

## CHAPTER 3

# Designs for Courses

This chapter presents the designs of several courses I have facilitated. Although all of these courses had adult education as their content area, many of my colleagues and former students have adapted these designs to such other subject areas as liberal arts, nursing, medicine, accounting, and business management.

The exhibits open with a comparison of two designs of the same course taught at different times. Exhibit 3-1, "The Nature of Adult Education," was offered at Boston University from 1960 to 1974, in classes of 30 students. It operated like a seminar, with small groups interacting with the whole class. Exhibit 3-2, "Adult Education: History, Philosophy, and Contemporary Nature," was offered at North Carolina State University from 1974 to 1979, with 50 to 75 students in each class. It used inquiry teams and learning contracts. My role in both was as a process manager and a content resource.

Exhibit 3-3, "Adult Learning Concepts and Theories," is a course I have conducted at several universities, sometimes under the title, "The Adult Learner."

Exhibit 3-4, "Program Planning and Methodology in Adult Education," is another course I have conducted at several universities under such alternate titles as "The Modern Practice of Adult Education" and "Adult Education Methods."

Exhibit 3-5, "Facilitating Self-Directed Learning" is a course I have conducted at the Oklahoma State University and the University of South Florida.

Exhibit 3-6, "Training and the Applied Behavioral Sciences," is a course I have conducted only once, at the University of Southern California's Washington Public Affairs Center.

**In this chapter:**

- **Exhibit 3-1.** The Nature of Adult Education
- **Exhibit 3-2.** Adult Education: History, Philosophy, and Contemporary Nature
- **Exhibit 3-3.** Adult Learning Concepts and Theories
- **Exhibit 3-4.** Program Planning and Methodology in Adult Education
- **Exhibit 3-5.** Facilitating Self-Directed Learning
- **Exhibit 3-6.** Training and the Applied Behavioral Sciences

❖ **Exhibit 3-1. The Nature of Adult Education** ❖

**Objectives**

The general objectives of this course, subject to modification by the individual objectives of the student, are to develop or strengthen the following competencies:

- an appreciation of the role of adult education in society, past and present, and exploration of its potential roles in the future
- knowledge of the present scope and trends of adult education in terms of aims, agencies, content, personnel, program types, methods and materials, and problems and obstacles
- an understanding of the concerns and philosophical issues affecting the adult educational field
- insight into the relationship between the education of adults and the education of youths
- an understanding of the basic process of adult education.

Students who want credit in this course will be evaluated on the basis of criteria and procedures determined mutually by the instructor and the students.

**Resources**

The following books are basic references for the course:

Houle, Cyril O. *The Design of Education*. Jossey-Bass Publishers, 1972a.

Knowles, Malcolm S. *The Adult Education Movement in the United States*. Holt, Rinehart & Winston, 1962.

—. *The Modern Practice of Adult Education: From Pedagogy to Andragogy*. Follett Press, 1980.

Smith, Robert M., George F. Aker, and J.R. Kidd. *Handbook of Adult Education*. Macmillan Publishing Co., 1970.

Other books that have resources relevant to the particular inquiry units are identified in the section titled "Process Design." When page numbers are not specified for a given reference, it is suggested that the

learners look up relevant information in the reference's table of contents and index. Full reference listings are in the master bibliography at the end of this book.

## **Process Design**

### **I. Orientation**

- A. Introduction of group members, with description of roles in adult education
- B. Assessment of learners' present knowledge, understanding, and perceptions of the adult educational field (in small groups)
- C. Formulation of objectives of the course: analysis of instructor's objectives and modification by students' objectives (in small groups)
- D. Organization of the course plan: sequence of inquiry, division of responsibility, plan for evaluation

### **II. The role of adult education in society**

#### A. Historical role

- Knowles (1960), pp. 7-28.
- Grattan (1955), pp. 3-17, 135-286.
- Knowles (1962), pp. 3-154.
- Houle (1972a), pp. 2-30, 237-241.
- Smith, et al. (1970), pp. xvii-xxx.

#### B. Contemporary needs

- Knowles (1960), pp. 3-6, 29-38.
- Knowles (1980), chapters 1-2.
- Sheats, et al. (1953), pp. 15-67.
- Knowles (1950), pp. 3-10.
- Verner (1964), pp. 3-7.
- Kempfer (1955), pp. 17-58.
- Smith, et al. (1970), pp. 3-23.

#### C. Aims of adult education as a movement

- Powell (1956), pp. 12-30.
- Sheats, et al. (1953), pp. 2-14.
- A Design for Democracy (1956), pp. 51-55, 59-77.
- Knowles (1960), pp. 151-155.
- Verner (1964), pp. 7-10.
- Kempfer (1955), pp. 3-16.
- Smith, et al. (1970), pp. 25-44.
- Houle (1972a), pp. 250-256.

### **III. Scope of adult education**

#### A. Agencies of adult education in the United States

##### 1. Types of agencies

- Brunner, et al. (1959), pp. 211-228.
- Powell (1956), pp. 33-61.
- Knowles (1962), pp. 157-188.
- Johnstone and Rivera (1965), chapter 2.
- Smith, et al. (1970), pp. 171-190.

##### a) Those primarily for the education of youth

###### (1) Public schools

- Knowles (1960), pp. 345-355.
- Sheats, et al. (1953), pp. 144-174.
- Grattan (1955), pp. 217-231.
- Knowles (1962), pp. 24-30, 52-60, 133-145.
- Smith, et al. (1970), pp. 231-244.

###### (2) Colleges and universities

- Knowles (1960), pp. 203, 217.
- Sheats, et al. (1953), pp. 175-199.
- Grattan (1955), pp. 183-196.
- Knowles (1962), pp. 46-50, 83-90.
- Smith, et al. (1970), pp. 191-230.

b) Those which are primarily adult educational

(1) Agricultural extension

- Knowles (1960), pp. 218-229.
- Sheats, et al. (1953), pp. 98-119.
- Grattan (1955), pp. 197-216.
- Knowles (1960), pp. 90-94, 163-164.
- Smith, et al. (1970), pp. 265-282.

(2) Independent centers

- Knowles (1960), pp. 263-273.
- Knowles (1962), pp. 105-107.
- Smith, et al. (1970), pp. 389-391.

(3) Proprietary schools

- Knowles (1960), pp. 339-344.
- Knowles (1962), pp. 131-133.
- Smith, et al. (1970), pp. 387-389.

c) Those that have adult education as a coordinate function

(1) Libraries

- Knowles (1962), 302-313.
- Sheats, et al. (1953), pp. 120-143.
- Grattan (1955), pp. 232-238.
- Knowles (1962), 7-8, 19-20, 51-52, 112-118.
- Smith, et al. (1970), pp. 245-252.

(2) Museums

- Knowles (1960), pp. 330-338.
- Knowles (1962), pp. 20, 74, 130-131.
- Smith, et al. (1970), pp. 252-260.

(3) Social welfare and health agencies

- Knowles (1960), pp. 336-377, 255-262.
- Knowles (1962), pp. 64-65, 103-105, 164-165.
- Smith, et al. (1970), pp. 252-260.

d) Those in which adult education is a supporting function

(1) Business and industry

- Knowles (1960), pp. 196-202.
- Knowles (1962), pp. 79-83.
- Smith, et al. (1970), pp. 315-334.

(2) Foundations

- Knowles (1960), pp. 196-202.
- Knowles (1962), pp. 94-97, 190-194, 241-242.

(3) Government agencies

- Knowles (1960), pp. 238-254.
- Knowles (1962), pp. 97-103, 136-137.
- Smith, et al. (1970), pp. 285-300.

(4) International organizations

- Knowles (1960), pp. 274-285.
- Sheats, et al. (1953), pp. 273-292.
- Smith, et al. (1970), pp. 45-58.

(5) Labor unions

- Knowles (1960), pp. 286-301.
- Sheats, et al. (1953), pp. 221-245.
- Grattan (1955), pp. 239-256.
- Knowles (1962), pp. 44-45, 107-111.
- Smith, et al. (1970), pp. 301-314.

(6) Mass media

- Knowles (1960), pp. 314-329.
- Knowles (1962), pp. 109-110, 118-130.
- Smith, et al. (1970), pp. 96-102.

(7) Religious institutions

- Knowles (1960), pp. 356-365.
- Knowles (1962), pp. 9, 22-23, 72-73, 145-151.
- Smith, et al. (1970), pp. 353-370.

(8) Voluntary associations

- Knowles (1960), pp. 378-390.
- Sheats, et al. (1953), pp. 200-220.
- Grattan (1955), pp. 257-275.
- Knowles (1962), pp. 21-22, 60-72, 151-154.
- Smith, et al. (1970), pp. 172-180.

B. Content areas of adult education

- Knowles (1960), pp. 393-550.
- Powell (1956), pp. 97-181.
- Knowles (1962), pp. 255-256.
- Johnstone and Rivera (1965), chapter 2.
- Smith, et al. (1970), pp. 397-526.

C. Personnel of adult education

1. Leadership

- Kempfer (1955), pp. 228-314.
- Knowles (1960), pp. 117-128.
- Brunner (1959), pp. 177-190.
- Sheats, et al. (1953), pp. 399-426.
- Powell (1956), pp. 199-219.
- Knowles (1962), pp. 253-254.
- Verner (1964), pp. 34-49.
- Smith, et al. (1970), pp. 109-120.

- Houle (1972a), pp. 155-158, 290-292.

2. Clientele

- Brunner (1959), pp. 89-118.
- Johnstone and Rivera (1965), chapters 3-4.
- Verner (1964), pp. 18-33.

D. Program development

- Brunner (1959), pp. 125-141.
- Houle (1972a), pp. 31-225, 243-247.
- Kempfer (1955), pp. 61-290.
- Knowles (1960), pp. 65-81.
- Knowles (1980), chapter 9.
- Knowles (1950), pp. 84-166.
- Sheats, et al. (1953), pp. 68-81.
- Smith, et al. (1970), pp. 59-74.
- Verner (1964), pp. 50-67.

E. Methods of adult education

- Knowles (1960), pp. 82-95.
- Knowles (1980), chapter 11.
- Brunner (1959), pp. 142-176.
- Sheats, et al. (1953), pp. 321-348.
- Johnstone and Rivera (1965), chapter 2.
- Verner (1964) p. 68.
- Smith, et al. (1970), pp. 91-108.
- Houle (1972a), pp. 90-130, 274-285, 292-293.

F. Materials of adult education

- Knowles (1960), pp. 96-105.
- Sheats, et al. (1953), pp. 349-379.
- Smith, et al. (1970), pp. 75-90.
- Houle (1972a), pp. 152-155, 289-290.

#### IV. Problems and concerns in adult education

##### A. Coordination and role clarification

- Knowles (1960), pp. 179-195.
- Brunner (1959), pp. 211-242.
- Sheats, et al. (1953), pp. 246-272, 294-320.
- Knowles (1962), pp. 190-268.
- Kempfer (1955), pp. 293-313.
- Smith, et al. (1970), pp. 178-180.

##### B. Research and evaluation

- Kempfer (1955), pp. 399-421.
- Knowles (1960), pp. 106-116, 162-175.
- Brunner (1959), pp. 1-7, 243-273.
- Sheats, et al. (1953), pp. 448-474.
- Verner (1964), pp. 91-105.
- Smith, et al. (1970), pp. 70-74, 137-150.
- Houle (1972a), pp. 169-171, 182-184, 295-295, 299-300.

##### C. Public understanding

- Knowles (1960), pp. 129-137.
- Sheats, et al. (1953), pp. 448-474.
- Kempfer (1955), pp. 339-362.

##### D. Finance

- Knowles (1960), pp. 138-151.
- Sheats, et al. (1953), pp. 380-398.
- Powell (1956), pp. 220-227.
- Kempfer (1955), pp. 363-398.
- Houle (1972a), pp. 177-179, 298.

##### E. Facilities

- Knowles (1960), pp. 156-161.

##### F. Philosophical issues

- Knowles (1960), pp. 41-53.
- Powell (1956), pp. 231-235.
- Sillars (1958).
- Houle (1972a), pp. 241-143, 247-272.
- Smith, et al. (1970), pp. 121-136.

#### V. Adult education in other countries

#### VI. Trends and strategies for the future

- Knowles (1960), pp. 553-561.
- Sheats, et al. (1953), pp. 475-505.
- Powell (1956), pp. 185-198.
- Grattan (1955), pp. 303-310.
- Knowles (1962), pp. 269-280.
- Verner (1964), pp. 106-111.
- Houle (1972a), pp. 225.
- Smith, et al. (1970), pp. 151-167.

## ❖ Exhibit 3-2. Adult Education: History, Philosophy, and Contemporary Nature ❖

### Objectives

The purpose of this course is provide resources for learners to develop or strengthen the following competencies:

- ▶ an understanding of adult education as a social movement and its role in society, including
  - the historical evolution of adult education as a field of study and practice
  - the optional values, aims, and assumptions that have guided and could guide adult education as an instrument of society
  - the ways in which adult education has and has not influenced the development of American society
  - the contemporary issues, problems, and needs in society, and adult education's responses to them
  - potential future societal needs and what adult education's response to them should be
- ▶ knowledge of the scope and structure of adult education as a field of operations, including
  - a panorama of institutions serving the educational needs of adults and their respective objectives, clientele, programs, and strategies
  - the functions, positions, and roles performed by adult educators and conditions, standards, and bases of compensation for these roles
  - the pre-service and in-service opportunities in professional education for the role of adult educator
  - the mechanisms created for professional association among people, interagency planning, and coordination of resources in the field
  - the learning projects adults do outside institutional auspices
  - the relationship of adult education in this country to the education of adults around the world
- ▶ knowledge of adult education as a discipline and field of study, including
  - the conceptual foundations—including theories about learning, adult development, organizational dynamics, and program development—that undergird adult educational operations
  - the field's financial policies and practices

- the effects of physical environments on adult learning and how these have affected physical facilities in the field
- the major areas of past research investigations in the field of adult education and their designs, methods, and findings
- the methods, techniques, and materials used in the field.

### Resources

#### Basic References

The following references will serve as the basic material resources for this course:

Knowles, Malcolm S. *Self-Directed Learning: A Guide for Learners and Teachers*. Follett Press, 1975.

—. *The Adult Education Movement in the United States*, revised edition. Krieger Publishing Co., 1977.

Smith, Robert M., George F. Aker, and J.R. Kidd. *Handbook of Adult Education*. Macmillan Publishing Co., 1970.

Additional lists of books that have resources relevant to the particular inquiry units are identified in the section titled "Inquiry Units" beginning on page 51. When page numbers are not specified for a given reference, it is suggested that the learners look up relevant information in the reference's table of contents and index. Full reference listings are in the master bibliography at the end of this book.

#### Periodical References

Information relevant to many of the inquiry units will be found in the following periodicals:

*Adult Education*, the quarterly professional journal of the Adult Education Association of the United States.

*Adult Leadership*, the monthly practitioner's magazine of the Adult Education Association of the United States.

*Community College Review*, the quarterly journal of the Department of Adult and Community College Education, North Carolina State University.

*Community and Junior College Journal*, the monthly magazine of the American Association of Community and Junior Colleges.

*Convergence*, the quarterly journal of the International Council for Adult Education.

*Journal of Extension*, the bimonthly journal of the Cooperative Extension Service.

### Human Resources

The members of the faculty of departments of adult and community college education will have special resources that are relevant to various inquiry units.

### Proposed Plan of Inquiry

This course's plan of inquiry is as follows:

- ▶ Group members introduce themselves, identifying roles, backgrounds, interests, and resources.
- ▶ The facilitator sets a climate of mutuality, support, informality, warmth, openness, trust, and so forth. (See Exhibit 2-1, "Basic Climate-Setting Exercise.")
- ▶ The facilitator shares his or her philosophical and theoretical framework, perception of role, resources, and so forth.
- ▶ The facilitator reviews (and modifies with the learners) the purpose, objectives, and plan of work for this course.
- ▶ The facilitator reviews (and modifies with the learners) the proposed inquiry units, with learners making a preliminary assessment of competency-development needs. (See Figure 1, "Self-Diagnostic Rating Scale.")
- ▶ The facilitator reviews material and human resources for this inquiry.
- ▶ Learners self-diagnose learning needs.
- ▶ Learners draft learning contracts with the help of consultation triads, then negotiate with the facilitator. (See Exhibit 2-2, "Guidelines for Using Learning Contracts," and Exhibit 2-3, "Consultation Exercise.")
- ▶ Learners organize inquiry teams.
- ▶ Learners create learning experiences:
  - Each learner will have some objectives that can be accomplished best through independent study, field projects, or tutoring. Other

objectives can best be accomplished through involvement in an inquiry team. Still other objectives can best be accomplished through participation in the presentations of other inquiry teams.

- Each inquiry team will have the responsibility for mastering the content of its inquiry unit and designing and executing a learning experience for the rest of the class. During the inquiry team's planning, the facilitator will be available as a consultant and resource person.
- Each inquiry team will plan the schedule of its learning experience for the rest of the class so the facilitator will have at least half an hour for input and analysis of the experience.

### Inquiry Units

#### I. Unit 1

- A. What are the characteristics of adult education as a social movement, and what has been its role in society?

1. How did it evolve historically as a field of study and social practice?

—Smith, et al. (1970), pp. xvii-xxiii, 25-43.

—Knowles (1980), pp. 7-38.

—Knowles (1962), pp. 3-154.

—Axford (1969), pp. 27-56.

—Brunner (1959).

—Grattan (1951).

—Grattan (1955).

2. What are the social philosophies that have guided and could guide adult education as an instrument of society (i.e, its values, aims, and so on)?

—Smith, et al. (1970), pp. 121-135.

—Knowles (1960), pp. 41-53.

—Bergevin (1967), pp. 7-40, 65-110.

—Lindeman (1956).

—Freire (1970).

—Lindeman (1926).



3. In what ways has adult education influenced or not influenced the development of American society?

—Knowles (1960), pp. 5-25, 29-38.

—Also see the references in Sections I.A.1 and I.A.2.

4. What are the contemporary issues, problems, and needs in society, and what are adult education's responses to them?

—Smith, et al. (1970), pp. 3-23.

—Commission on Non-Traditional Study (1973).

—Houle (1972b).

—Blakely (1965).

—Blakely (1971).

—Charters (1971).

—Cook, et al. (1969).

5. What are potential future societal needs, and what should adult education's response to them be?

—Smith, et al. (1970), pp. 151-167.

—Knowles (1960), pp. 553-561.

—Knowles (1962), pp. 269-349.

## II. Unit 2

A. What is the scope and structure of adult education as a field of operations?

1. What institutions serve the educational needs of adults and what are their objectives, clientele, programs, and strategies?

—Smith, et al. (1970), pp. 171-526.

—Knowles (1960), pp. 179-550.

—Knowles (1962), pp. 76-154.

—Johnstone and Rivera (1965).

2. What are the various functions, positions, and roles performed by adult educators and the conditions, standards, and bases of compensation for these roles?

—Nadler (1970), pp. 147-247.

—Knowles (1980), pp. 21-35.

3. What are the opportunities and characteristics of graduate programs and in-service training programs for the professional development for adult educators?

—Smith, et al. (1970), pp. 109-119.

—Knowles (1960), pp. 69-102, 117-128, 307-326.

4. What mechanisms have been established for professional association and coordination in the field of adult education?

—Smith, et al. (1970), pp. 171-189, 75-90, 527-547.

—Knowles (1960), pp. 179-185.

—Knowles (1962), pp. 157-268, 327-334.

5. What adult learning takes place outside institutional programs, and how is experiential learning assessed for academic credit?

—Smith, et al. (1970), pp. 513-527.

—Tough (1979).

—Johnstone and Rivera (1965).

6. What is the relationship between adult education in this country and the education of adults around the world?

—Smith, et al. (1970), pp. 45-57.

—Knowles (1960), pp. 274-285.

## III. Unit 3

A. What are the characteristics of adult education as a discipline and field of study?

1. What are the conceptual foundations of the field, and how do these differ from the conceptual foundations of other elements of the national educational enterprise?

- Smith, et al. (1970), pp. 25-43, 59-74.
- Knowles (1960), pp. 3-6, 27-39, 54-64, 65-81, 105-305.
- Kidd (1973).
- Knowles (1980), pp. 37-55, 99-129.
- Knowles (1984b), pp. 27-59.

2. What are the financial policies and practices in the field?

—Knowles (1960), pp. 138-155.

3. What are the effects of the physical environment on learning and how have these affected physical facilities in the field?

—Knowles (1960), pp. 156-161.

—Alford, (1968).

4. What have been the major areas of research in adult education and what have been their designs, methods, and findings?

—Smith, et al. (1970), pp. 137-149, 549-563.

—Knowles (1960), pp. 106-116.

—Brunner (1959).

## ❖ Exhibit 3-3. Adult Learning Concepts and Theories ❖

### Objectives

The purpose of this course is to help learners develop or strengthen the following competencies:

- ▶ knowledge of the current concepts and research findings about the needs, interests, motivations, capacities, and developmental characteristics of adults as learners
- ▶ an understanding of the differences between youths and adults as learners and of the implications of these differences for teaching and learning
- ▶ insight into the processes and condition of adult learning and into the forces that affect learning in the dynamics of personal, group, and organizational behavior
- ▶ knowledge of the various theories of learning, and construction of a personal theory of learning
- ▶ an appreciation of the role and resources of an individual person in carrying on a continuing program of self-development.

In addition, special objectives of individual learners in this course will be assessed and incorporated into the curriculum.

### Resources

The following references serve as the basic references for this course:

Kidd, J.R. *How Adults Learn*. Follett Press, 1973.

Knowles, Malcolm S. *The Adult Learner: A Neglected Species*. Gulf Publishing Co., 1978 (3d edition published 1984b).

Additional lists of books that have resources relevant to the particular inquiry units are identified in the section titled "Inquiry Units" beginning on page 56. When page numbers are not specified for a given reference, it is suggested that the learners look up relevant information in the reference's table of contents and index. Full reference listings are in the master bibliography at the end of this book.

Handouts for this course include Figure 1, "Self-Diagnostic Rating Scale," and Exhibit 2-4, "Suggestions for Inquiry Teams."

## Process Design

This course's plan of inquiry is as follows:

- ▶ climate setting; see Exhibit 2-1, "Basic Climate-Setting Exercise"
- ▶ diagnosis of learning needs; see Figure 1, "Self-Diagnostic Rating Scale"
- ▶ organization of inquiry teams; see Exhibit 2-4, "Suggestions for Inquiry Teams"
- ▶ scheduling of inquiry team meetings and reports
- ▶ reporting of inquiry teams
- ▶ closing question-and-issues session
- ▶ evaluation of this course.

## Inquiry Units

### I. Unit 1

#### A. What are the characteristics of adult learners?

1. How do adults learn? What is learning versus growth, change, and maturation? How do adults learn differently than children and youths? What are adults' unique characteristics as learners?

—Kidd (1973), pp. 13-52.

—Knowles (1984b), pp. 43-59.

2. What is the student body of adult education? How is "adult" defined in terms of education? How many adults are participating? In what ways are they different from nonparticipants? What is the potential student body? What types of content do they study? Where? What reasons do they give for enrolling?

3. What motivates adults to learn? What are learning needs? How do they evolve? What are the developmental tasks and teachable moments of adult life?

—Kidd (1973), pp. 100-112, 124-146.

—Knowles (1984b), pp. 23, 29-31, 45-46, 62, 97, 112, 113.

### II. Unit 2

#### A. How does learning take place?

1. What is theory? What are the theories of learning? What kinds of learning are there? What are the main theories about them? What are their implications for adult learning?

—Kidd (1973), pp. 147-192.

—Knowles (1984b), pp. 1-59.

2. How do group processes affect learning? What are the forces in groups that facilitate and inhibit learning? What kinds of learning are most appropriate for group or individual learning? Under what conditions is learning in groups optimized?

—Kidd (1973), pp. 209-215.

3. How does the larger environment affect learning? What forces are at work in institutions, communities, and society-at-large that facilitate or inhibit learning? What are the main theories about institutional and social change, and how do educational processes fit into them? How can institutions and communities be changed to become more conducive environments for learning? What is organizational development? What would an optimally educative environment be like?

—Kidd (1973), pp. 193-267.

—Knowles (1984b), pp. 99-129.

### III. Unit 3

#### A. What are the implications of learning theory for adult education?

1. What are the implications for organizing learning experiences? How can learning experiences be organized best to satisfy the needs of adult learners, be in step with their developmental

tasks, be relevant to their life experiences, take into account their unique characteristics, and promote their self-actualization? How is adult learning best reinforced and transferred?

—Kidd (1973), pp. 268-291.

—Knowles (1984b), pp. 99-129.

2. What are the implications for the role of the teacher? In what ways do modern ideas about learning call for changes in the traditional definitions of the role of the teacher? What is effective teaching? What are the responsibilities and strategies for educators?

—Kidd (1973), pp. 292-309.

—Knowles (1984b), pp. 60-98.

3. What are the implications of the concept of lifelong education for the field of education? How differently would children and youths be taught if they were taught to be lifelong learners? How would the educational system be organized and operated? What would be the role of nontraditional study?

## ❖ Exhibit 3-4. Program Planning and Methodology in Adult Education ❖

### Assumptions

This study guide is based on the assumption that learning is an internal process with the locus of control of that process residing in the learner, but that this process can be facilitated by outside helpers. It further assumes that there are certain conditions more conducive to learning than others, and that these superior conditions are produced by practices in the learning-teaching transaction that adhere to superior principles of teaching. These conditions and principles are described in Knowles's *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (Follett Press, 1980), pp. 57-58.

This study guide is based on certain assumptions about adults as learners and the learning process. These assumptions have some implications for what you do and how you will use the facilitator, your peers, and the resource materials. First, it assumes that you as a learner

- have the self-concept of being an adult and the desire and capability of taking responsibility for planning and managing your own learning with help from fellow students, the facilitator, and other helpers. It further assumes that what you learn through your own initiative you will learn more effectively than what you learn through imposition by others.
- bring with you into this activity a rich background of experience that is a valuable resource both for your own learning and for the learning of fellow students. It further assumes that your experience is different from the experience of other members of the course, and that your combined experiences represent a rich pool of resources for one another's learning.
- are readiest to learn those things you perceive will help you perform more effectively in your life tasks and allow you to achieve a higher level of potential. It further assumes that the study guide and the facilitator have an obligation to help you see how the course can help you perform more effectively.
- are unique, along with every other member of the course, with your own styles and paces of learning, outside commitments and pressures, goals, and internal motivations. It also assumes that your learning plans and strategies must be highly individualized.

## Objectives

The purpose of this course is to help learners develop or strengthen the following competencies:

- ▶ knowledge of the basic principles and methods of program development and an understanding of their application in a variety of settings
- ▶ skill in the basic functions of program management, such as policy formulation; selecting, training, and supervising leaders and teachers; promoting and interpreting programs; financing; working with boards and committees; and program evaluation
- ▶ an understanding of the broad range of methods and techniques available to help adults learn, and skill in using these methods and techniques
- ▶ knowledge of the rationale for selecting particular methods and techniques for achieving particular educational objectives
- ▶ skill in designing learning experiences that use combinations of methods and techniques for optimal learning
- ▶ insight into the nature and dynamics of organizational life, and an understanding of the implications of these dynamics for the management of an adult educational enterprise
- ▶ an understanding of the role of the adult educator as a consultant and skill in using the consultation process to facilitate personal, group, and organizational change.

## Resources

Books that have resources relevant to the particular inquiry units are identified in the section titled "Inquiry Units" on page 64. When page numbers are not specified for a given reference, it is suggested that the learners look up relevant information in the reference's table of contents and index. Full reference listings are in the master bibliography at the end of this book.

Handouts for this study guide are

- ▶ Figure 1, "Self-Diagnostic Rating Scale"
- ▶ Exhibit 2-2. "Guidelines for Using Learning Contracts"
- ▶ Exhibit 2-3. "Consultation Exercise."

## Process Design

### I. Day 1

- A. Climate setting; see Exhibit 2-1, "Basic Climate-Setting Exercise" (75 minutes)

1. Small groups share their what's, who's, resources, and concerns.

- B. Analysis of this experience and generalizations about the characteristics of a climate that is conducive to learning (45 minutes)

### C. Break

- D. Self-diagnosis of learning needs (60 minutes)

1. Individual learners turn to Figure 1, "Self-Diagnostic Rating Scale," and rate each competency statement as described at the top of the form. Notice that there are blanks for you to write in additional competencies that you wish to add to the model.

- E. Review of self-diagnosed learning needs and consultation exercise (90 minutes)

1. Learners form consultation teams of three each to reality-test one another's self-ratings; see Exhibit 2-3, "Consultation Exercise."

### II. Day 2

- A. Drafting a learning contract (75 minutes)

1. Learners read Knowles (1980), pp. 382-385; Exhibit 2-2, "Guidelines for Using Learning Contracts"; and Figure 3, "A Learning Contract."

2. Each learner finds those competencies in the self-diagnosis in Figure 1 where the *P* is two or more notches below the *R* and translates them into learning objectives in the first column of the learning contract in Figure 3.

3. Learners fill in the remaining columns of the contract according to the guidelines.

### B. Break

C. Review of learning contracts (90 minutes)

1. Learners review their contracts with members of their consultation teams.

D. Break

- E. Review the plan of work for this course, with learners raising questions needing clarification (45 minutes)

F. Facilitator identification of needed resources (60 minutes)

1. Learners pool items in their learning contracts specifying the use of the facilitator's content resources.

G. Break

H. Organization of inquiry teams (30 minutes)

1. Learners choose one inquiry unit to take special responsibility for.

I. Plan work (90 minutes)

1. Inquiry teams see Exhibit 2-4, "Suggestions for Inquiry Teams," and Figure 7, "Process Rating Sheet for Inquiry Teams," to plan work.

**III. Day 3**

- A. Progress reports by inquiry teams and scheduling of reports (30 minutes)

- B. Presentation of first team (60 minutes)

- C. Commentary by facilitator and learners (30 minutes)

- D. Break

- E. Presentation of second team (60 minutes)

- F. Commentary by facilitator and learners (30 minutes)

- G. Formative evaluation (30 minutes)

**IV. Day 4**

- A. Presentation of third team (60 minutes)

- B. Commentary by facilitator and learners (30 minutes)

- C. Break

- D. Presentation of fourth team (60 minutes)

- E. Commentary by facilitator and learners (30 minutes)

- F. Break

- G. Presentation of fifth team (60 minutes)

- H. Commentary by facilitator and learners (30 minutes)

- I. Break

- J. Presentation of sixth team (60 minutes)

- K. Commentary by facilitator and learners (30 minutes)

- L. Formative evaluation (45 minutes)

**V. Day 5**

- A. Presentation of seventh team (60 minutes)

- B. Commentary by facilitator and learners (30 minutes)

- C. Break

- D. Presentation of eighth team (60 minutes)

E. Commentary by facilitator and learners (30 minutes)

F. Break

G. Presentation of ninth team (60 minutes)

H. Commentary by facilitator and learners (30 minutes)

## VI. Day 6

A. Presentation of tenth team (60 minutes)

B. Commentary by facilitator and learners (30 minutes)

C. Break

D. Identification of unresolved issues and concerns, with responses by facilitator (75 minutes)

E. Break

F. Review of portfolios of evidence by consultation teams (90 minutes)

G. Break

H. Analysis of the total experience, with generalizations about the program planning process (45 minutes)

I. Input on program evaluation and evaluation of this course (60 minutes)

## Inquiry Units

### I. Organizing a program

A. An overview of the program planning process

—Knowles (1980), chapters 2, 3, 9.

—Houle (1972a), chapter 1.

—Sanders (1966), pp. 94-109, 352-360.

—Knox, et al. (1980), chapters 1-3.

B. Establishing an organizational structure and climate

1. Philosophy of administration

—Knowles (1980), chapter 5.

—Houle (1972a), chapter 2.

—Knox, et al. (1980), chapter 8.

2. Policy-making structure

—Knowles (1980), pp. 70-78.

—Sanders (1966), pp. 33-47.

—Houle (1960), pp. 1-167.

C. Determining needs and interests

1. Individual needs

—Knowles (1980), chapter 6.

—Boone, et al. (1980), chapters 1-2.

2. Organizational needs

—Knowles (1980), chapter 6.

—Hospital Research and Educational Trust (1970), chapter 2.

3. Community and societal needs

—Knowles (1980), chapter 6.

—Boone, et al. (1980), chapter 14.

D. Formulating aims and objectives

—Knowles (1980), chapter 7.

—Sanders (1966), pp. 417-423.

—Houle (1972a), chapters 3, 5.

—Knox, et al. (1980), chapter 3.

## II. Designing a program

### A. Theory and principles of design

- Knowles (1980), chapter 8.
- Houle (1972a), chapters 3, 5.
- Sanders (1966), pp. 94-104.

### B. Selection and scheduling of activities

- Knowles (1980), chapter 8.
- Houle (1972b), pp. 9, 151-152, 160-161.

## III. Operating a program

### A. Staffing

- Knowles (1980), pp. 78-80.
- Knox, et al. (1980), chapter 7.

### B. Recruiting and training leaders and teachers

- Knowles (1980), pp. 156-163.
- Sanders (1966), pp. 315-330, 391-402.

### C. Managing facilities and procedures

- Knowles (1980), pp. 163-170.

### D. Educational counseling

- Knowles (1980), pp. 133-134, 171-176.

### E. Promotion and public relations

- Knowles (1980), pp. 176-189.
- Sanders (1966), pp. 167-232, 375-387.

### F. Financing

- Knowles (1980), pp. 190-193.

### G. Methods and techniques

- Knowles (1980), chapter 11.
- Knowles and Knowles (1972).
- Houle (1972a), chapter 4.
- Leypoldt (1967).
- Pfeiffer and Jones (1969).

### H. Program evaluation

- Knowles (1980), chapter 10.
- Houle (1972a), chapter 4.
- Sanders (1966), pp. 339-351.
- Knox, et al. (1980), chapter 4.
- Patton (1980).
- Patton (1981).
- Patton (1982).

## IV. Organizational dynamics, change strategies, and the consultant's role

- Knowles (1980), chapters 2-3.
- Bennis, et al. (1968).
- Schein (1969), pp. 1-147.
- Sanders (1966), pp. 69-86.



## ❖ Exhibit 3-5. Facilitating Self-Directed Learning ❖

### Objectives

The general objectives of this course are to help learners develop or strengthen the following competencies:

- ▶ an understanding of the modern, andragogical concepts of learning and how these differ from traditional, pedagogical concepts of teaching and learning
- ▶ knowledge of the role of educator as facilitator and resource for self-directed learners
- ▶ the ability to apply these concepts to the designing and conducting of learning experiences for a variety of purposes in a variety of settings.

### Resources

The basic text is Knowles's *Self-Directed Learning: A Guide for Learners and Teachers* (Follett Press, 1975). Handouts include the following:

- ▶ Figure 1, "Self-Diagnostic Rating Scale"
- ▶ Exhibit 2-2, "Guidelines for Using Learning Contracts"
- ▶ Exhibit 2-3, "Consultation Exercise"
- ▶ Exhibit 2-4, "Suggestions for Inquiry Teams."

### Process Design

#### I. Day 1

##### A. Climate-setting exercise (90 minutes)

1. Introduce the exercise. Learners read Knowles (1975), pp. 9-11.
2. Group members share their what's, who's, resources, and concerns. One member volunteers to give a summary report.
3. The groups' reporters give the summary reports (45 minutes).

##### B. Break

##### C. Inquiry Projects 1 and 2: The why and what of self-directed learning (180 minutes)

1. Learners read Knowles (1975), pp. 14-22, Learning Resource A.
2. Groups pool reactions, issues, and questions. One member volunteers to report the collected information.
3. The facilitator responds to the groups' reports.

#### II. Day 2

##### A. Inquiry Project 3: What competencies are required for self-directed learning? (75 minutes)

1. Learners read Knowles (1975), pp. 23-24.
2. Learners complete the self-rating scale in Learning Resource B in Knowles (1975), p. 61.

##### B. Inquiry Project 4: Designing a learning plan (45 minutes)

1. Learners read Knowles (1975), pp. 25-28.
2. Learners draft learning contracts for developing needed competencies for self-directed learning, using Figure 3, "A Learning Contract."

##### C. Break

##### D. Learners implement their learning contracts, using any resources in the room. (60 minutes)

##### E. Break

##### F. The role of the learning facilitator defined and implemented (90 minutes)

1. Learners read Knowles (1975), pp. 29-58.

2. Groups pool reactions, issues, and questions. One member volunteers to report this information.

3. The facilitator responds to the groups' reports.

#### G. Break

H. Diagnosis of competency-development needs as a facilitator of learning (60 minutes)

1. Learners rate themselves on the "Self-Diagnostic Rating Scale" in Figure 1.

2. Learners review one another's ratings in teams of two or three.

I. Preparation of learning contracts for the course (60 minutes)

1. Learners read "Guidelines for Using Learning Contracts" in Exhibit 2-2.

2. Each student selects one competency statement in which there is a gap between the *R* and the *P* in the "Self-Diagnostic Rating Scale," translates it into a learning objective, and completes the columns in the learning contract for that objective.

3. Students raise questions about the contracting process for the facilitator to respond to.

4. Students will bring completed contracts to the next meeting.

### III. Day 3

A. Peer review of learning contracts in "Consultation Exercise" in Exhibit 2-3 (120 minutes)

1. Learners read Knowles (1975), pp. 75-80.

2. Groups form triads, with one member presenting his or her contract for review by a second member (the consultant),

while a third member observes. Each round lasts 30 minutes.

3. Groups analyze this experience; see Knowles (1975), p. 78r.

#### B. Break

C. Clinic on problems and issues regarding contract learning (30 minutes)

D. Organization of learning groups around contract objectives (45 minutes)

E. Learning groups read "Suggestions for Inquiry Teams" in Exhibit 2-4 and then meet (75 minutes)

### IV. Day 4

A. Learning groups meet (120 minutes)

B. Break

C. Learning groups meet (75 minutes)

D. Break

E. Learning groups report (90 minutes)

F. Break

G. Identification of back-home application projects (30 minutes)

H. Organization of back-home application teams (30 minutes)

I. Back-home application teams meet (60 minutes)

### V. Days 5 to 18

A. Learners prepare portfolios of evidence of accomplishment of objectives

## VI. Day 19

- A. Back-home application teams meet (120 minutes)
- B. Break
- C. Back-home application teams meet (120 minutes)
- D. Clinic on problems and issues of back-home application teams (90 minutes)

## VII. Day 20

- A. Consultation triads review portfolios of evidence (120 minutes)
- B. Break
- C. Consultation teams fill out grade reports for each student. Learners polish portfolios of evidence and turn them in to the facilitator. (75 minutes)
- D. Break
- E. Mop-up of unresolved issues and questions regarding self-directed learning (60 minutes)
- F. Course evaluation (60 minutes)

## ❖ Exhibit 3-6. Training and the Applied Behavioral Sciences ❖

### Assumptions

This study guide is based on the assumption that learning is an internal process, with the locus of control of that process residing in the learner, but one that can be facilitated by outside helpers. It further assumes that certain conditions are more conducive to learning than others, and that these superior conditions are produced by learning-teaching practices that adhere to superior principles of teaching. These conditions and principles are described in Knowles's *The Modern Practice of Adult Education: From Pedagogy to Andragogy* (Follett Press, 1980), pp. 57-58.

This study guide is based on certain assumptions about adults as learners and the learning process. These assumptions have some implications for what you do and how you will use the facilitator, your peers, and the resource materials. First, it assumes that you as a learner

- ▶ have the self-concept of being an adult and the desire and capability of taking responsibility for planning and managing your own learning with help from fellow students, the facilitator, and other helpers. It further assumes that what you learn through your own initiative you will learn more effectively than what you learn through imposition by others.
- ▶ bring with you into this activity a rich background of experience that is a valuable resource both for your own learning and for the learning of fellow students. It further assumes that your experience is different from the experience of other members of the course, and that your combined experiences represent a rich pool of resources for one another's learning.
- ▶ are readiest to learn those things you perceive will help you perform more effectively in your life tasks and allow you to achieve a higher level of potential. It further assumes that the study guide and the facilitator have an obligation to help you see how the course can help you perform more effectively.
- ▶ are unique, along with every other member of the course, with your own styles and paces of learning, outside commitments and pressures, goals, and internal motivations. It also assumes that your learning plans and strategies must be highly individualized.

## Objectives

This course will help learners develop or strengthen the following competencies:

- ▶ basic knowledge and understanding of the modern concepts and research findings from the behavioral sciences regarding the needs, interests, motivations, capacities, and developmental processes of adult learners
- ▶ an understanding of the differences in assumptions about youths and adults as learners and the implications of these differences for teaching and training
- ▶ knowledge of the various theories of learning and the ability to assess their relevance to particular adult-learning situations
- ▶ the ability to conceptualize and perform the role of teacher-trainer as a facilitator and resource person for self-directed learners
- ▶ knowledge of the basic principles and methods of program development and an understanding of their application in a variety of settings
- ▶ skill in the basic functions of program management, such as policy formulation; selecting, training, and supervising leaders and teachers; promoting and interpreting programs; financing; working with boards and committees; and program evaluation
- ▶ an understanding of a broad range of methods and techniques available to help adults learn and become skilled in using these methods and techniques
- ▶ knowledge of the rationale for selecting particular methods and techniques for achieving particular educational objectives
- ▶ skill in designing learning experiences that use combinations of methods and techniques for optimal learning
- ▶ insight into the nature and dynamics of organizational life and an understanding of the implications of these dynamics for the management of an adult educational enterprise
- ▶ an understanding of the role of adult educator as a consultant and skill in using the consultation process in facilitating personal, group, and organizational change.

Requirements for accomplishing this course's purpose will vary according to the prior learning of the participants. Each learner will engage in a self-diagnostic process using the "Self-Diagnostic Rating Scale" in Figure 1. Each person will then construct, with the facilitator's help, a learning contract containing as objectives those abilities that are

not yet achieved at a high level of competence. Those learners who wish to contract for a "B" grade need to include in their contract only the objectives listed at the beginning of this study guide that they have not yet achieved at the required level. Those learners wishing to contract for an "A" grade must submit a separate contract specifying one or more objectives that will ensure superior performance and will build on their unique strengths, talents, interests, and career goals. You may prepare in advance for entering into this contracting process by reading Knowles's *Self-Directed Learning: A Guide for Learners and Teachers* (Follett Press, 1975).

## Resources

This course uses the following basic references:

Cross, P.K. *Adults as Learners*. Jossey-Bass Publishers, 1981.

Knowles, Malcolm S. *The Modern Practice of Adult Education: From Pedagogy to Andragogy*. Follett Press, 1980.

—. *The Adult Learner: A Neglected Species*. Gulf Publishing Co., 1984b.

—. *Self-Directed Learning: A Guide for Learners and Teachers*. Follett Press, 1975.

Nadler, L. *The Handbook of Human Resource Development*. John Wiley & Sons Inc., 1984.

Handouts used in this course are:

- ▶ Figure 1, "Self-Diagnostic Rating Scale"
- ▶ Exhibit 2-2, "Guidelines for Using Learning Contracts"
- ▶ Exhibit 2-3, "Consultation Exercise"
- ▶ Exhibit 2-4, "Suggestions for Inquiry Teams."

## Process Design

### I. Day 1

- A. Climate setting; see Exhibit 2-1, "Basic Climate-Setting Exercise" (60 minutes)

1. Small groups share their what's, who's, resources, and concerns.
- B. Analysis of this experience and generalizations about the characteristics of a climate that is conducive to learning (30 minutes)
- C. Break
- D. The facilitator's theoretical framework and the definition of his or her role (60 minutes)
  1. A dialogic self-revelation
- E. Break
- F. Self-diagnosis of learning needs (60 minutes)
  1. Individual learners turn to Figure 1, "Self-Diagnostic Rating Scale," and rate themselves on each competency statement described at the top of the form. Notice that there are blanks for the learners to write in additional competencies that they wish to add to the model.
- G. Review of self-diagnosed learning needs (30 minutes)
  1. Learners form consultation teams of three or four each and reality-test one another's self-ratings.
- H. Break
- I. Drafting a learning contract (60 minutes)
  1. Learners read Exhibit 2-2, "Guidelines for Using Learning Contracts." Each learner then turns to his or her own self-diagnosis, identifies those competency statements in which the *P* is two or more notches below the *R*, and translates them into learning objectives in the first column of the learning contract in Figure 3. They fill in the remaining columns of the contract form in accordance with the guidelines.

## II. Day 2

- A. Continue drafting the learning contract (45 minutes)
- B. Analysis of the contracting process, and discussion of questions, problems, and concerns about it (30 minutes)
- C. Break
- D. Review of learning contracts and consultation exercise (75 minutes)
  1. Learners review their contracts with members of their consultation team while doing the consultation exercise in Exhibit 2-3.
- E. Break
- F. Continue review of learning contracts (30 minutes)
- G. Analysis of this experience (15 minutes)
  1. What behaviors of the consultants facilitate or inhibit getting the desired help?
- H. Review of this course's plan of work (30 minutes)
  1. Learners raise questions needing clarification.
- I. Break
- J. Review of inquiry units (15 minutes)
- K. Selection of inquiry teams and first meetings (60 minutes)
  1. Learners choose one inquiry unit to take special responsibility for.
  2. Inquiry teams meet to plan work. See Exhibit 2-4, "Suggestions for Inquiry Teams."

### III. Day 3

- A. Inquiry teams meet, with facilitator as a roving consultant (75 minutes)
- B. Break
- C. Inquiry teams meet (75 minutes)
- D. Break
- E. Inquiry-team progress reports (45 minutes)
- F. Inquiry teams meet (45 minutes)
- G. Break
- H. Inquiry teams pool items in their contracts specifying the use of the facilitator's content resources and propose agenda items for Day 4 (60 minutes)

### IV. Day 4

- A. Execution of plans made on the afternoon of Day 3, with a short break in the middle (165 minutes)
- B. Break
- C. Inquiry teams meet to plan work (90 minutes)
  - 1. Inquiry teams propose time schedules for their reports.
- D. Break
- E. Progress reports and time schedule proposals from inquiry teams; final planning for sessions (60 minutes)

### V. Day 5

- A. Reports of scheduled inquiry teams, with commentary by facili-

tator and learners after each one and a short break in the middle of the session (165 minutes)

- B. Break

- C. Reports of scheduled inquiry teams, with a short break in the middle of the session (165 minutes)

### VI. Day 6

- A. Reports of scheduled inquiry teams, with commentary by facilitator and learners following each and a short break in the middle of the session (165 minutes)

- B. Break

- C. Reports of scheduled inquiry teams, with a short break in the middle of the session (165 minutes)

### VII. Day 7

- A. Reports of scheduled inquiry teams, with commentary by facilitator and learners following each and a short break in the middle of the session (165 minutes)

- B. Break

- C. Reports of scheduled inquiry teams, with a short break in the middle of the session (165 minutes)

### VIII. Day 8

- A. Review of portfolios of evidence by consultation teams (75 minutes)

- B. Break

- C. Continuation of review of portfolios of evidence by consultation teams (75 minutes)

D. Pairs of consultation teams pool unresolved issues and concerns (30 minutes)

E. Break

F. Groups report unresolved issues and concerns (15 minutes)

G. Facilitator responds to unresolved issues and concerns (75 minutes)

H. Break

I. Learners evaluate this course (60 minutes)

## **Inquiry Units**

### **I. Unit 1**

#### **A. Adult learning and teaching**

1. What are the unique characteristics of adults as learners with respect to their needs, interests, motivations, capacities, and developmental processes?

—Cross (1981), pp. 50-186.

—Knowles (1980), pp. 40-60.

—Knowles (1984a) pp. 27-63.

—Knowles (1984b), pp. 6-12.

—Knox (1977), pp. 1-31, 171-244, 405-469, 551-578.

—Wlodkowski (1985), pp. 1-15, 44-71.

2. What are the differences in assumptions about youths and adults as learners, and what are the implications of these differences for teaching and training?

—Knowles (1980), pp. 43-60.

—Nadler (1984), sections 6.1-6.22.

3. What are the various theories of learning and their relevance to particular learning situations?

—Cross (1981), pp. 220-252.

—Knowles (1984a), pp. 1-26, 64-139.

4. What is the role of a teacher or trainer as a facilitator and resource person for self-directed learners?

—Knowles (1975), pp. 29-58.

—Knowles (1980), pp. 24-39.

—Knowles (1984a), pp. 189-200.

—Knowles (1984b), pp. 141-146.

—Wlodkowski (1985), pp. 16-43, 72-280.

### **II. Unit 2**

#### **A. Program development**

1. What are the basic principles and methods of program development in human resources development and what are their applications in a variety of settings? What is the role of the human resource developer?

—Boone (1985), pp. 1-78.

—Knowles (1980), pp. 66-154.

—Nadler (1970), pp. 147-247, 1-40.

—Nadler (1984), sections 7.1-7.35.

2. What are the tasks and skills required to perform the basic functions of program management?

—Boone (1985), pp. 79-206.

—Knowles (1980), pp. 155-218.

—Nadler (1970), pp. 41-123.

### **III. Unit 3**

#### **A. Methods and techniques**

1. What is the broad range of methods and techniques available to help adults learn and what skills are required to use them?

Which methods and techniques are effective for achieving particular objectives?

—Craig (1976), sections 32.3-47.16.

—Knowles (1980), pp. 222-249.

—Nadler (1980), pp. 94-107.

—Nadler (1984), sections 8.1-11.32.

2. How can learning experiences be designed to use combinations of methods and techniques for optimal learning?

—Knowles (1984a), pp. 106-139, 177-188.

#### IV. Unit 4

A. The organization as a system of learning resources

1. What are the dynamics of organizational life that affect the management of adult educational or training systems?

—Craig (1976), pp. 8.3-8.8, 8.26.

—Knowles (1980), pp. 66-81.

—Knowles (1984a), pp. 192-200, 228-234.

—Nadler (1980), pp. 124-161.

—Nadler (1984), sections 2.1-2.15, 4.1-4.26.

2. What is the role of the human resource developer as a consultant in facilitating personal, group, and organizational change, and what skills are involved?

—Argyris (1970).

—Bennis, Benne, and Chin (1968).

—Lippitt (1973).

—Lippitt and Lippitt (1978).

—Nadler (1970), pp. 232-247.

—Nadler (1984), sections 5.1-5.27.

—Schein (1969).