

CHAPTER 1

Conceptual Foundations

The designs in this book are based on two conceptual foundations: learning theory and design theory.

Learning Theory: The Andragogical Model Versus the Pedagogical Model

Since the Middle Ages, the pedagogical model has served as the foundation of traditional education. In fact, it is the only way of thinking about education that most people know, because it is what they experience in school. The following assumptions about learners are inherent in the pedagogical model:

- ▶ **Concept of the learner.** The learner is a dependent personality by definition, because the pedagogical model assigns to the teacher full responsibility for making all the decisions about what should be learned, when it should be learned, how it should be learned, and whether it has been learned. The only task for the learner, therefore, is to submissively carry out the teacher's directions.
- ▶ **Role of the learner's experience.** Learners enter into an educational activity with little experience to use as a resource for learning. It is the experience of the teachers, the textbook author, and the audiovisual aids producer that counts. Accordingly, the backbone of the pedagogical methodology is transmission techniques—lectures, assigned readings, and audiovisual presentations.
- ▶ **Readiness to learn.** Students become ready to learn when they are told they have to learn if they want to advance to the next grade. This readiness is largely a function of age.
- ▶ **Orientation to learning.** Students enter into an educational activity with a subject-centered orientation to learning. They see learning as a process of acquiring prescribed subject-matter content. Consequently, the curriculum is organized according to content units and is sequenced according to the logic of the subject matter.
- ▶ **Motivation to learn.** External pressures from teachers and par-

ents, competition for grades, and the consequences of failure are the students' primary motivations.

In contrast—and in equally pure form—the following assumptions about learners are inherent in the andragogical model:

- ▶ **Concept of the learner.** As adults, we have a deep psychological need to be self-directing—to be perceived by others and treated by others as able to take responsibility for ourselves. When we find ourselves in situations where we feel others imposing their wills on us without our participation in making decisions that affect us, we feel resentment and resistance.
- ▶ **Role of the learner's experience.** The andragogical model assumes that adults enter into an educational activity with a greater volume and a different quality of experience than youths. The greater volume is obvious—the longer we live, the more experience we accumulate. The difference in quality of experience arises from the different roles adults and young people perform.

This difference in experience affects the planning and conducting of an educational activity. First, it means that adults are themselves the richest learning resource for one another for many kinds of learning. Hence, the greater emphasis in adult education is on such techniques as group discussion, simulation exercises, laboratory experiences, field experiences, problem-solving projects, and interactive media.

The differences in experience also assume greater heterogeneity in groups of adults. The range of experience in a group of adults of various ages will be greater than that in a group of same-aged youths. Consequently, adult education emphasizes individualized learning plans, such as learning contracts.

Readiness To Learn

The andragogical model assumes that adults become ready to learn when they experience a need to know or be able to do something to perform more effectively in some aspect of their lives. Among the chief sources of readiness are the developmental tasks associated with moving from one stage of development to another. Any change—marriage, the birth of children, the loss of a job, divorce, the death of a friend or relative, or a change of residence—can trigger a readiness to learn. But we don't need to wait for readiness to develop naturally. We can induce readiness by exposing learners to more effective role models, engaging

them in career planning, and providing them with diagnostic experiences to assess the gaps between where they are now and where they want and need to be in terms of their personal competencies.

Orientation to Learning

Because adults are motivated to learn after they experience a need, they enter an educational activity with a life-, task-, or problem-centered orientation to learning. The chief implication of this assumption is the importance of organizing learning experiences (i.e., the curriculum) around life situations, rather than according to subject-matter units. For example, courses that are called Composition I, Composition II, and Composition III in high school might better be called Writing Better Business Letters, Writing for Pleasure and Profit, and Improving Your Professional Communications in an adult education program.

Motivation To Learn

Although the andragogical model acknowledges that adults will respond to some external motivators—for example, a chance for promotion, a change of jobs, or a change in technology—it proposes that the more potent motivators are internal—such as self-esteem, recognition by peers, better quality of life, greater self-confidence, self-actualization, and so on. Program announcements should emphasize these kinds of benefits.

Conclusion

As I have asserted in several books and many articles, I regard the pedagogical and andragogical models as parallel, not antithetical. It is the responsibility of the educator to check out which assumptions of the two models are realistic for a given situation. In some situations, such as when learners are experiencing a new and strange type of content or are confronting a machine they have never seen before, learners may be truly dependent on receiving some didactic instruction before they can initiate their own learning. In such situations, the pedagogical assumption of dependency is realistic, and pedagogical strategies are appropriate (at least up to the point that the learners have acquired sufficient background knowledge to start taking responsibility for their own learning). In many more situations, however, the andragogical strategies would be realistic from the outset.

Design Theory: Content Design Versus Process Design

The pedagogical and andragogical models employ two very different theoretical approaches to the design and operation of educational programs. The basic format of the pedagogical model is a *content design*, which requires the teacher to answer only four questions:

- ▶ **What content needs to be covered?** It is the teacher's responsibility to cover, through lectures or assigned readings, all of the content that the students need to learn. Thus, the teacher (or pedagogue) constructs a long list of items to be covered.
- ▶ **How can this content be organized into manageable units?** The pedagogue clusters the content into appropriate time units—say, 50-minute lesson plans or three-hour workshops.
- ▶ **What is the most logical sequence for presenting these units?** It is the logic of the subject matter, not the readiness of the learners or other psychological factors, that determines the sequence. In scientific or mathematical content programs, the sequence is from simple to complex; in history, it is chronological.
- ▶ **What is the most efficient means of transmitting this content?** In the case of highly conceptual content, the preferred means would be lecture or audiovisual presentations and assigned readings. If the content involves skill performance, the transmission means would be demonstration by the teacher and drill by the students.

In contrast, the basic format of the andragogical model is a *process design*. The andragogical model assigns dual roles to the facilitator of learning (a title preferred over “teacher”). First and most importantly, he or she designs and manages procedures that will facilitate the acquisition of content by the learners. Second, he or she will act as a content resource. The andragogical model assumes that many resources other than the teacher are available to learners. These resources include peers, people in the community with specialized knowledge and skills, material and media resources, and field experiences. One of the principal responsibilities of the facilitator is to know about these resources and to link learners with them. This process is often called *educational brokering*.