 1980; and Darkenwald and Mer-

riam, 1982. It probably also influenced the publication of one book on philosophy for adult learners [Buford, 1980] and one book on the utilization of philosophical approaches to the improvement of practice in continuing education. [Apps, 1985]

Contributions from Adult Education

Most scholars in the field of adult education itself have dealt with the problem of learning by trying to adapt theories about child learning to the "differences in degree" among adults. (For example, Brunner, 1959; Kidd, 1959; Kempfer, 1955; Verner and Booth, 1964.) Howard McClusky followed this line for the most part, but began to map out directions for the development of a "differential psychology of the adult potential" in which the concepts of *margin* (the power available to a person over and beyond that required to handle his load), *commitment, time perception, critical periods,* and *self concept* are central. A summary of McClusky's emergent theory is presented in Appendix B, which you may wish to turn to at this point.

Cyril O. Houle began a line of investigations in the 1950s at the University of Chicago that has been extended by Allen Tough at the Ontario Institute for Studies in Education which promises to yield better understanding about the process of adult learning. Their approach was a study through in-depth interviews of a small sample of adults who were identified as *continuing learners.*

Houle's study of twenty-two subjects was designed to discover primarily *why* adults engage in continuing education, but it sheds some light also on *how* they learn. Through an involved process of the analysis of the characteristics uncovered in the interviews, he found that his subjects could be fitted into three categories. As Houle points out, "These are not pure types; the best way to represent them pictorially would be by three circles which overlap at their edges. But the central emphasis of each subgroup is clearly discernible." [Houle, 1961, p. 16] The criterion for typing the individuals into subgroups was the major conception they held about the purposes and values of continuing education for themselves. The three types are:

1. The *goal-oriented* learners, who use education for accomplishing fairly clear-cut objectives. These individuals usually did not make any real start on their continuing education until their middle twenties and after—sometimes much later.

> The continuing education of the goal-oriented is in episodes, each of which begins with the realization of a need or the identification of an interest. There is no even, steady, continuous flow to the learning of such people, though it is an ever-recurring characteristic of their lives. Nor do they restrict their activities to any one institution or method of learning. The need or interest appears and they satisfy it by taking a course, or joining a group, or reading a book or going on a trip. [*Ibid.*, p. 18]

2. The *activity-oriented,* who take part because they find in the circumstances of the learning a meaning which has no necessary connection—and often no connection at all—with the content or the announced purpose of the activity. These individuals also begin their sustained participation in adult education at the point when their problems or their needs become sufficiently pressing.

> All of the activity-oriented people interviewed in this study were course-takers and group-joiners. They might stay within a single institution or they might go to a number of different places, but it was social contact that they sought and their selection of any activity was essentially based on the amount and kind of human relationships it would yield. [*Ibid.*, pp. 23-24]

3. The *learning-oriented,* who seek knowledge for its own sake. Unlike the other types, most learning-oriented adults have been engrossed in learning as long as they can remember.

> What they do has a continuity, a flow and a spread which establish the basic nature of their participation in continuing education. For the most part, they are avid readers and have been since childhood; they join groups and classes and organizations for educational reasons; they select the serious programs on television and radio; when they travel . . . they make a production out of it, being sure to prepare adequately to appreciate what they see; and they choose jobs and make other decisions in life in terms of the potential for growth which they offer. [*Ibid.*, pp. 24-25]

Tough's investigation was concerned not only with what and why adults learn, but how they learn and what help they obtain for learning. Tough found that adult learning is a very pervasive activity.

> Almost everyone undertakes at least one or two major learning efforts a year, and some individuals undertake as many as 15 or 20. . . . It is common for a man or woman to spend 700 hours a year at learning projects. . . . About 70% of all learning projects are planned by the learner himself, who seeks help and subject matter from a variety of acquaintances, experts, and printed resources. [Tough, 1979, p. 1]

Tough found that his subjects organized their learning efforts around "projects . . . defined as a series of related episodes, adding up to at least seven hours. In each *episode* more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself." [*Ibid.*, p. 6]

He found that in some projects the episodes may be related to the desired knowledge and skill. For example, the learner may want to learn more about India: in one episode he reads about the people of India; in another episode he discusses the current economic and political situation with an Indian graduate student; in a third he watches a television program describing the life of an Indian child. Or the episodes can also be related by the use to which the knowledge and skill will be put: one person might engage in a project consisting of a number of learning experiences to improve his competence as a parent; another project might consist of episodes aimed at obtaining the knowledge and skill necessary for building a boat.

Tough was interested in determining what motivated adults to begin a learning project, and found that overwhelmingly his subjects anticipated several desired outcomes and benefits to result, as summarized in Figure 3-1. Some of the benefits are immediate: satisfying a curiosity, enjoying the content itself, enjoying practicing the skill, enjoying the activity of learning; others are long-run: producing something, imparting knowledge or skill to others, understanding what will happen in some future situation, etc. Clearly pleasure and self-esteem were critical elements in the motivation of Tough's subjects.

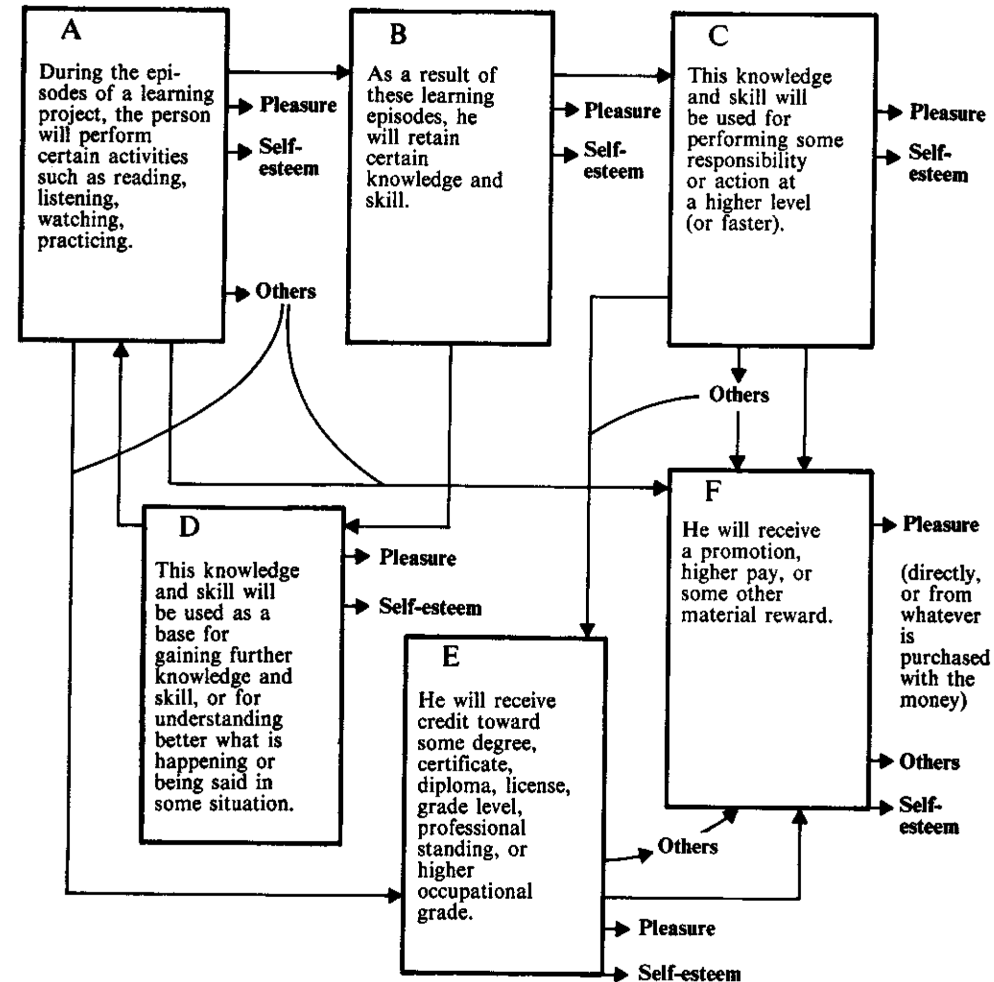

Figure 3-1. The relationships among the benefits that a learner may expect from a learning project. [Tough, 1979, p. 48]

Tough came to the conclusion that an adult learner proceeds through several phases in the process of engaging in a learning project, and speculated that helping them gain increased competence in dealing with each phase might be one of the most effective ways of improving their learning effectiveness.

The first phase is deciding to begin, in which Tough identified twenty-six possible steps the learner might take, including setting an action goal, assessing his interests, seeking information on certain opportunities, choosing the most appropriate knowledge and skill, establishing a desired level or amount, estimating the cost and benefits.

A second phase is choosing the planner, which may be himself, an object (e.g., programmed text, workbook, tape recordings), an individual *learning consultant* (instructor, counselor, resource person), or a group. Competence in choosing a planner and using him *proactively* rather than *reactively,* collaboratively rather than dependently, were found to be crucial in this phase.

Finally, the learner engages in learning episodes sketched out in the planning process, the critical elements here being the variety and richness of the resources, their availability and the learner's skill in making use of them.

Tough emerged from his study with this challenging vision regarding future possibilities in adult learning:

> The last 20 years have produced some important new additions to the content of adult learning projects. Through group and individual methods, many adults now set out to increase their self-insight, their awareness and sensitivity with other persons and their interpersonal competence. They learn to "listen to themselves," to free their body and their conversations from certain restrictions and tensions, to take a risk, to be open and congruent. Attempting to learn this sort of knowledge and skill seemed incredible to most people 20 years ago. Great changes in our conception of what people can and should set out to learn have been created by T-groups, the human potential movement, humanistic psychology, and transpersonal psychology.
>
> Perhaps the next 20 years will produce several important additions to what we try to learn. In 1990, when people look back to our conception of what adults can learn, will they be amused by how narrow it is? [Tough, 1979, pp. 43-44]

Tough's prediction in the final paragraph is being borne out. In the decade-and-half since he made it, a rising volume of research on adult learning has been reported. Most of this research builds on, reinforces, and refines the research of Tough's "last 20 years," especially

in regard to the developmental stages of the adult years. Two significant new thrusts in the research pertain to learning style and the physiology of learning, as epitomized in the "right-brain, left-brain" metaphor. [See Boucouvalas, 1988] My own prediction is that the major new discoveries in the next decade will be related to the physiology and chemistry of learning, with special implications for the acceleration of learning and the efficiency of information processing.

The Roots of Andragogy—An Integrative Concept

Attempts to bring the isolated concepts, insights, and research findings regarding adult learning together into an integrated framework began as early as 1949, with the publication of Harry Overstreet's *The Mature Mind,* and continued with my own *Informal Adult Education* in 1950, Edmund Brunner's *Overview of Research in Adult Education* in 1954, J.R. Kidd's *How Adults Learn* in 1959, J.R. Gibb's chapter on "Learning Theory in Adult Education" in the *Handbook of Adult Education in the U.S.* in 1960, and Harry L. Miller's *Teaching and Learning in Adult Education* in 1964. But these turned out to be more descriptive listings of concepts and principles than comprehensive, coherent, and integrated theoretical frameworks. What was needed was an integrative and differentiating concept.

Such a concept had been evolving in Europe for some time—the concept of a unified theory of adult learning for which the label *andragogy* had been coined to differentiate it from the theory of youth learning, *pedagogy.* I was first introduced to the concept and the label in 1967 by a Yugoslavian adult educator, Dusan Savicevic, and introduced them into our American literature with my article, "Androgogy, Not Pedagogy," in *Adult Leadership* in April, 1968. (Note my misspelling of the word until I was corrected through correspondence with the publishers of Merriam-Webster dictionaries). Since this label has now become widely adopted in our literature, it may be worthwhile to trace the history of its use.

A Dutch adult educator, Ger van Enckevort, has made an exhaustive study of the origins and use of the term andragogy, and I shall merely summarize his findings.* The term (Andragogik) was

*Ger van Enckevort, "Andragology: A New Science," Nederlands Centrum Voor Volksontwikkeling, Amersfoort, The Netherlands, April, 1971 (mimeographed.)

first coined, so far as he could discover, by a German grammar school teacher, Alexander Kapp, in 1833. Kapp used the word in a description of the educational theory of the Greek philosopher Plato, although Plato never used the term himself. A few years later the better-known German philosopher Johan Friedrich Herbart acknowledged the term by strongly opposing its use. Van Enckevort observes that "the great philosopher had more influence than the simple teacher, and so the word was forgotten and disappeared for nearly a hundred years."

Van Enckevort found the term being used again in 1921 by the German social scientist Eugen Rosenstock, who taught at the Academy of Labor in Frankfort. In a report to the Academy in 1921 he expressed the opinion that adult education required special teachers, special methods, and a special philosophy. "It is not enough to translate the insights of education theory [or pedagogy] to the situation of adults . . . the teachers should be professionals who could cooperate with the pupils; only such a teacher can be, in contrast to a "pedagogue," an "andragogue." Incidentally, Rosenstock believed that he invented the term until 1962, when he was informed of its earlier use by Kapp and Herbart. Van Enckevort reports that Rosenstock used the term on a number of occasions, and that it was picked up by some of his colleagues, but that it did not receive general recognition.

The Dutch scholar next finds the term being used by a Swiss psychiatrist, Heinrich Hanselmann, in a book published in 1951, *Andragogy: Nature, Possibilities and Boundaries of Adult Education,* which dealt with the nonmedical treatment or reeducation of adults. Only six years later, in 1957, a German teacher, Franz Poggeler, published a book entitled *Introduction to Andragogy: Basic Issues in Adult Education.* About this time the term started being used in other than German-speaking countries. In 1956 M. Ogrizovic published a dissertation in Yugoslavia on "penological andragogy" and in 1959 a book entitled *Problems of Andragogy.* Soon other leading Yugoslavian adult educators, including Samolovcev, Filipovic, and Savicevic, began speaking and writing about andragogy, and faculties of andragogy offering doctorates in adult education were established at the universities of Zagreb and Belgrade in Yugoslavia and the universities of Budapest and Debrecen in Hungary.

Andragogy started being used in the Netherlands by Professor T.T. ten Have in his lectures in 1954, and in 1959 he published the

outlines for a science of andragogy. Since 1966 the University of Amsterdam has had a doctorate for andragogues, and in 1970 a department of pedagogical and andragogical sciences was established in the faculty of social sciences. In the current Dutch literature a distinction is made among "andragogy," which is any intentional and professionally guided activity that aims at a change in adult persons; "andragogics," which is the background of methodological and ideological systems that govern the actual process of andragogy; and "andragology," which is the scientific study of both andragogy and andragogics.

During the past decade andragogy has come into increasing use by adult educators in France (Bertrand Schwartz), England (J.A. Simpson), Venezuela (Felix Adam), and Canada (a Bachelor of Andragogy degree program was established at Concordia University in Montreal in 1973).

In this country, to date several major expositions of the theory of andragogy and its implications for practice have appeared; [Godbey, 1978; Knowles, 1970, rev. 1980; Ingalls and Arceri, 1972; Knowles, 1973, 1975, and 1984] a number of articles have appeared in periodicals reporting on applications of the andragogical framework to social work education, religious education, undergraduate and graduate education, management training, and other spheres; and an increasing volume of research on hypotheses derived from andragogical theory is being reported. There is a growing evidence, too, that the use of andragogical theory is making a difference in the way programs of adult education are being organized and operated, in the way teachers of adults are being trained, and in the way adults are being helped to learn. There is even evidence that concepts of andragogy are beginning to make an impact on the theory and practice of elementary, secondary, and collegiate education. My *Andragogy in Action* provides case descriptions of a variety of programs based on the andragogical model.

The field of adult education has long sought a glue to bind its diverse institutions, clienteles, and activities into some sense of unity; perhaps andragogy will give it at least a unifying theory. And, extended in its application to the concept of lifelong education, perhaps andragogy will provide a unifying theme for all of education.

"Andragogy" first appeared in a dictionary in the "Addenda" of Webster's 3rd New International Dictionary (Unabridged) in 1981, so it is inching its way into the official language.

An Andragogical Theory of Adult Learning

For more than four decades I have been trying to formulate a theory of adult learning that takes into account what we know from experience and research about the unique characteristics of adult learners. Originally (in *Informal Adult Education,* 1950), I organized my ideas around the notion that adults learn best in informal, comfortable, flexible, nonthreatening settings. Then, in the mid-1960's I was exposed to the term *andragogy* by a Yugoslavian adult educator who was attending a summer session workshop at Boston University, and it seemed to me to be a more adequate organizing concept—for it meant, as I understood it then, the art and science of helping adults learn.

When I first started constructing an andragogical model of education I saw it as the antithesis of the pedagogical model. In fact, the subtitle of the 1970 edition of *The Modern Practice of Adult Education* was "Andragogy Versus Pedagogy." So, I need to explore the meaning of pedagogy a bit before elaborating on the meaning of andragogy.

First There Was Pedagogy

"Pedagogy" is derived from the Greek words *paid,* meaning "child" (the same stem from which "pediatrics" comes) and *agogus,* meaning "leader of." Thus, pedagogy literally means the art and science of teaching children. The pedagogical model of education is a set of beliefs—indeed, as viewed by many traditional teachers, an ideology—based on assumptions about teaching and learning that evolved between the seventh and twelfth centuries in the monastic and cathedral schools of Europe out of their experience in teaching basic skills to young boys. As secular schools started being organized in later centuries, and public schools in the nineteenth century, this was the only model in existence. And so our entire educational enterprise, including higher education, was frozen into the pedagogical model. When adult education began being organized systematically in this country after World War I, it was the only model teachers of adults had to go on. As a result, adults have by and large been taught as if they were children until fairly recently.

The pedagogical model assigns to the teacher full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned. It is teacher-directed education, leaving to the learner only the submissive role of following a teacher's instructions. It is thus based on these assumptions about learners:

1. *The need to know.* Learners only need to know that they must learn what the teacher teaches if they want to pass and get promoted; they do not need to know how what they learn will apply to their lives.
2. *The learner's self-concept.* The teacher's concept of the learner is that of a dependent personality; therefore, the learner's self-concept eventually becomes that of a dependent personality.

Let me elaborate on this point a bit. I speculate, with growing support from research [see Bruner, 1961; Erikson, 1950, 1959, 1964; Getzels and Jackson, 1962; Bower and Hollister, 1967; Cross, 1981; Iscoe and Stevenson, 1960; Robinson, 1988; Smith, 1982; Stevenson-Long, 1979; White, 1959] that as individuals mature, their *need* and *capacity* to be self-directing, to utilize their experience in learning, to identify their own readinesses to learn, and to organize their learning around life problems, increases steadily from infancy to pre-adolescence, and then increases rapidly during adolescence.

In Figure 3-2 this rate of natural maturation is represented as a decrease in dependency, as represented by the solid line. Thus, pedagogical assumptions are realistic—and pedagogy is practiced appropriately—because of the high degree of dependency during the first year, but they become decreasingly appropriate in the second, third, fourth, and so on, years—as represented by the area with the vertical lines. But it is my observation that the American culture (home, school, religious institutions, youth agencies, governmental systems) assumes—and therefore permits—a growth rate that is much slower, as represented by the broken line. Accordingly, pedagogy is practiced increasingly inappropriately as represented by the shaded area between the solid and broken lines. The problem is that the culture does not nurture the development of the abilities required for self-direction, while the need to be increasingly self-directing continues to develop organically. The result is a growing gap between the need and the ability to be self-directing, and this produces tension, resistance, resentment, and often rebellion in the individual.

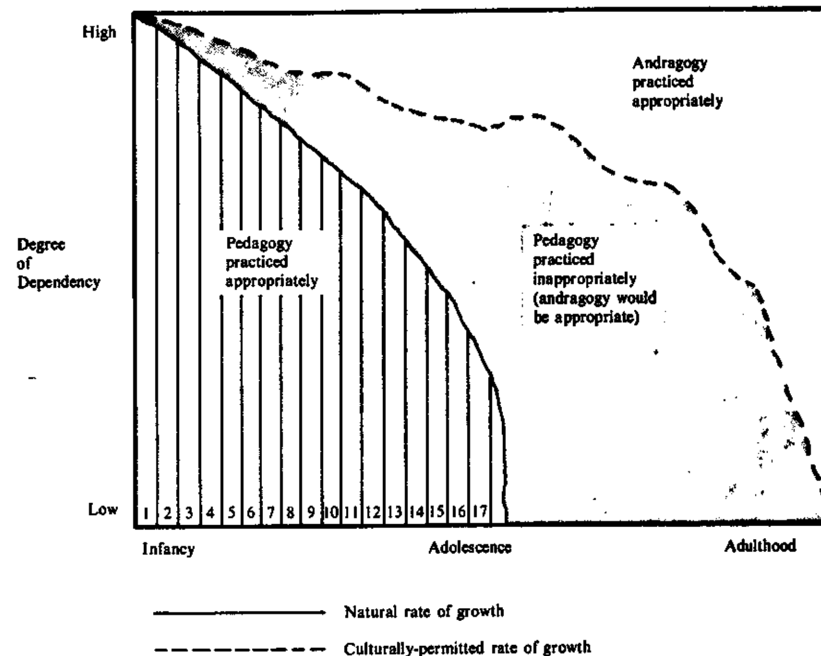

Figure 3-2. The natural maturation toward self-direction as compared with the culturally-permitted rate of growth of self-direction.

3. *The role of experience.* The learner's experience is of little worth as a resource for learning; the experience that counts is that of the teacher, the textbook writer, and the audio-visual aids producer. Therefore, transmittal techniques—lectures, assigned readings, etc., are the backbone of pedagogical methodology.
4. *Readiness to learn.* Learners become ready to learn what the teacher tells them they must learn if they want to pass and get promoted.
5. *Orientation to learning.* Learners have a subject-centered orientation to learning; they see learning as acquiring subject-matter content. Therefore, learning experiences are organized according to the logic of the subject-matter content.
6. *Motivation.* Learners are motivated to learn by external motivators—grades, the teachers' approval or disapproval, parental pressures.

And Then Came Andragogy

Before describing the andragogical assumptions about learners and learning, it is helpful to look at what we mean by "adult." As I see it, there are four definitions of "adult." First, the *biological* definition: we become adult biologically when we reach the age at which we can reproduce—which at our latitude is in early adolescence. Second, the *legal* definition: we become adult legally when we reach the age at which the law says we can vote, get a driver's license, marry without consent, and the like. Third, the *social* definition: we become adult socially when we start performing adult roles, such as the role of full-time worker, spouse, parent, voting citizen, and the like. Finally, the *psychological* definition: we become adult psychologically when we arrive at a self-concept of being responsible for our own lives, of being self-directing. From the viewpoint of learning, it is the psychological definition that is most crucial. But it seems to me that the process of gaining a self-concept of self-directedness starts early in life (I was almost completely self-directing in learning to use my leisure time by age five) and grows cumulatively as we become biologically mature, start performing adult-like roles (I was a magazine salesman and paper-route entrepreneur in high school), and take increasing responsibility for making our own decisions. So we become adult by degree as we move through childhood and adolescence, and the rate of increase by degree is probably accelerated if we live in homes, study in schools, and participate in youth organizations that foster our taking increasing responsibilities. But most of us probably do not have full-fledged self-concepts of self-directedness until we leave school or college, get a full-time job, marry, and start a family.

The Andragogical Model

The andragogical model is based on several assumptions that are different from those of the pedagogical model:

1. *The need to know.* Adults need to know why they need to learn something before undertaking to learn it. Tough (1979) found that when adults undertake to learn something on their own they will invest considerable energy in probing into the benefits they will gain from learning it and the negative consequences of not learning it. Consequently, one of the new apho-

risms in adult education is that the first task of the facilitator of learning is to help the learners become aware of the "need to know." At the very least, facilitators can make an intellectual case for the value of the learning in improving the effectiveness of the learners' performance or the quality of their lives. When I think of all the courses I have taken in school and college, I can think of very few in which I understood the need to know what the teacher was teaching me; I was taking the courses to get credits toward a diploma or degree. And I am sure that I would have learned more from those courses if the teachers had shown me how I would be able to use the learnings in real life. But even more potent tools for raising the level of awareness of the need to know are real or simulated experiences in which the learners discover for themselves the gaps between where they are now and where they want to be. Personnel appraisal systems, job rotation, exposure to role models, and diagnostic performance assessments are examples of such tools. Paolo Freire, the great Brazilian adult educator, has developed an elaborate process for what he calls the "consciousness-raising" of peasants in developing countries in his *The Pedagogy of the Oppressed* (1970).

2. *The learners' self-concept.* Adults have a self-concept of being responsible for their own decisions, for their own lives. Once they have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction. They resent and resist situations in which they feel others are imposing their wills on them. But this presents a serious problem to us in adult education: the minute they walk into an activity labeled "education" or "training" or any of their synonyms, they hark back to their conditioning in their previous school experience, put on their dunce hats of dependency, fold their arms, sit back, and say "Teach me." I have experienced over and over again adults who are obviously self-directing in every other aspect of their lives putting pressure on me to tell them what to do. The problem occurs when we assume that this is really where they are coming from and start treating them like children, for then we create a conflict within them between their intellectual model—learner equals dependent—and the deeper, perhaps subconscious psychological need to be self-directing. And the way most people deal with psychological conflict is to try to flee from the situation causing it—which probably accounts in part for the high dropout rate in much voluntary adult education. As we have become aware of this problem, adult educators have been working at creating learning experiences in which adults are helped to make the transition from dependent to self-directing learners. My little book, *Self-Directed Learning: A Guide for Learners and Teachers* (1975) is a collection of such experiences.

3. *The role of the learners' experience.* Adults come into an educational activity with both a greater volume and a different quality of experience from youths. By virtue of simply having lived longer, they have accumulated more experience than they had as youths. But they also have had a different kind of experience. When I was 15, I had not had the experience of being a full-time worker, a spouse, a parent, a voting citizen; when I was 30, I had had all those experiences. This difference in quantity and quality of experience has several consequences for adult education.

For one, it assures that in any group of adults there will be a wider range of individual differences than is the case with a group of youths. Any group of adults will be more heterogeneous—in terms of background, learning style, motivation, needs, interests, and goals—than is true of a group of youths. Hence, the great emphasis in adult education on individualization of teaching and learning strategies.

For another, it means that for many kinds of learning the richest resources for learning reside in the adult learners themselves. Hence, the greater emphasis in adult education on experiential techniques—techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods—over transmittal techniques. Hence, also, the greater emphasis on peer-helping activities.

But the fact of greater experience also has some potentially negative effects. As we accumulate experience, we tend to develop mental habits, biases, and presuppositions that tend to cause us to close our minds to new ideas, fresh perceptions, and alternative ways of thinking. Accordingly, adult educators

are trying to discover ways of helping adults to examine their habits and biases and open their minds to new approaches. Sensitivity training, value clarification, meditation, and dogmatism scales are among the techniques that are used to tackle this problem.

There is another, more subtle reason for emphasizing the utilization of the experience of the learners; it has to do with the learners' self-identity. Young children derive their self-identity largely from external definers—who their parents, brothers, sisters, and extended families are; where they live; and what churches and schools they go to. As they mature, they increasingly define themselves in terms of the experiences they have had. To children, experience is something that happens to them; to adults, their experience is *who they are.* For example, when I was 10, if I had been asked who I am, I probably would have replied, "My name is Malcolm Knowles; my father is Dr. A.D. Knowles, a veterinarian; I live at 415 Fourth Street, Missoula, Montana; I attend Roosevelt Grammar School on Sixth Street; and I am a member of the Sunday School at the Presbyterian Church on Fifth Street. If someone had asked me at age 30 who I was I would have replied, "My name is Malcolm Knowles; I was a delegate to the World Boy Scout Jamboree in Berkinhead, England in 1929; I studied international law at Harvard College, graduating in 1934; I was director of training for the National Youth Administration of Massachusetts from 1935 to 1940," and so on. I derived my self-identity from my experiences. The implication of this fact for adult education is that in any situation in which adults' experience is ignored or devalued, they perceive this as not rejecting just their experience, but rejecting them as persons.

4. *Readiness to learn.* Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations. An especially rich source of "readiness to learn" is the developmental tasks associated with moving from one developmental stage to the next. The critical implication of this assumption is the importance of timing learning experiences to coincide with those developmental tasks. For example, a sophomore girl in high school is not ready to learn about infant nutrition or marital relations, but let her get engaged after graduation and she will be very ready. Bench workers are not ready for a course in supervisory training until they have mastered doing the work they will be supervising and decided that they are ready for more responsibility.

   It is not necessary to sit by passively and wait for readiness to develop naturally, however. There are ways to induce readiness through exposure to models of superior performance, career counseling, simulation exercises, and other techniques.

5. *Orientation to learning.* In contrast to children's and youths' subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning. Adults are motivated to devote energy to learn something to the extent that they perceive that it will help them perform tasks or deal with problems that they confront in their life situations. Furthermore, they learn new knowledge, understandings, skills, values, and attitudes most effectively when they are presented in the context of application to real-life situations.

   This point is so critical that I would like to reinforce it with three illustrations.

For many years, we sought to reduce illiteracy in this country by teaching courses in reading, writing, and arithmetic, and our record was terribly disappointing. The dropout rate was high, motivation to study was low, and achievement scores were poor. When researchers started trying to discover what was wrong, they quickly discovered that the words presented in the standard vocabulary lists in the reading and writing courses were not the words these people used in their life situations and that the mathematical problems presented in their arithmetic courses were not the problems they had to be able to solve when they went to the store, the bank, or the shop. As a result, new curriculums organized around life situations and the acquisition of coping skills (e.g., coping with the world of work, of local government and community services, of health, of the family, of consuming) were constructed. Many of the problems encountered in the traditional courses disappeared or were greatly reduced.

A second example is from university extension. For many years it was the practice of universities to offer late afternoon or evening courses for adults that were exactly the same

courses taught to teenagers in the day. Then in the 1950s I began noticing the evening programs changing. A course titled "Composition I" in the day program became "Writing Better Business Letters" in the evening program; "Composition II" became "Writing for Pleasure and Profit"; and "Composition III" became "Improving Your Professional Communications." And it wasn't just the titles that changed; the way they were taught also changed. While students in "Composition I" still memorized rules of grammar, students in "Writing Better Business Letters" started right off writing business letters and then extracted principles of grammatical writing from an analysis of what they had written.

A third example comes from my own personal experience with trying to learn to use a computer for writing letters, articles, and books, keeping my accounts, maintaining mailing lists, and the like. In December 1981 I bought myself one of the more popular personal computers, set it up in my study, and started reading the instruction manual with enthusiastic anticipation. The instruction manual started right off making me memorize commands. After memorizing about three pages' worth, I had to go off on a short trip, and when I returned I dashed up to my study to practice the commands I had memorized. Lo and behold, after retrieving three or four commands, I couldn't remember the others. It occurred to me that I was being asked to learn something for its own sake without knowing how I would use it to perform the tasks I wanted the computer to perform for me. So I decided to ignore the manual and teach myself how to make the computer write letters for me. It was a struggle, and the manual wasn't very helpful, but after several months I was using the computer for most of my correspondence, and in June I wrote my first article on it. It became clear to me that the computer company could have saved me a lot of time if its software producers and manual writers understood that adults are task-centered in their learning and had taught me the commands in the context of using them to write letters or perform other tasks I wanted to perform. Some months later I wrote an article for *Training and Development Journal* in which I included a "Memo to the Computer Industry" (see Appendix C) as an example of the application of the andragogical model to computer instruction.

This assumption is strongly supported by the studies of adults' time perspective described by McClusky in Appendix B and by Tough's studies of adult learning projects described earlier in this chapter. In fact, I now prefer Tough's concept of learning projects as a basis of organizing adult educational programs to my earlier concept of problem areas.

6. *Motivation.* While adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like). Tough (1979) found in his research that all normal adults are motivated to keep growing and developing, but that this motivation is frequently blocked by such barriers as negative self-concept as a student, inaccessibility of opportunities or resources, time constraints, and programs that violate principles of adult learning.

Putting the Pedagogical and Andragogical Models in Perspective

In the treatment of these two models so far it may appear that I am saying that they are antithetical, that pedagogy is bad and andragogy is good, and that pedagogy is for children and andragogy is for adults. This is pretty much the way I presented the models in the first edition of *The Modern Practice of Adult Education: Andragogy Versus Pedagogy* in 1970. But during the next decade, a number of teachers in elementary and secondary schools and in colleges reported to me that they were experimenting with applying the andragogical model and that children and youths seemed to learn better in many circumstances when some features of the andragogical model were applied. So, in the revised edition of *The Modern Practice of Adult Education* (1980), the subtitle was changed to "From Pedagogy to Andragogy." Also, a number of trainers and teachers of adults described situations to me in which they found that the andragogical model did not work.

So, I would like to put the two models into the perspective in which I now see them. Let me start by making a distinction between an ideology and a system of alternative assumptions. It seems to me that the pedagogical model has taken on many of the characteristics of an ideology, ideology being defined as a systematic body of beliefs that requires loyalty and conformity by its adherents. In most of my previous experience as a student and a teacher I felt pressures from the educa-

tional system to adhere to the pedagogical model. For example, the best motivator of performance, I was told, is competition for grades; and, therefore, grades must be on a curve of normal distribution—only so many A's are allowed and there must be some failures. The pedagogical ideology is typically sanctified by the shibboleth "academic standards." (If you give too many A's, you are violating academic standards.)

The andragogical model, as I see it, is *not* an ideology; it is a system of alternative sets of assumptions. And this leads us to the critical difference between the two models. The pedagogical model is an ideological model which excludes the andragogical assumptions. The andragogical model is a system of assumptions which includes the pedagogical assumptions.

What this means in practice is that we educators now have the responsibility to check out which assumptions are realistic in a given situation. If a pedagogical assumption is realistic for a particular learner in regard to a particular learning goal, then a pedagogical strategy is appropriate, at least as a starting point. For example, when learners are indeed dependent (such as when entering into a totally strange content area), when they have in fact had no previous experience with a content area, when they do not understand the relevance of a content area to their life tasks or problems, when they do need to accumulate a given body of subject matter in order to accomplish a required performance, and when they feel no internal need to learn that content, then they need to be taught by the pedagogical model. (If I were to enroll tomorrow in a course in nuclear physics, I would need to have a didactic instructor teach me what the content is, how it is organized, what its special terminology is, and what the resources are for learning about it before I would be able to start taking the initiative in learning more about it.)

But there is one big difference between how an ideological pedagog and an andragog would go from here. The pedagog, perceiving the pedagogical assumptions to be the *only* realistic assumptions, will insist that the learners remain dependent on the teacher; whereas the andragog, perceiving that movement toward the andragogical assumptions is a desirable goal, will do everything possible to help the learners take increasing responsibility for their own learning.

Even dyed-in-the-wool pedagogical teachers have reported to me that their teaching has become more effective when they adapted some of the andragogical concepts to the pedagogical model—for example,

by providing a climate in which the learners feel more respected, trusted, unthreatened, and cared about; by exposing them to the need to know before instructing them; by giving them some responsibility in choosing methods and resources; and by involving them in sharing responsibility for evaluating their learning.

Implications for Practice

The implications for applying these assumptions to planning and conducting programs of adult education and human resources development are explored in Chapter 5.