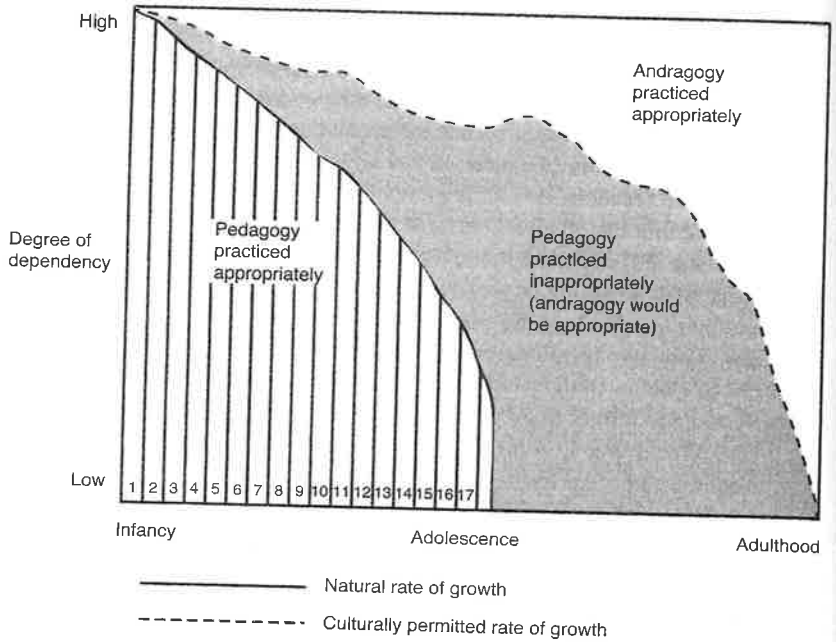

Figure 3.1 The natural maturation toward self-direction as compared with the culturally permitted rate of growth of self-direction

vertical lines). Seemingly, US 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 increasing need for self-direction continues to develop organically. The result is a growing gap between the need and the ability to be self-directing; which can produce tension, resistance, resentment, and often rebellion in the individual.

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 audiovisual aids producer. Therefore, transmittal techniques (e.g., 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 (e.g., grades, the teacher's 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 is meant by "adult." There are at least four viable definitions of *adult*. First, the biological definition: biologically, we become adults when we reach the age at which we can reproduce (i.e., in early adolescence). Second, the legal definition: legally, we become adults 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: socially, we become adults 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: psychologically, we become adults when we arrive at a self-concept of being responsible for our own lives, of being self-directing. With regard to learning, it is the psychological definition that is most crucial. But it seems that the process of gaining a self-concept, of self-directedness, starts early in life and grows cumulatively as we biologically mature, start performing adult-like roles, and take increasing responsibility for making our own decisions. So, we become adults 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 and 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 aphorisms 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. 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. Paulo Freire, the great Brazilian adult educator, developed an elaborate process for what he calls the *consciousness-raising* of peasants in developing countries in his *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. This presents a serious problem in adult education: The minute adults walk into an activity labeled "education," "training," or anything synonymous, 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." This assumption of required dependency and the facilitator's subsequent treatment of adult students as children creates a conflict within them between their intellectual model—learner equals dependent—and the deeper, perhaps subconscious, psychological need to be self-directing. And the typical method of dealing 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 adult educators become aware of this problem, they make efforts to create learning experiences in which adults are helped to make the transition from dependent to self-directing learners. *Self-Directed Learning: A Guide for Learners and Teachers* (Knowles, 1975) is a collection of such experiences.
3. *The role of the learners' experiences.* Adults come into an educational activity with both a greater volume and a different quality of experience from that of youths. By virtue of simply having lived longer, they have accumulated more experience than they had as youths. But they have also had a different kind of experience. This difference in quantity and quality of experience has several consequences for adult education.

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, greater emphasis in adult education is placed on individualization of teaching and learning strategies.

It also means that for many kinds of learning, the richest resources for learning reside in the adult learners themselves. Hence, the emphasis in adult education is on experiential techniques—techniques that tap into the experience of the learners, such as group discussions, simulation exercises, problem-solving activities, case methods, and laboratory methods instead of transmittal techniques. Also, greater emphasis is placed 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 try to discover ways to help adults examine their habits and biases and open their minds to new approaches. Sensitivity training, values 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 experience of the learners; it has to do with each learner's 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 attend. 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, experience is who they are. The implication of this fact for adult education is that in any situation in which the participants' experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves 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 supervise and have 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 learn to the extent that they perceive that learning will help them perform tasks or deal with problems 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 reinforcement is required.

   For many years, educators sought to reduce illiteracy in the USA by teaching courses in reading, writing, and arithmetic; and the record was terribly disappointing. The dropout rate was high, motivation to study was low, and achievement scores were poor. When researchers started to discover what was wrong, they quickly found that the words presented in the standard vocabulary lists in the reading and writing courses were not the words the students 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 curricula 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 courses. 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, the evening programs changed. 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 the courses were taught also changed. While students in "Composition I" still memorized rules of grammar, students in "Writing Better Business Letters" immediately began writing business letters and then extracted principles of grammatical writing from an analysis of what they had written.

6. *Motivation*. Adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), but 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 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.

It is important to note that the number of assumptions has grown from four to six over the years. Originally, andragogy presented four assumptions (shown here as numbers 2–5; Knowles, 1975, 1978, 1980b). Assumption number 6, motivation to learn, was added in 1984 (Knowles, 1984a), and assumption number 1, the need to know, in more recent years (Knowles, 1989b, 1990).

Putting the pedagogical and andragogical models in perspective

So far, the treatment of these two models may suggest 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 the models were presented in the first edition of *The Modern Practice of Adult Education: Andragogy versus Pedagogy* (Knowles, 1970). But during the next decade, a number of teachers in elementary and secondary schools and in colleges reported 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 in which they found that the andragogical model did not work.

Therefore, putting the two models into perspective requires making a distinction between an ideology and a system of alternative assumptions. It seems that the pedagogical model has taken on many of the characteristics of *ideology*, which is defined as a systematic body of beliefs that requires loyalty and conformity by its adherents. Consequently, teachers often feel pressure from the educational system to adhere to the pedagogical mode.