THE MODERN PRACTICE OF ADULT EDUCATION

From Pedagogy to Andragogy

REVISED AND UPDATED

Malcolm S. Knowles

EPI

CAMBRIDGE

The Adult Education Company 888 Seventh Avenue, New York, New York 10106

*Copyright © 1980 by Malootin S. Knowles. All rights reserver. No portion of this book may be used or reproduced in any manner whatspever without written permission from the publisher except in the case of brief quotations embodied in critical reviews and critical. Manual factured to the United States of America.

Published and distributed by:
Cambridge, The Adult Education Company
888 Seventh Avenue
New York, NY 10106

ISBN 0-8428-2213-5

Library of Congress Cataloging In Publication Data

Knowles, Malcolm Shepherd, 1913– The modern practice of adult education.

Bibliography; p. Includes index.

1. Adult education.
1. Title.
LC5215.K62 1980 374 80–14344
ISBN 0–695-81472-9

Contents

Exhibits	Page 9
Chapter 1 Preparing Yourself to Inquire	13
Setting a Climate for Inquiry	13
How the Inquiry Is Organized	14
Where to Start	15
For Your Continuing Inquiry	15
Part I The Emerging Role and Technology of Adult Ed	ducation
Chapter 2 What Is Modern Practice?	18
In a World of Accelerating Change	18
A New Conception of the Purpose of Education	18
From a Focus on Teaching to a Focus on Learning	19
Lifelong Learning	19
New Delivery Systems	19
For Your Continuing Inquiry	20
Chapter 3 What Is the Role and Mission of the Adult Educator?	24
What is an Adult?	24
What Is Adult Education?	25
Who is an Adult Educator?	26
What Does an Adult Educator Do?	26
What is the Adult Educator's Mission?	27
The Needs and Goals of Individuals	27
The Needs and Goals of Institutions	33
The Needs and Goals of Society	36
The Changing and Challenging Role of Adult Educators	36
For Your Continuing Inquiry	38
Chapter 4 What is Andragogy?	40
In the Beginning Was Pedagogy	40
Then Came Andragogy	41
Assumptions of Pedagogy and Andragogy	43
Some Implications of the Assumptions for Practice	45
Self-Concepts and Teachers' Concepts of Learners	45
The Role of Experience	49
Readiness to Learn	51
Orientation to Learning	53

	Page		Page
Some Other Assumptions about Learning and Teaching	55	Formats for Individual Learning	131
Some Implications for Youth Education	58	Formats for Group Learning	135
The Andragogical Process of Program Development	59	Community Development as a Format for Learning	149
How Do We Know That It Is Better?	59	Some Sample Designs of Comprehensive Programs	150
For Your Continuing Inquiry	60	For Your Continuing Inquiry	153
Part II Organizing and Administering Comprehensive Prog	ırams	Chapter 9 Operating a Comprehensive Program	155
of Adult Education		The Art of Administration	155
of Haatt Edgadtion	1	Recruiting and Training Leaders and Teachers	156
Chapter 5 Establishing an Organizational Climate and Structure	66	Selecting Leaders and Teachers	156
The Purpose of Organizations	66	Compensation of Instructors	158
Providing an Educative Environment	66	Training and Supervision of Instructors	159
Practicing a Democratic Philosophy	67	Building Faculty Morale	162
Exemplifying Change and Growth	68	Managing Facilities and Procedures	163
The Organizational Setting of Adult Education	68	Providing Good Physical Facilities	163
Providing a Policy Base	70	Resource File	167
Criteria for a Policy Statement	71	Registration Procedures	168
Examples of Policy Statements	72	Opening-Night Procedures	169
Building a Committee Structure	72	Attendance Records, Grades, and Certificates	170 17
Types of Committees	72	Educational Counseling	
Functions of a Committee	74	Promotion and Public Relations	170
Composition of a Committee	75	Defining the Clientele	170
Some Guidelines for Effective Committee Operation	77	Planning the Promotion Campaign	177
Providing Staff Services	78	Integrating the Program with a Theme	179
For Your Continuing Inquiry	80	Getting Expert Advice	180 180
Chapter 6 Assessing Needs and Interests in Program Planning	82	Preparing and Distributing Promotion Materials	180
The Crucial Importance of This Step	82	Newspaper Advertising	18
The Nature of Needs	82	Newspaper Publicity	18
Basic Human Needs	83	Radio and Television	183
Educational Needs	88	Direct Mail and Printed Materials	18
The Nature of Interests	88	Posters, Displays, and Exhibits	18
General Interests	89	Personal Contacts in the Community	18
Factors That Affect Interest	89	Enlisting the Support of Participants	18
Changes in Interest During the Life Cycle	91	The Telephone Committee	18
General Subject Interests	92	Evaluating a Promotion Campaign	18
Assessing Needs and Interests	93	Interpreting and Reporting	19
Needs and Interests of Individuals	93	Budgeting and Financing	19
Needs of Organizations	97	Establishing an Overall Financial Policy	19
Needs of Communities	106	Establishing Fees	19
For Your Continuing Inquiry	118	Determining Costs Sources of Income Other Than Tuition	19
• • •	120	Payment Practices	19
Chapter 7 Defining Purposes and Objectives The Nature and Function of Purposes and Objectives	120	For Your Continuing Inquiry	19
Defining General Purposes	120		
•	121	Chapter 10 Evaluating Comprehensive Programs	19
Defining Program Objectives	122	Confronting a Sacred Cow	19
Translating Needs into Program Objectives For Your Continuing Inquiry	126	Conflicting Values in Evaluation	20
	Ì	Purposes of Evaluation	20
Chapter 8 Designing a Comprehensive Program	127	The Evaluation Process	20
The Far-Out Notion of Adult Education as an Art Form	127	When to Evaluate	20
Art Principles Applied to Adult Education	129	Who Should Evaluate?	20 20
Selecting the Formats for Learning	130	Formulating Evaluative Questions	20

8 CONTENTS

INDEX

		Page
Metho	ds of Data Collection	210
Analys	sis of the Data	215
Outcome	es of Evaluation	215
For Your	Continuing Inquiry	216
Part III H	elping Adults Learn	
Chapter 11	Designing and Managing Learning Activities	222
	ic Process	222
_	Climate for Learning	223
	ning a Structure for Mutual Planning	226
-	ing Needs for Learning	227
	oping Competency Models	227
	sing the Present Level of Performance	229
	sing Learning Needs	232 232
	ting Directions (Objectives) for Learning	232
	ng a Pattern of Learning Experiences	235 235
_	izing Principles	236 236
	ing-Design Models	239
_	g the Learning Experiences	239
Techn	•	241
	ials and Devices	243
	t Learning nple of Andragogy at Work	244
	ng Results and Rediagnosing Learning Needs	247
	r Continuing Inquiry	247
APPENDIXE:	•	
Appendix A	Correspondence with the Publishers of Merriam-Webster	
	Dictionaries Regarding "Andragogy"	252
Appendix B	Competencies for the Role of Adult Educator: Self-Diagnostic Rating Scale	255
Appendix C	Life Tasks of American Adults	262
Appendix D	Toward a Model of Lifelong Education	265
Appendix E	Some Papers, Research Reports, and Experiments on Andragogy	269
Appendix F	Chapter 5 Exhibits: Policy Statements	274
Appendix G	Chapter 7 Exhibits: Statements of Purposes and Objectives	295
Appendix H	Chapter 8 Exhibits: Sample Program Designs	307
Appendix I	Chapter 9 Exhibits: Tools for Operating Programs	314
Appendix J	Chapter 10 Exhibits: Evaluation Materials	344
Appendix K	Chapter 11 Exhibits: Some Tools for Conducting Learning Activities	360

393

Exhibits

El Sun

Exhibit		Page
1	Maslow's Hierarchy of Human Needs	28
2	Dimensions of Maturation	29
3	The Relationship of the Time-Span of Social Change to Individual Life-Span	41
4	A Comparison of the Assumptions of Pedagogy and Andragogy	43
5	Some Characteristics of Static vs. Innovative Organizations	69
6	Commission to the Adult-Education Committee of the XYZ Community Center	76
7	Grid for Selecting Board Members	77
8	Antecedents to an Act of Behavior	84
9	Definition of Educational Need	88
10	Incentives for Adult Learning	89
11	Ratio of Participants to Nonparticipants in Adult Education by Occupation	90
12	Areas of Learning Indicated as the First Choice of Would-Be Learners and Studied by Learners	93
13	Interest Questionnaire	98
14		100
15	Some Need Indicators	102
16		107
17	The Process of Translating Needs into Objectives	125
18	Houle's Major Categories of Educational Design Situations	132
19	Decision Points and Components of an Adult-Educational	133
	Framework	164
20		165
21		167
22		168
23		170
24		179
25		18
26		20
27		210
28		21:
29	End-of-Meeting Evaluation Slip	23
30		24
31	Matching rechinques to besiled behavioral oddomes	24
32	The Cone of Experience	- "

		Page
Appe	ndix F Chapter 5 Exhibits: Policy Statements	
F-1	Corporate Policy Statements	275
F-2	College Mission and Institutional Goal	278
F-3	Training Policy, National Endowment for the Arts	281
F-4	Purposes and Objectives of the Cooperative Extension Service	286
F5	Continuing Education for Personnel in Health Care Institutions	288
F-6	Policy Statement of the University of Wisconsin System	290
Appe	ndix G Chapter 7 Exhibits: Statements of Purposes and Objectives	
G-1	Purposes and Objectives of Public School Continuing Programs	296
G–2	Purposes and Objectives of Continuing Education Programs in Community Colleges and Technical Institutes	298
G-3	Purposes and Objectives of College and University Continuing	
	Education Programs	303
G-4	Purposes and Objectives of Programs In Business and Industry	306
Appe	ndix H Chapter 8 Exhibits: Sample Program Designs	
H–1	UCLA Extension Catalog Center Spread	308
H–2	Concord-Carlisle, Massachusetts, Regional School District,	
	Schedule of Classes by Day	309
H–3 H–4	Day-Hour Schedule, Cambridge Center for Adult Education	310
	Adult Programs in Great Neck, New York	312
Appe	,	
1–1	Letter of Appointment	315
I-2	Faculty Orientation Memo	316
I-3	Teacher's Process Plan	319
I-4	Faculty Institute, University College, Northeastern University	321
1–5 I–6	Process Design for a One-Day Workshop	322
1-0 1-7	Certificate of Completion	323
1–7 1–8	A Personal Career Planning Process Direct Mail Promotion—Adult Education Program	324 326
I-9	Schedule of Special Form Letters	327
I-10	Publicity Schedule	328
u -11	Newspaper Advertising Schedule	329
i–12	Sample Publicity Releases	330
I–13	Request to Faculty for Publicity Pictures	336
I – 14	Sample Catalog Covers	337
l–15	A Sample of Flyers by the University of California, Riverside Extension	339
I–16	Concord-Carlisle Regional School District Adult and Continuing Education Budget	340
I –17	Budget Report, University of Southern California	341
I–18	Cost Analysis Sheet, Great Neck Public Schools	342
I–19	Financial Policies of the Cambridge Center for Adult Education	343
	ndix J Chapter 10 Exhibits: Evaluation Materials	-
J-1	Program Evaluation: For Reality	345
J-2	Student Evaluation Questionnaires	353
J-3	Leader's Evaluation Form	359

		Page
ppendi	x K Chapter 11 Exhibits: Some Tools for Conducting Learning Activity	ties
K-1	Process Rating Sheet for Inquiry Teams	361
K-2	Preliminary Self-Diagnosis for Program Planning Form	362
K-3	Camp Fire Girls: Self-Diagnostic Form	364
K-4	Self-Diagnostic Guide	369
K-5	Worksheet for Stating Learning Objectives	372
K-6	Organic Model	373
K-7	Operational Model	374
K-8	Operational Model	378
K-9	Role of Change Agent Model	379
K-10	Functional Model	380
K-11	Learning Contract Form	381
K-12	Some Guidelines for the Use of Learning Contracts in Field-Based	
	Learning	382
K-13	Learning Contract	386
K-14	The Assumptions and Process Elements of the Pedagogical and Andragogical Models of Learning	390

1 Preparing Yourself to Inquire

Setting a Climate for Inquiry

This book, if it practices what it preaches, should be a good adult-learning experience for you, the reader. Since I believe that the single most effective teaching device available to teachers is the example of their own behavior, I shall do my best to make this book a good example of an adult-learning experience.

But this goal won't be easy to attain, because at its best, an adult-learning experience should be a process of self-directed inquiry, with the resources of the teacher, fellow students, and materials being available to the learners but not imposed on them. The learners should be active participants, discovering for themselves those things they are ready to discover at a particular phase of their personal development. But people typically don't read books in this spirit. They read books as they listen to lectures—to get answers to questions the author thinks are important rather than to explore questions and answers in a spirit of mutual inquiry. This is the problem: most people have been trained to read books rather than to dialogue with them.

So if this book is to serve as a learning experience for you, we must at the outset establish a climate of mutual inquiry. And as we shall see later, I believe that this is the first step in developing any learning experience.

Now what, exactly, is involved in establishing a climate of mutual inquiry in a book? I'm not sure I know. Plato did it by actually writing in the form of dialogues between teachers and students. But this technique seems more appropriate to philosophical inquiry than to the more technological inquiry covered in this book.

Perhaps for this kind of book the most important aspects of the climate are the attitudes of the author and reader. Speaking for myself, my attitude is that of a helper to you, not as your teacher in the traditional sense. I perceive you as coming to this book for help in discovering better ways to perform whatever adult-educational functions you are responsible for at this time and perhaps in the future. For some readers these functions will be different from those of others, and I shall try to resist the temptation to put you all in the same mold. I also perceive you as bringing a variety of experiences, previous training, and points of view about society and education to the reading of this book. I bring my experience, training, and point of view to the writing of it. I shall present my ideas with conviction and enthusiasm, not with the attitude that they are the truth or the best ideas but in the hope that they will provide a framework with which you can compare and test your own ideas. My attitude is that I am sharing my experience, training, and point of view with you rather than imposing them on you.

This set of attitudes on my part sets up some requirements regarding your atti-

tudes, though, if our climate of mutual inquiry is to come off. First and foremost, this book presupposes that you will come to it with an attitude of inquiry rather than one of dependent edification. By this I mean that I am expecting you to look to this book to help you formulate questions about your practices as an adult educator to which you will then seek answers from many sources, including this book, other books, training programs, colleagues, and above all, your own experimentation. An attitude of gentle skepticism would probably also be helpful. I shall feel less inhibited about expressing my ideas, assumptions, and convictions clearly and forcefully if I can rely on you to test them against your experience, to adopt those that make sense to you, and to build on them creatively.

Another aspect of the climate of this mutual inquiry that I think is important for us to agree on is the relatively pioneering nature of our undertaking. Although the education of adults is as old as civilization, and adult education as an identifiable field of study and practice has celebrated its silver anniversary, the notion that there is a distinct and different technology for adult learning is in its very beginning stages of development. Consequently, what we know about how to help adults learn is largely the product of artistic experience, and our theories about the phenomena of adult learning are highly speculative. Even the labels we give these phenomena and the categories we use to organize them (such as the typology of techniques in Chapter 11) are crude and constantly changing. We must await a good deal more research before we can start talking about the scientific foundation of our technology of adult education. But for adventurous souls with a high tolerance for ambiguity, this is the most exciting phase in the evolution of a new discipline. So our climate must be characterized by a willingness to take risk, to experiment, to learn from our mistakes, and to construct theories that we know will have to be modified. People who need pat answers, neat categories, and proved theories will be uncomfortable in the climate required by this book—or, indeed, by the field of adult education as it is now.

How the Inquiry Is Organized

This inquiry is organized into three parts. Part I attempts to bring out into the open certain assumptions about the emerging role and technology of adult education on which the rest of the book is based. Chapter 2 explores the meaning of "modern practice." Chapter 3 presents assumptions about who adult educators really are (including the assumption that there are many more of us than any statistics show), what their mission is as social practitioners, and what their role is becoming and must become in our changing society. Chapter 4 is a highly personal statement of a beginning theory about adult learning for which I have borrowed the label "andragogy" from my European colleagues. I am not sure, of course, that all the assumptions in Part I are right. But they are there to be challenged, tested, and modified through the process of your inquiry. I can testify, though, that they have made a difference in my own practice, have given me the security of knowing what I am doing and why I am doing it, and have brought a sense of consistency to my actions.

Part II constitutes a kind of how-to-do-it manual for applying the principles of andragogy to the organization and administration of comprehensive programs of adult learning. There is one chapter for each phase of the andragogical process: establishing a climate and structure, assessing needs and interests, defining purposes and objectives, constructing a design, operating the program, and evaluating the results. This section is liberally illustrated with examples of materials developed by a variety of institutions, not all of which are equally congruent with andragogical principles—a fact that presents the reader with the opportunity to take a clinical rather than an imitative stance toward the illustrations.

Part III traces the application of the same basic process of adult education to the designing and managing of particular learning activities, in the andragogical spirit of helping adults learn, in contrast to the pedagogical spirit of teaching adults. Chapter 11 carries the full weight of this part of the inquiry.

Several appendices have been added to provide illustrative material that might interfere with the flow of the text if included in the chapters. Because andragogu is a new word to American readers and has such a central place in this book, and because etymologists tend to take a critical stance toward the formation of new linguistic forms. I have included in Appendix A a reproduction of my correspondence with the publishers of Merriam-Webster dictionaries regarding "andragogy."

Where to Start

There are several ways you can go about using this book as a resource for your own self-directed inquiry, with you taking the initiative to get what will be useful to you rather than passively letting it tell you what it assumes you ought to know.

One way is to think of questions you would like to get answers to or problems you would like to find better solutions to. You might find that simply scanning the Table of Contents will give you an overview of the kinds of information the book contains and will stimulate questions or remind you of problems. Then for each question or problem pick a key word, find it (or a synonym) in the Index, and turn to the pages in the book indicated by the Index. For example, you might be curious to know what motivates adults to want to learn. If you look in the Index under "Motivation," "Needs," and "Participation," you will find several places in the book that deal with this question. Or you might be having a problem getting people to come into your program. If you look in the Index under "Program, promotion of" or under "Promotion" you will find where in the book this problem is dealt with.

Another way to use this book is as a resource for improving specific competencies. Turn to Appendix B and you will find a model of competencies for performing the roles of learning facilitator, program developer, and administrator. Instructions are in Appendix B for you to rate each competency in terms of its importance to your career goals as compared with its present level of development. By going through this selfdiagnostic process you will emerge with a profile showing the gaps between where you are now and where you want to be in regard to these competencies. You can select those competencies in which there are substantial gaps, pick out key words in each competency statement, and look them up in the Index. You could, if you wanted to construct a systematic learning plan for yourself, even draft a learning contract as described in Chapter 11.

For Your Continuing Inquiry . . .

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

National Center for Higher Education Management Systems. Adult Learning Activities: A Handbook of Standard Terminology for Classifying and Describing Learning Activities of Adults. National Center for Education Statistics Handbook No. 9. Washington, D.C.: Government Printing Office, 1979.

Ef Joan

Part I

The Emerging Role and Technology of Adult Education

What Is Modern Practice?

In a World of Accelerating Change

As I reflect back on nearly five decades as a worker in the vineyards of adult education, it is clear to me that each decade witnessed more changes in the theoretical framework, organizational structure, personnel, clientele, methods, techniques, and materials of our field than the preceding decade. Adult educators who used the practices in the seventies that they had learned in the sixties were ineffective and archaic. "Modern" is thus a very temporary state. My own assessment is that the half-life of current practices is about a decade—that half of the practices become outdated over the course of ten years. So about half of this book had to be rewritten when I revised the 1970 edition.

One of the reassuring features of this process of change, however, is that the basic concepts and assumptions about adult learners and adult learning that have been flowing through our stream of thought for half a century have remained intact; it is remarkable that the propositions made by Eduard C. Lindeman in 1926 in his The Meaning of Adult Education have been largely supported —and enriched—by experience and research ever since.

What are the main ideas that are influencing-or will influence-adult-education practices in the eighties and nineties? I can observe several in my field of vision.

A New Conception of the Purpose of Education

Perhaps most fundamental of all the current thrusts on our thinking is the reexamination of our notions about the very purpose of education. The dominant conception about the mission of education until recently has been to produce what in the literature is most often called "the educated man." In our era of Women's Lib we would prefer the terminology "the knowledgeable person." The faith has been that if we simply pour enough knowledge into people: 1) they will turn out to be good people, and 2) they will know how to make use of their knowledge. This faith may have been justified, or at least understandable, in an era of relative stability in which knowledge and technology changed very gradually and in an era in which education was considered a right and privilege for essentially an elite leisured class.

But in an era of knowledge explosion, technological revolution, and a social policy of equality of educational opportunity, this definition of the purpose of education and this faith in the power of transmitted knowledge are no longer appropriate. We now know that in the world of the future we must define the mission of education as to

produce competent people—people who are able to apply their knowledge under changing conditions; and we know that the foundational competence all people must have is the competence to engage in lifelong self-directed learning. We now know, also, that the way to produce competent people is to have them acquire their knowledge (and skills, understandings, attitudes, values, and interests) in the context of its application.

Hence the accelerating spread in the seventies and eighties of competency-based education. (I tend to agree with Cyril Houle that a more descriptive label would be "performance-based education"; but it is "competency-based education" that has caught on.) Not only are competency models beginning to replace content-transmission objectives as the basis for organizing curricula, but self-paced individualized learning modules (or learning packages) and learning contracts are replacing course outlines as the modes for structuring learning experiences. This new way of thinking about education has drastic implications for the education of children and youth, but it seems to be especially relevant to a field of practice that has responsibility to help adults live productively in a world of accelerating change.

From a Focus on Teaching to a Focus on Learning

A second thrust in our thinking is a shift in our research and practice away from a focus on teaching to a focus on learning. Until quite recently most educational psychologists (with the exception of Piaget and Bruner) gave their attention almost exclusively to studying the reactions of children to teaching, and schools of education gave their attention primarily to training teachers how to control students' reactions to their teaching. With Piaget's and Bruner's discoveries that children have a natural ability to conceptualize and Tough's finding that adults go through a natural sequence of steps when they undertake to learn something on their own, we began to be interested in finding out more about the natural processes of learning-focusing on what happens inside the learner rather than on what the teacher does. Out of this line of thinking came a new emphasis on education as a process of facilitating self-directed learning and a redefinition of the role of teacher as a facilitator of self-directed learning and a resource to self-directed learners.

Lifelong Learning

A third thrust is the injection into our thinking of the concept of lifelong learning as the organizing principle for all of education. The basic premise underlying this line of thought is that in a world of accelerating change learning must be a lifelong process. Therefore, schooling must be concerned primarily with developing the skills of inquiry, and adult education must be primarily concerned with providing the resources and support for self-directed inquirers.

New Delivery Systems

Influenced strongly by all of these forces is a fourth thrust—a concern for developing new ways to deliver educational services to individuals so that they can go on learning throughout their lives at their convenience in terms of time and place. Among the labels being given to these new delivery systems are "nontraditional study," "external degrees," "multimedia learning systems," "community education," "learning communities," "learning resource centers," "educational brokering agencies," and "learning networks." These labels represent more than just a random series of innovative experiments; they point to a new direction in our thinking about how and where learning takes place. Education is no longer seen as the monopoly of educational institutions and their teachers. We now perceive that resources for learning are everywhere in our environment and that people can get help in their learning from a variety of other people. The modern task of education, therefore, becomes one of finding new ways to link learners with learning resources.

For Your Continuing Inquiry . . .

Regarding Contemporary Change and the Future

- Bennis, Warren G., and Slater, Philip E. The Temporary Society. New York: Harper & Row, 1968.
- Daedalus. Toward the Year 2000. Cambridge, Mass.: Journal of the American Academy of Arts & Sciences, 1967.
- De Chardin, Pierre Teilhard. Future of Man. New York: Harper & Row, 1964.
- Dumazedier, J. Toward a Society of Leisure. New York: The Free Press, 1967.
- Fromm, Erich. The Revolution of Hope: Toward a Humanized Technology. New York: Harper & Row, 1968.
- Fuller, R. Buckminster. Operating Manual for Spaceship Earth. Carbondale: Southern Illinois University Press, 1969.
- Gardner, John. Self-Renewal: The Individual and the Innovative Society. New York: Harper & Row, 1963.
- Harrington, Fred H. The Future of Adult Education. San Francisco: Jossey-Bass, 1977. Michael, Donald N. On Learning to Plan and Planning to Learn: The Social Psychology of Changing Toward Future-Responsive Societal Learning. San Francisco: Jossey-
- Bass, 1973. . The Unprepared Society: Planning for a Precarious Future. New York: Basic
- O'Toole, James. Work, Learning, and the American Future. San Francisco: Jossey-Bass,
- Rubin, Louis (ed.). The Future of Education: Perspectives on Tomorrow's Schooling. Boston: Allyn & Bacon, 1975.
- Sarason, Seymour B. The Creation of Settings and the Future Societies. San Francisco: Jossey-Bass, 1972.
- Schon, Donald A. Beyond the Stable State. New York: W. W. Norton, 1971.
- Toffler, Alvin. Future Shock. New York: Random House, 1970.
- _. Learning for Tomorrow: The Role of the Future in Education. New York: Random House, 1974.

Regarding the Purpose of Education

- Bergevin, Paul. A Philosophy for Adult Education. New York: Seabury Press, 1967. Eble, Kenneth E. A Perfect Education. New York: Macmillan, 1968.
- Gessner, Robert (ed.). The Democratic Man: Selected Writings of Eduard C. Lindeman. Boston: Beacon Press, 1956.

- Illich, Ivan. Deschooling Society. New York: Harper & Row, 1970.
 - . Tools for Conviviality. New York: Harper & Row, 1973.
- Kidd, J. Roby. Relentless Verity: Education for Being-Becoming-Belonging. Syracuse: Publications in Continuing Education, Syracuse University, 1974.
- Lindeman, Eduard C. The Meaning of Adult Education. Montreal: Harvest House, 1961.
- Nash, Paul. Models of Man: Explorations in the Western Educational Tradition. New York: John Wiley & Sons, 1968.
- Nyberg, David (ed.). The Philosophy of Open Education. Boston: Routledge & Kegan Paul. 1975.
- Postman, Neil, and Weingartner, Charles. Teaching as a Subversive Activity. New York: Delacorte Press, 1969.
- Tolley, William P. The Adventure of Learning. Syracuse: Syracuse University Press,
- Whitehead, Alfred N. The Aims of Education and Other Essays. New York: Macmillan, 1959.

Regarding Competency-Based Education

- Davies, Ivor K. Competency-Based Learning: Management, Technology, and Design. New York: McGraw-Hill, 1973.
- Grant, Gerald, et al. On Competence: A Critical Analysis of Competence-Based Reforms in Higher Education. San Francisco: Jossey-Bass, 1979.
- Hall, G. E., and Jones, H. L. Competency-Based Education: A Process for the Improvement of Education. Englewood Cliffs, N.J.: Prentice-Hall, 1975.
- Houston, W. Robert. Exploring Competency Based Education. Berkeley, Ca.: Mc-Cutchan Publishing Co., 1964.
- Pinto, Patrick R., and Walker, James W. A Study of Professional Training and Development Roles and Competencies. Madison, Wis.: American Society for Training and Development, 1978.
- Torshen, Kay P. The Mastery Approach to Competency-Based Education. New York: Academic Press, 1977.
- Woditsch, Gary A. Developing Generic Skills: A Model for Competency-Based General Education. Bowling Green, Ohio: Bowling Green State University, 1977.

Regarding Learning

- Bruner, Jerome S. Toward a Theory of Instruction. Cambridge, Mass.: Harvard University Press, 1966.
- Cross, K. Patricia. Accent on Learning. San Francisco: Jossey-Bass, 1976.
- Furth, Hans G. Piaget for Teachers. Englewood Cliffs, N.J.: Prentice-Hall, 1970.
- Gross, Ronald. The Lifelong Learner. A Guide to Self-Development. New York: Simon & Schuster, 1977.
- Hilgard, Ernest R., and Bower, Gordon H. Theories of Learning. New York: Appleton-Century-Crofts, 1966.
- Houle, Cyril O. Continuing Your Education. New York: McGraw-Hill, 1964.
- The Inquiring Mind. Madison, Wis.: University of Wisconsin Press, 1961.
- Howe, Michael J. A. Adult Learning: Psychological Research and Applications. New York: John Wiley & Sons, 1977.
- Kidd, J. Roby. How Adults Learn. New York: Association Press, 1973.

The Adult Learner: A Neglected Species. Houston, Texas: Gulf Publishing Co., 1978.

Knox, Alan B. Adult Development and Learning. San Francisco: Jossey-Bass, 1977. Loevinger, Jane. Ego Development: Conceptions and Theories. San Francisco: Jossey-Bass, 1976.

Maslow, Abraham. Motivation and Personality. New York: Harper & Row, 1970.

Rogers, Carl R. Freedom to Learn: A View of What Education Might Become. Columbus, Ohio: Charles E. Merrill, 1969.

Silberman, Melvin L.; Allender, Jerome S.; and Yanoff, Jay M. The Psychology of Open Teaching and Learning: An Inquiry Approach. Boston: Little, Brown, 1972.

Tough, Allen. The Adult's Learning Projects. Toronto: Ontario Institute for Studies in Education, 1971.

. Learning Without a Teacher. Toronto: Ontario Institute for Studies in Education, 1967.

Regarding Lifelong Education

- Cropley, A. J. Lifelong Education: A Psychological Analysis. New York: Pergamon Press. 1977.
- Dave, R. H. Lifelong Education and School Curriculum. Mono. No. 1. Hamburg, Germany: UNESCO Institute for Education, 1973.
- (ed.). Reflections on Lifelong Education and the School. Mono. No. 3. Hamburg, Germany: UNESCO Institute for Education, 1975.
- _. Foundations of Lifelong Education. New York: Pergamon Press, 1976.

Draves, William. The Free University: A Model for Lifelong Learning. Chicago: Association Press/Follett, 1980.

Faure, Edgar, et al. Learning to Be: The World of Education Today and Tomorrow. Paris: UNESCO, 1972.

Hesburg, T. M.; Miller, P. A.; and Wharton, C. R., Jr. Patterns for Lifelong Learning. San Francisco: Jossey-Bass, 1973.

Husen, Torsten. The Learning Society. New York: Harper & Row, 1974.

Jessup, Frank W. (ed.). Lifelong Learning: A Symposium on Continuing Education. New York: Pergamon Press, 1969.

Lengrad, Paul. An Introduction to Lifelong Learning. London: Croom Helm, 1975. Ohliger, John, and McCarthy, Colleen. Lifelong Learning or Lifelong Schooling? Syracuse, N.Y.: Syracuse University Press, 1971.

Peterson, Richard, et al. Lifelong Learning in America. San Francisco: Jossey-Bass, 1979.

Regarding New Delivery Systems

- Bailey, S. K., and Macy, F. U. Regional Learning Services: A Design for Educational Flexibility. Syracuse, N.Y.: Policy Institute of Syracuse University Research Corporation, 1973.
- Basking, Samuel (ed.). Organizing Nontraditional Study. New Directions for Institutional Research, No. 4. San Francisco: Jossey-Bass, 1974.
- Berte, Neal R. Individualizing Education by Learning Contracts. New Directions for Higher Education, No. 10. San Francisco: Jossey-Bass, 1975.

- Chickering, Arthur W. An Introduction to Experiential Learning. New Rochelle, N.Y.: Change Magazine Press, 1977.
- Commission on Non-Traditional Study. Diversity by Design. San Francisco: Iossey-Bass, 1973.
- Cross, K. Patricia. The Missing Link: Connecting Adult Learners to Learning Resources. Princeton, N.J.: College Board Publications, 1979.
- Cross, K. Patricia, and Valley, John R. (eds.). Planning Non-Traditional Programs. San Francisco: Jossey-Bass, 1974.
- Gould, Samuel B., and Cross, K. Patricia. Explorations in Non-Traditional Study. San Francisco: Jossey-Bass, 1972.
- Harman, David (ed.). Expanding Recurrent and Nonformal Education. New Directions for Higher Education, No. 14. San Francisco: Jossey-Bass, 1976.
- Hartnett, R. T., et al. The British Open University in the United States. Princeton, N.J.: Educational Testing Service, 1974.
- Heffernan, James M.; Macy, Francis U.; and Vickers, Donn F. Educational Brokering: A New Service for Adult Learners. Syracuse, N.Y.: National Center for Educational Brokering, 1976.
- Houle, Cyril O. The External Degree. San Francisco: Jossey-Bass, 1973.
- Keeton, Morris T., and Tate, Pamela J. A Boom in Experiential Learning. New Directions for Experiential Learning, No. 1. San Francisco: Jossey-Bass, 1978.
- Keeton, Morris, et al. Experiential Learning: Rationale, Characteristics, and Assessment. San Francisco: Jossey-Bass, 1976.
- Miller, Ronald, et al. Planning for a Statewide Educational Information Network. Princeton, N.J.: College Board Publications, 1978.
- Milton, Ohmer. Alternatives to the Traditional. San Francisco: Jossey-Bass, 1973.
- Perry, Walter. The Open University. San Francisco: Jossey-Bass, 1977.
- Rust, Val D. Alternatives in Education: Historical and Theoretical Perspectives. Beverly Hills, Cal.: Sage Publications, 1977.
- Sarason, Seymour B., et al. Human Services and Resource Networks. San Francisco: Jossey-Bass, 1977.
- Sarason, Seymour B., and Lorentz, Elizabeth. The Challenge of the Resource Exchange Network. San Francisco: Jossey-Bass, 1979.

What Is the Role and Mission of the Adult Educator?

What Is an Adult?

I am often asked, especially by teachers in high schools, community colleges, universities, and professional schools, "How do you define 'adult' when you talk about adult education?"

There are, of course, many definitions in current usage. There is the dictionary definition: "fully developed and mature: GROWN-UP" (Webster's New Collegiate Dictionary, 1973, p. 17). But this isn't very helpful in the absence of definitions of "fully developed," "mature," and "grown-up." Then there is the physiological definition: achievement of the ability to reproduce—which varies from era to era, culture to culture, and individual to individual (and probably from sex to sex). And there are various legal definitions-voting age, driving age, drinking age, juvenile delinquent versus adult criminal age, age of consent, and the like. But there is a wide variation among governments and eras in these definitions, as well.

From the point of view of determining what individuals should be treated as adults educationally, it seems to me the two critical questions that should be asked are: 1) who behaves as an adult—who performs adult roles? (a social definition) and also 2) whose self-concept is that of an adult? (a psychological definition). Both questions can probably be answered only as a matter of degree. Applying the first criterion, a person is adult to the extent that that individual is performing social roles typically exigned by our culture to those it considers to be adults. The roles of worker spouse, parent, responsible citizen soldier and the like. Applying the second criterion, a-person is adult to the extent that that individual perceives herself or himself to be essentially responsible for her or his own life.

We have a holdover from a long tradition, however, that complicates this picture, which is that historically the role of student has been defined as a role appropriate for childhood and youth. Accordingly, many of the policies, rules and regulations, entrance requirements, financial arrangements, physical facilities, curricula, instructional strategies, and graduation requirements of our educational institutions are geared to the characteristics of children and youth. As adults have returned to academia in increasing numbers to study part-time while working or homemaking full-time, they have experienced culture shock in being treated as children.

Furthermore, even children and youth are likely to be adult to some degree. A high school student who is working part-time or taking care of the household of an ill parent or editing a school newspaper is performing adult roles to a degree. And many

youth are taking a high degree of responsibility for their own lives outside of school and resent being given little responsibility for their lives in school.

What Is Adult Education?

People have little difficulty getting a clear picture of what elementary education is (it is what goes on in the red brick building with little children) or what secondary education is (it is what goes on with adolescents in those bigger buildings near the football stadium) or what higher education is (it is what goes on in those enormous college and university complexes, with youth). But adult education is much harder to picture. It takes place in all sorts of buildings and even in no buildings at all, involves all sorts of people, has no set curriculum, and often isn't even labeled "adult education," but such things as "staff development," "manpower development," "developmental education," "inservice education," "continuing education," "lifelong education," and many others.

One problem contributing to the confusion is that the term "adult education" is used with at least three different meanings. In its broadest sense, the term describes a process—the process of adults learning. In this sense it encompasses practically all experiences of mature men and women by which they acquire new knowledge, understanding, skills, attitudes, interests, or values. It is a process that is used by adults for their self-development, both alone and with others, and it is used by institutions of all kinds for the growth and development of their employees, members, and clients. It is an educational process that is often used in combination with production processes, political processes, or service processes.

In its more technical meaning, "adult education" describes a set of organized activities carried on by a wide variety of institutions for the accomplishment of specific educational objectives. In this sense it encompasses all the organized classes, study groups, lecture series, planned reading programs, guided discussions, conferences, institutes, workshops, and correspondence courses in which American adults engage.

A third meaning combines all these processes and activities into the idea of a movement or field of social practice. In this sense "adult education" brings together into a discrete social system all the individuals, institutions, and associations concerned with the education of adults and perceives them as working toward the common goals of improving the methods and materials of adult learning, extending the opportunities for adults to learn, and advancing the general level of our culture.

Another problem contributing to the confusion is that adult education is such a relatively new field of social practice that it is still in the process of forming an identity that is separate from youth education, social work, counseling, and related fields of social practice. Although the education of adults has been a cultural function since ancient times, it was not until the founding of the American Association for Adult Education in 1926 that adult education was conceived of as a delineated field in this country. Since then the field has been growing and changing so dynamically that it has been almost impossible to keep up with its statistics or its character. Indeed, institutionally sponsored adult education is the fastest growing aspect of our national educational enterprise in the last quarter of this century. And it is growing not only horizontally-reaching a greater and greater proportion of our adult population, but vertically-taking over institutions that heretofore served only youth. In many colleges and universities and in most community colleges, over half of the enrollments are by adults who are working full-time and studying part-time, and those institutions are becoming essentially adult-educational institutions.

Who is an Adult Educator?

Many more people are adult educators than know they are. If "adult educator" is defined as one who has some responsibility for helping adults to learn, look at how many people in this country are entitled to bear this hallmark:

- -hundreds of thousands of program chairmen, education chairmen, and discussion leaders in such voluntary associations as women's clubs, men's clubs, service organizations, religious laymen's organizations, PTA's, professional societies, civic clubs, labor unions, trade associations, farmers' organizations, and the like:
- -tens of thousands of executives, training officers, supervisors, and foremen in business and industry, government, and social agencies;
- -thousands of teachers, administrators, and group leaders in such educational institutions as public schools, colleges and universities, libraries, and commercial schools;
- -hundreds of program directors, writers, and editors in the educational aspects of such mass media as newspapers, magazines, radio, and television;
- -a few score full-time, professional adult educators who have been trained specifically for this vocation and who are making their permanent career in it.

But relatively few of this vast corps are conscious that they are performing the increasingly precisely defined role of "adult educator." Few of them are aware that there is a growing body of knowledge and techniques that they can learn to help them perform this role better. The reasons for this condition are not hard to surmise. In the case of the myriad of volunteer leaders, the assignment is to do a specific job in a finite period of time: "to serve as the program chairman of the XYZ club for one year." In the case of the executives and supervisors the assignment tends to be in terms of particular processes in particular companies: "sales manager, Parts Division." In the case of teachers the assignment tends to be in terms of subject matter: "instructor of mathematics." The fact is, though, that to the extent that all of these assignments involve helping other adults to become more competent, they have a common element—what we might call an adult-education component. And to this extent all the people carrying these kinds of assignments are partly adult educators.

What Does an Adult Educator Do?

What are the functions an adult educator performs? To answer this question it is probably necessary to distinguish among several levels of the adult-education role.

At the firing-line level are the teachers, group leaders, and supervisors who work directly with adult learners on a face-to-face basis. Among their functions are: 1) helping the learners diagnose their needs for particular learnings within the scope of the given situation (the diagnostic function); 2) planning with the learners a sequence of experiences that will produce the desired learnings (the planning function); 3) creating conditions that will cause the learners to want to learn (the motivational function); 4) selecting the most effective methods and techniques for producing the desired learnings (the methodological function); 5) providing the human and material resources

necessary to produce the desired learnings (the resource function); 6) helping the learners measure the outcomes of the learning experiences (the evaluative function).

At the program-director level are the committee chairmen, training directors, evening-school principals, extension deans, and other administrators who are responsible for planning and operating broad programs consisting of a variety of adult-educational activities. Their functions include: 1) assessing the individual, institutional, and societal needs for adult learning relevant to their organizational settings (the diagnostic function); 2) establishing and managing an organizational structure for the effective development and operation of an adult-education program (the organizational function); 3) formulating objectives to meet the assessed needs and designing a program of activities to achieve these objectives (the planning function); 4) instituting and supervising those procedures required for the effective operation of a program, including recruiting and training leaders and teachers, managing facilities and administrative processes, recruiting students, financing, and interpreting (the administrative function); 5) assessing the effectiveness of the program (the evaluative function).

At the professional-leadership level are the small group of career adult educators who are responsible for such functions as developing new knowledge, preparing materials, inventing new techniques, providing leadership for coordinative organizations. training adult-education workers, and generally promoting the further development of the field of adult education.

What Is the Adult Educator's Mission?

At first sight the mission of the adult educator seems simple: to operate successful educational activities for mature men and women, success being defined in terms of the numbers and enthusiasm of the participants. But a reading of the history of the adult-education movement in this country indicates that the mission of adult educators is much greater than this. In fact, this mission can best be described in relation to satisfying three distinct sets of needs and goals: 1) the needs and goals of individuals, 2) the needs and goals of institutions, and 3) the needs and goals of society.

The Needs and Goals of Individuals

The primary and immediate mission of every adult educator is to help individuals satisfy their needs and achieve their goals. Usually if an individual is asked what these are, he or she will respond in terms of the acquisition of some specific competence, such as "being able to speak in public" or "knowing mathematics." Or the person might go one level of abstraction higher to such objectives as "being able to make more money" or "being able to get along with people better." These, to be sure, are important incentives to learning, but in this book they are treated as "interests" rather than "needs," a distinction that will be discussed more fully in a later chapter. Interests are relevant to the adult educator's technology, but in relation to this mission we are talking about something different and more fundamental-indeed, about something of which individuals are less conscious than they are of their interests. We are talking about the more ultimate needs and goals of human fulfillment.

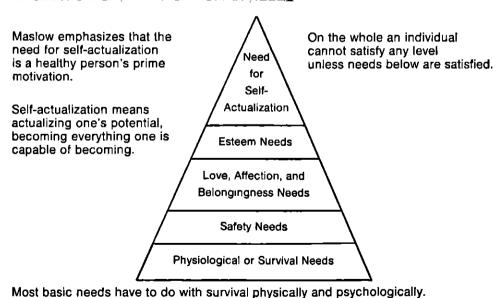
One such need can be stated negatively as the prevention of obsolescence. This need arises from the fact that most adults alive today were educated in their youth according to the doctrine that learning is primarily a function of youth and that the purpose of education is to supply individuals in their youth with all the knowledge and skills they will require to live adequately for the rest of their lives. But the rapidly accelerating pace of change in our society has proved this doctrine to be no longer valid. Facts learned in youth have become insufficient and in many instances actually untrue; and skills learned in youth have become outmoded by new technologies. Consequently, adult years become years of creeping obsolescence in work, in play, in understanding of self, and in understanding of the world.

The problem is that education is not yet perceived as a lifelong process, so that we are still taught in our youth only what we ought to know then and not how to keep finding out. One mission of the adult educator, then, can be stated positively as helping individuals to develop the attitude that learning is a lifelong process and to acquire the skills of self-directed learning. In this sense, one of the tests of everything the adult educator does-whether it be to conduct a course in hatmaking, a human-relations workshop, or a staff meeting—is the extent to which the participants leave a given experience with heightened curiosity and with increased ability to carry on their own learning,1

Another ultimate need of individuals is to achieve complete self-identity through the development of their full potentialities. Increasing evidence is appearing in the psychological literature that complete self-development is a universal human need, and that at least a feeling of movement in this direction is a condition of mental health.² A. H. Maslow, for example, arranges human needs in the hierarchical order shown in Exhibit 1.

Exhibit 1

MASLOW'S HIERARCHY OF HUMAN NEEDS



He then proposes the following principles of operation for these needs: 1) gratification for the needs on each level, starting with the lowest, frees a person for higher levels of gratification; 2) those persons in whom a need has been satisfied are best equipped to deal with deprivations of that need in the future; 3) healthy persons are those whose basic needs have been met so that they are principally motivated by their needs to actualize their highest potentialities.3 This concept implies that the adult educator's mission is to help individuals learn what is required for gratification of their needs at whatever level they are struggling. If they are hungry, we must help them learn what will get them food; if they are well-fed, safe, loved, and esteemed, we must help them explore undeveloped capacities and become their full selves.

A third ultimate need of individuals is to mature. Harry Overstreet equated maturity with "linkages with life" as follows:

A mature person is not one who has come to a certain level of achievement and stopped there. He is rather a maturing person-one whose linkages with life are constantly becoming stronger and richer because his attitudes are such as to encourage their growth.... A mature person, for example, is not one who knows a large number of facts. Rather, he is one whose mental habits are such that he grows in knowledge and the wise use of it.4

The idea of maturity as a goal of education must be defined more specifically than this, however, if it is to serve as a guide to continuous learning. Out of the psychological literature comes the notion that there are several dimensions of the maturing process, each with its own unique cycle of development. If the really critical dimensions of the maturing process could be identified, then adult educators would have some reliable yardsticks against which to measure the accomplishment of their mission. As a starting point, the fifteen dimensions in Exhibit 2 are nominated for consideration. (Note that these dimensions describe directions of growth, not absolute states to be achieved.)

Exhibit 2

DIMENSIONS OF MATURATION

From	_		Toward	
		Dependence		
	2.	Passivity		- Activity
		Subjectivity		. Objectivity
	4.	Ignorance		Enlightenment
		Small abilities		
		Few responsibilities		
		Narrow interests		
	₿.	Selfishness		. Altruism
	9.	Self-rejection		. Self-acceptance
1		Amorphous self-identity _		
		Focus on particulars		
		Superficial concerns		. Deep concerns
1	13.	Imitation		
		Need for certainty		
			-	_

³A H Maslow, Motivation and Personality (New York, Harper and Brothers, 2nd ed., 1970) "Harry A. Overstreet, The Malure Mind (New York, W. W. Norton, 1949), p. 43.

¹For an elaboration of this idea, see Cyril O. Houle, The Inquiring Mind (Madison, Wis.: University of Wisconsin Press, 1961).

²See Gordon Allport, Becoming Basic Considerations for a Basic Psychology of Personality (New Haven: Yale University Press, 1955); Erik H. Erikson, Childhood and Society (New York: W. W. Norton, 1950); Kurt Lewin, A Dynamic Theory of Personality (New York: McGraw-Hill, 1955); Gardner Murphy, Human Potentialities (New York: Basic Books, 1958); and Carl R. Rogers, On Becoming a Person (Boston: Houghton Mifflin Co.,

Perhaps the meaning of this conception of dimensions of maturing can be made clearer by brief elaborations on them.

- 1. From dependence toward autonomy. All human beings enter this world in a completely dependent condition; their every need must be fulfilled by someone else. One of the central quests of their lives is for increasing self-direction (although the opposite of dependence in our complicated world may not be independence so much as selfdirecting interdependence). The fact is that every experience we have in life tends to affect our movement from dependence toward autonomy; and to the extent that a given experience helps us to move away from dependence it can be said to be educational, while to the extent that it tends to keep us dependent or make us more dependent, it can be said to be antieducational. Think of the effects on this dimension of maturing of the traditional conceptions of the roles of teacher, parent, minister, boss, and leader, which tend to put the individual in an essentially dependent role.
- 2. From passivity toward activity. Throughout childhood individuals who are maturing become increasingly active in exploring the world about them and tend to engage in an expanding number of its activities. In adulthood the emphasis is likely to shift from quantitative activity to qualitative activity, but whether on a qualitative basis or a quantitative basis, maturing individuals tend to be participating individuals. And the way they are taught to participate in school and in other educative experienceswhether they are put in the role of passive recipients of knowledge or in that of active inquirers after knowledge-will greatly affect the direction and speed of their movement in this dimension of growth.
- 3. From subjectivity toward objectivity. It is a universal characteristic of infancy that the world revolves around "me," takes on its meaning from "my" perception of it, and is subject to "my" commands. One of the most difficult adjustments people have to make in life is to move themselves out of the center of the universe and to discover where they really fit into it. The extent to which each experience in life helps them to look at themselves realistically, and to maintain self-respect in the process, is certainly one of the tests of its educational quality.
- 4. From ignorance toward enlightenment. It is in this area of maturing that schooling has traditionally placed its emphasis. But are we clear about what "enlightenment" really is? Certainly it can't be knowing everything—the volume of modern knowledge is too vast for any individual to encompass it. In his Some Things Worth Knowing, Stuart Chase poses this as one of the most pressing problems our civilization must solve, and he suggests one possible line of attack. He proposes that every individual should be perceived as being both a specialist and a generalist. As specialists, people need to master deeply the knowledge and skills of their vocation. But as generalists they need to master and keep up to date on a core of knowledge from all those specialities that bear on the practical problems of life—thus suggesting a kind of "core curriculum" for adult education, which would consist of a distillation of the essential elements from every discipline that all citizens should know. Only through such a process as this, Chase argues, can true enlightenment be achieved.
- 5. From small abilities toward large abilities. There is a tendency in human nature, once we have learned to do something well, to take pride in that ability and to rest on the laurels it wins us. Since each newly developed ability tends to be learned in its simplest form, this tendency can result in individuals becoming frozen into the lowest level of their potential performance. A skillful facilitator of learning helps each individual to glimpse higher possible levels of performance and to develop continually larger abilities.

- 6. From few responsibilities toward many responsibilities. Another curious tendency in human nature, especially among parents, teachers, and supervisors, is to underestimate the amount of responsibility a child, student, and subordinate can carry. And so the maturation process is frequently retarded by the parent retaining responsibility the child is prepared to take over, the teacher making decisions the students are ready to make, and the supervisor carrying functions the subordinates are ready to have delegated to them.
- 7. From narrow interests toward broad interests. The child's world starts with a field of interests that is bounded by the crib, and one significant sign of a person's continuing maturation is the extension of this field in ever-widening circles for the rest of life. Anything that causes an individual's field of interests to become fixated within a given circle or to recede to smaller circles is interfering with an important dimension of maturation. This dimension has special relevance to work with older people, in which the myth is widely held that it is natural for interests to diminish with age. Gerontologists who have made the opposite assumption—that older people are able to develop new interests and are healthier if they do—have had spectacular results.
- 8. From selfishness toward altruism. We come into the world in a state of total selfcenteredness, and one of our central tasks for the rest of our lives is to become increasingly able to care about others. Conditions that induce a spirit of rivalry toward others rather than helpfulness toward others—such as the competition for grades promoted by traditional schooling—interfere with maturation in this dimension. Incidentally, there are some psychiatrists (e.g., Franz Alexander) who hold that altruism is the single best criterion of mental health.
- 9. From self-rejection toward self-acceptance. While children's first impression of themselves is probably that they are kings or queens of the mountain, they soon learn that much of their natural behavior (making noise, getting into things, not eating correctly, etc.) is "bad." And so their attitude quickly changes from one of self-adulation to one of self-rejection. But mature persons are those who accept themselves as persons of worth (which, incidentally, is a prerequisite to being able to accept others as having worth). And so the extent to which subsequent life experiences help the individual move from self-rejection toward self-acceptance will largely determine whether an individual matures in this dimension or not.
- 10. From amorphous self-identity toward integrated self-identity. Erik Erikson has provided the deepest insights concerning this dimension of maturation, mapping out its course through the "eight ages of man," as follows:
 - a) Oral-sensory, in which the basic issue is trust vs. mistrust.
 - b) Muscular-anal, in which the basic issue is autonomy vs. shame.
 - c) Locomotion-genital, in which the basic issue is initiative vs. guilt.
 - d) Latency, in which the basic issue is industry vs. inferiority.
 - e) Puberty and adolescence, in which the basic issue is identity vs. role confusion.
 - f) Young adulthood, in which the basic issue is intimacy vs. isolation.
 - g) Adulthood, in which the basic issue is generativity vs. stagnation.
 - h) Maturity, in which the basic issue is ego-integrity vs. despair.5

Although no stage is completely fulfilled at any point in life-and we continue to actualize each stage further throughout life—if development in a given stage is mostly

⁵Erik H. Erikson, Childhood and Society (New York: W. W. Norton, 1950), p. 273. See also his identity and the Life Cycle, International Universities Press, Psychological Issues, Vol. 1, No. 1 (1959).

frustrated, an individual is likely to remain fixated at that stage. Erikson's concepts of the process of identity formation are far too complex and provocative to be described in this book. But perhaps this taste is sufficient to indicate that the dimension of maturation from "I don't know who I am" toward "I know clearly who I am" is a delicate and crucial one.

- 11. From focus on particulars toward focus on principles. To a child's mind each object is unique and each event is unconnected with any other. The discovery of principles enabling a person to group objects and connect events is the essence of the process of inquiry. One of the tragic aspects of traditional pedagogy is that it has so often imposed principles on inquiring minds and has therefore denied them the opportunity to mature in the ability to discover principles.
- 12. From superficial concerns toward deep concerns. The young child's world is an existential world; all that matters is the enjoyment of pleasure and the avoidance of pain at the moment. One dimension of maturing consists of gaining perspective on what mattered more deeply in our past and is likely to matter more deeply in our future—and, having accomplished this feat, gaining perspective on what matters in the past and future of others. Too often this process is retarded by society's trying to impose its deep concerns on us before we have discovered our own.
- 13. From imitation toward originality. The child's first technique of learning and adapting is that of imitation. The adult world has long tended to accept this method of learning as not only natural but best, and has geared much of its educational system to produce conformity through imitation. The consequence has been the retardation of generations of human beings in their maturation toward the more self-fulfilling end of this dimension, originality.
- 14. From the need for certainty toward tolerance for ambiguity. The basic insecurity of the child's world imposes a deep need for certainty. Only as our experiences in life provide us with an increasing sense of security and self-confidence will we be able to move in the direction of a mature tolerance for ambiguity-a prerequisite for survival in a world of ambiguity.
- 15. From impulsiveness toward rationality. Traditionally, the naturally impulsive behaviors of children have been controlled through systems of reward and punishmentwith emphasis on the latter. Too often the consequence of this policy is reactions of irrationality—rebellion, withdrawal, and fantasy. True maturing toward rationality requires self-understanding and self-control of one's impulses.

Perhaps there are other dimensions of the maturing process that ought to be added or that ought to replace some of these dimensions, and certainly, until further research is done on this important aspect of human development, we shall have to regard any such formulation as highly tentative. Meantime, the general notion that one of the missions of the adult educator is to assist individuals to continue a maturing process throughout life provides some useful guidelines for the development of a sequential, continuous, and integrated program of lifelong learning.

A few implications of this multidimensional theory of maturation can be suggested to illustrate this point:

1) Every educational activity provides an opportunity for growth by each individual in several dimensions. For example, although focusing on stimulating growth toward increased enlightenment, a course on world affairs can be planned so as to stimulate growth toward greater independence of thought, broader interests, greater objectivity, and tolerance for ambiguity.

- 2) The dimensions of maturation tend to be interdependent, so that changes in one dimension have an effect on other dimensions. For example, considerable growth toward enlightenment might be produced by methods (such as those used in the traditional lecture course) which cause the student to become increasingly dependent on the teacher. Although a choice may sometimes have to be made between such values, a truly artistic teacher will try to induce positive growth in all dimensions.
- 3) All human beings move on a scale from zero to infinity in each dimension throughout life, and tend to incorporate learning from a given experience in proportion to its relevance to their stage of development on the scale at that moment. For example, in a group of fifteen adult students, the individuals would be ready to take fifteen different degrees of responsibility for their own learning, and if the learning experience is to be optimally useful, provision must be made for this range of differences.

No doubt other ultimate needs could be identified, but these serve to illustrate the point that the adult educator's mission in helping individuals is far more complex and significant than it might appear on the surface. Perhaps the classic summary of individual needs and goals that define the adult educators' mission and challenge their art is contained in these words of Eduard Lindeman:

In what areas do most people appear to find life's meaning? We have only one pragmatic guide: meaning must reside in the things for which people strive, the goals which they set for themselves, their wants, needs, desires, and wishes. Even here our criterion is applicable only to those whose lives are already dedicated to aspirations and ambitions which belong to the higher levels of human achievement. . . . Viewed from the standpoint of adult education, such personalities seem to want among other things, intelligence, power, self-expression, freedom, creativity, appreciation, enjoyment, fellowship. Or, stated in terms of the Greek ideal, they are searchers after the good life. They want to count for something; they want their experiences to be vivid and meaningful; they want their talents to be utilized; they want to know beauty and joy; and they want all of these realizations of their total personalities to be shared in communities of fellowship. Briefly they want to improve themselves; this is their realistic and primary aim. But they want also to change the social order so that vital personalities will be creating a new environment in which their aspirations may be properly expressed.6

The Needs and Goals of Institutions

Much adult education takes place under the auspices of institutions, and adult educators are employed by institutions. These institutions, too, have needs and goals that help to define the adult educator's mission. At least three sets of these needs and goals can be served, and in some ways served best, by adult-educational means:

1. The development of individuals in the institution's constituency in the direction of the institution's goals for them. Most institutions with adults in their constituencies have some sort of image of the kind of people they want to influence their members to become. For example, labor unions want their members to understand and support the cause of unionism, appreciate its historical role, participate effectively in the activities of their union, understand their legal rights and obligations, exert influence on public policy, be wise consumers, and enjoy the cultural life of their communities. Religious institutions have various ways of describing their goals for their members, but they

⁶Eduard C. Lindeman, The Meaning of Adult Education (Montreal: Harvest House, 1961), pp. 13-14. By

tend to converge on a conception of "committed" members who believe and live according to the creed propounded by the institution. A public school's image for its adult constituents is likely to be flavored by such symbols as "responsible citizen," "efficient worker," or "good parent"; that of a university, by "intellectual leader" or "professional leader"; that of a trade association, by "industrial statesman"; and so on. Institutional leaders expect adult-educational programs to help to produce these kinds of qualities in their constituents, and they evaluate the programs at least partly on the basis of their effectiveness in doing so.

Even in institutions whose constituents are primarily children and youth, adult education is perceived as an instrument for helping them improve the quality of education of the young. Public schools, for example, are devoting increasing energy to improving the educative quality of the home environments of their children through courses, study groups, and lecture series on child development and home and family living for parents, parental counseling, and extracurricular activities for parents and children together. Many voluntary youth agencies, such as the Boy Scouts, Girl Scouts, YMCA and YWCA, Sunday schools, and 4-H clubs, perceive the training of volunteer adult leaders as the critical element in their accomplishing their character-building goals with youth.

Not infrequently the needs and interests of individuals come into conflict with the needs and interests of their institutions, as when a member develops an independence of thought that contradicts the established doctrine of the institution. In such cases the adult educator may have to make a choice as to which mission to serve: helping individuals to grow or helping the institution to survive. Increasingly, however, adult educators are resolving such conflicts between education and indoctrination by taking the institution as their client and helping its leaders to engage in a process of self-study, as a result of which the institution's educational goals are often broadened to provide wider areas of freedom for individual growth.

2. The improvement of institutional operation. A growing number of institutions especially in industry and government—have come to recognize that one of the most efficient means for increasing the effectiveness of their operation is the continuing education of their employees. This recognition has reached such a point in industry, in fact, as to move two serious students of the phenomenon to describe the educational activities of American industry as a third great educational force on a par with our public school and higher-education systems.⁷

What industry has discovered is equally applicable to every other institutionnamely, that adult-education processes are basic tools of organizational growth and development. These processes are now used routinely for the orientation of new employees, for on-the-job training in technical skills, for the preparation of personnel for advancement, for executive development, for supervisory training, for the improvement of interpersonal relations within the organization, and for the improvement of the institution's public relations. Increasingly these same processes are coming to be used for the planning and guiding of long-run institutional change.

One of the missions of adult educators, then, is to help institutions become increasingly effective as institutions. In this sense, institutions are their clients as well as individuals, and part of their art is helping various target populations within institutions—governing boards, administrators, supervisors, departmental personnel, members, and the like-to learn new behaviors that will produce stronger institutions. In carrying out this mission adult educators may take the role of direct instructor or trainer, but more frequently their role will be that of planner, consultant, or "change agent"-a specialized role to which modern adult-education literature is devoting increasing attention.

3. The development of public understanding and involvement. An institution can build good public relations through either a Madison Avenue type of sales approach or through involving its public in the serious study of public needs, problems, and goals. Although each approach has its place, the adult-educational approach tends to produce deeper and more lasting understanding and caring.

In the case of public schools, for example, it is ironic that although one of the first contributions of adult education was the education of the public about childhood education,8 this potentially invaluable function was largely neglected until the past few years. During the years following World War II, when expanding enrollments and rising costs were causing school budgets to be scrutinized critically by the various watchdogs of the public treasuries, school superintendents in a number of cities found that their most effective supporters came from among the adult citizens who had participated in their evening programs for adults. But the Seattle Public Schools proved in a dramatic experiment in 1957-58 that adult education processes were even more effective in mobilizing public support when used directly for this purpose. After a series of setbacks in school-levy elections in the early 1950s, in spite of all-out publicity campaigns, a Citizens School Levy Committee in 1957 organized a citywide program of citizen conferences and study groups in which information about the needs and program of the schools was presented and discussed. When the school levy was again presented to the people in March, 1958, it was approved—a result credited largely to the educational approach taken.9

The periodical literature of adult education contains other reports of the use of adult-education processes to produce public understanding of such diverse institutions as the armed services (exhibits, documentary films, guided tours), universities (public lectures, cultural events, citizen advisory councils), the March of Dimes (which preceded its nationwide campaign of Salk vaccination with community-by-community educational programs), and the United States National Commission for UNESCO (which sponsored nationwide citizen discussion programs). In general, these programs succeeded in producing real public understanding to the extent that they were informative rather than indoctrinational and to the extent that they involved citizens in meaningful participation in the work of the institution.

It is a legitimate mission of adult educators to use their art to bring about a better understanding of their institutions, but theirs is a mission requiring the highest ethical commitment, for the line of demarcation between education and propaganda is a fine one.

See Donald Nylen and Dale Coss, "We Heard a Knock at the Door," Adult Leadership, Vol. vii (September,

⁷Harold F. Clark and Harold S. Sloan, Classroom in the Factories (Rutherford, N.J.: Fairleigh Dickinson University, 1958).

The lyceum movement, which flourished in the 1830s, had as its objective "the advancement of education, especially in the common schools" It succeeded in mobilizing public opinion in favor of tax-supported public schools See Carl Bode, The American Lyceum (New York: Oxford University Press, 1956).

The Needs and Goals of Society

Every society has used adult-education processes to continue the development of the kind of citizens visualized to be required for the maintenance and progress of that society; and the perception of the kind of adult required is different for each society. For example, the perception in Soviet society is quite different from the perception in Western society; the perception in urban society is different from that in rural society; the perception in Jewish society is different in some respects from the perception in Catholic or Protestant societies; the perception in professional society is different from that in industrial society; and so on. The challenging fact is that adult educators are the agents of several different societies whose needs they are expected to serve simultaneously. And one of the measures of their artistry is the extent to which they are able to understand and serve these differing needs.

But there are more general needs of American society, perhaps even of world society, that define an even broader mission for the adult educator.

A society whose central dynamic change—economic and technological, political, social, cultural, and even theological—requires a citizenry that is able to change.10

A society whose elements—geographic, economic, intellectual—are becoming increasingly complex and interdependent requires a citizenry with broader knowledge, less parochial values, more tolerant attitudes, and greater skill in human relations than past societies demanded.

A society in which machinery is doing more and more of the work of man requires a citizenry capable of performing increasingly complicated occupational roles and capable of creatively using more leisure time.

A society in which gaps between people (youth vs. adult, black vs. white, East vs. West, rich vs. poor) are becoming better defined and less tolerable requires a citizenry that is liberated from traditional prejudices and is able to establish open, empathic, and collaborative relationships with people of all sorts.

A strong case can be made for the proposition that the greatest danger to the survival of civilization today is not atomic warfare, not environmental pollution, not the population explosion, not the depletion of natural resources, and not any of the other contemporary crises, but the underlying cause of them all—the accelerating obsolescence of man. The evidence is mounting that man's ability to cope with a changing world is lagging farther and farther behind the changing world. The only hope now seems to be a crash program to retool the present generation of adults with the competencies required to function adequately in a condition of perpetual change. This is the deep need—the awesome challenge—presented to the adult educator by modern society.

The Changing and Challenging Role of Adult Educators

As the mission of adult educators has become more complex and more significant, the character of their role has been gradually changing. The demands on them to prepare more carefully for performing the role have increased proportionately,

For many years it was assumed that the principles and techniques used in the education of children would be equally effective in helping adults learn. People were therefore recruited to direct institutional programs of adult education on the basis of having had experience in directing programs of youth education; teachers of children were recruited as teachers of adults; and it was taken for granted that any reasonably well-educated person would know how to do a good job as program chairman or study-group leader of a voluntary organization.

But as knowledge accumulated both from experience and from research in adult education and related social sciences, it became increasingly apparent that adults were more than just grown-up children, that they possessed certain unique characteristics as learners that required different principles and techniques from those employed with children. And with this new knowledge, which the rest of this book is concerned with describing, came the insight that good adult educators don't just happen; they become good by learning these principles and techniques. As a result, the role of adult educator has moved gradually away from that of willing amateur toward that of trained specialist, and opportunities have multiplied for the requisite training to be obtained at all levels: for the firing-line leaders and teachers, through short-term institutes and literature; for program directors, through summer workshops, courses, and literature; and for professional leaders, through master's and doctoral programs in graduate schools of education.

Another way in which the role of adult educators has been changing is in its basic theoretical conception.

Initially, adult educators were conceived loosely as "those who educate adults," in the sense of transmitting knowledge to them, telling them what they ought to know, or at best enticing them to learn. Their clientele was perceived as consisting mostly of underprivileged adults, and their function was perceived as being primarily remedial helping individuals catch up to the average. In recent years, however, adult educators are referred to increasingly in the literature as "change agents" and as performing "helping roles." Their clientele is perceived as consisting of all types of individuals (indeed, it is the better-educated persons who now predominate in adult-education enrollments), institutions, and communities. Their function has moved increasingly away from being remedial toward being developmental-toward helping their clients achieve full potential.

As agents of change their responsibilities now extend far beyond the routine scheduling of activities in response to cursory expressions of interest. Their responsibilities entail, rather, the involvement of clients in a penetrating analysis of higher aspirations and the changes required to achieve them, the diagnosis of obstacles that must be overcome in achieving these changes, and the planning of an effective strategy for accomplishing the desired results. Their part in this process is that of helper, guide. encourager, consultant, and resource-not that of transmitter, disciplinarian, judge, and authority. They recognize that it is less important that their clients know the right answers to the questions they think are important than that the clients know how to ask the important questions and find the answers for themselves. Their ultimate objective is to help people grow in the ability to learn, to help people become mature selves.

I can illustrate at least some of the dimensions in this shift in role from my own career as an adult educator. When I entered the field in 1935 my role as a program administrator was defined as a manager of logistics—one who conducted surveys to determine the needs and interests of individuals, who organized classes for groups of individuals and found instructors for them, who scheduled them into rooms at specified times, who developed brochures and other promotional materials to recruit stu-

¹ºSee Daedalus, "Toward the Year 2,000," Vol. 96, No. 3 (Summer, 1967); John Gardner, Self-Renewal (New York: Harper & Row, 1963); Donald A. Schon, Beyond the Stable State (New York: W. W. Norton, 1971); Alvin Toffler, Future Shock (New York, Random House, 1970).

dents for them, who built a budget to assure that income would at least equal expenses, and who evaluated them through easy-to-score questionnaires. And my role as a teacher of adults was defined as one who decided what the students should learn, how and when they would learn it (primarily through my lectures), and if they had learned it. As the years have gone by I have found less and less of my time as a program administrator being spent in managing logistics and more and more of it being spent serving as a consultant to larger social systems—corporations, educational institutions, government agencies, religious denominations, voluntary organizations—helping them build total environments more conducive to human growth and development. And during these same years I have found that in my role as a teacher of adults I have spent less and less of my time deciding what students should learn and then transmitting it to them, and more and more of my time helping them discover for themselves what they need to learn and then helping them find and use the most effective resources (including my resources) for learning those things.

These are entirely new roles, requiring entirely different skills, knowledge, attitudes, and values from those of the traditional educator. But it is now becoming clear that they are required to fulfill the new mission of adult education—to develop a total environment conducive to human growth and self-actualization; to create an educative society.

For Your Continuing Inquiry . . .

Regarding What Is Adult Education

Axford, Roger W. Adult Education: The Open Door. Scranton, Pa.: International Textbook Co., 1969.

Bryson, Lyman. Adult Education. New York: American Book Co., 1936.

Dobbs, Ralph C. Adult Education in America. Cassville, Mo.: Litho Printers, 1971. Elias, John, and Merriam, Sharan. Philosophical Foundations of Adult Education. Huntington, N.Y.: Krieger Publishing Co., 1979.

Grattan, C. Hartley. In Quest of Knowledge: A Historical Perspective of Adult Education. New York: Association Press, 1955.

Johnstone, John W. C., and Rivera, William. Volunteers for Learning: A Study of the Educational Pursuits of American Adults. Chicago: Aldine Publishing Co., 1965.

Knowles, Malcolm S. The Adult Education Movement in the United States. 2nd ed. Huntington, N.Y.: Krieger Publications, 1977.

Smith, Robert, et al. Handbook of Adult Education in the United States. New York: Macmillan, 1970.

Regarding the Role and Mission of the Adult Educator

- Craig, R. L. (ed.). Training and Development Handbook. 2nd ed. New York: McGraw-
- Cross, K. Patricia. The Missing Link: Connecting Adult Learners to Learning Resources. Princeton, N.J.: College Board Publications, 1979.
- Cross, K. Patricia, and Valley, John R. (eds.). Planning Nontraditional Programs. San Francisco: Jossey-Bass, 1974.
- Faure, Edgar, et al. Learning to Be: The World of Education Today and Tomorrow. Paris: UNESCO, 1972.

- Gould, Samuel, et al. Diversity by Design. San Francisco: Jossey-Bass, 1973.
- Heffernan, James M., et al. Educational Brokering: A New Service for Adult Learners. Syracuse, N.Y.: National Center for Educational Brokering, 1976.
- Hesburgh, T. M., et al. Patterns for Lifelong Learning. San Francisco: Jossey-Bass, 1973.
- Houle, Cyril O. The External Degree. San Francisco: Jossey-Bass, 1973.
- Jensen, Gale, et al. Adult Education: Outlines of an Emerging Field of University Study. Washington, D.C.: Adult Education Association of the U.S.A., 1964.
- Keeton, Morris T., and Tate, Pamela J. A Boom in Experiential Learning. New Directions for Experiential Learning, No. 1. San Francisco: Jossey-Bass, 1978.
- Nadler, Leonard. Developing Human Resources. Houston: Gulf Publishing Co., 1970. Peterson, Richard E., et al. Lifelong Learning in America. San Francisco: Jossey-Bass, 1979.
- Rust, Val. D. Alternatives in Education: Historical and Theoretical Perspectives. Beverly Hills, Cal.: Sage Publications, 1977.
- Shaw, Nathan. Administration of Continuing Education. Washington, D.C.: National Association for Public and Continuing Education, 1969.
- Vermilye, Dyckman W. (ed.). Lifelong Learners: A New Clientele for Higher Education. San Francisco: Jossey-Bass, 1974.

Regarding the Adult Educator As Change Agent

- Arends, Richard I., and Arends, Jane H. System Change Strategies in Educational Settings. New York: Human Sciences Press, 1977.
- Argyris, Chris. Intercention Theory and Method. Reading, Mass.: Addison-Wesley, 1970.
- Bell, Chip R., and Nadler, Leonard. The Client-Consultant Handbook. Houston: Gulf Publishing Co., 1979.
- Bennis, Warren; Benne, Kenneth; and Chin, Robert. The Planning of Change. New York: Holt, Rinehart & Winston, 1968.
- Carkhuff, Robert R. Helping and Human Relations. New York: Holt, Rinehart & Winston, 1969.
- Combs, A. W., et al. Helping Relationships: Basic Concepts for the Helping Professions. 2nd ed. Rockleigh, N.J.: Allyn & Bacon, 1978.
- Eiben, Ray, and Milliren, Al (eds.). Educational Change: A Humanistic Approach. La Jolla, Cal.: University Associates, 1976.
- Lippitt, Gordon. Organization Renewal. New York: Appleton-Century-Crofts, 1969.
- Lippitt, Gordon, and Lippitt, Ronald. The Consulting Process in Action. La Jolla, Cal.; University Associates, 1978.
- Schein, Edgar. Process Consultation: Its Role in Organization Development. Reading, Mass.: Addison-Wesley, 1969.

What Is Andragogy?

In the Beginning Was Pedagogy

Until recently there was only one model of assumptions about learning and the characteristics of learners on which educators could base their curricula and teaching practices. It evolved in the monastic schools of Europe between the seventh and twelfth centuries and came to dominate secular schools when they were organized in the twelfth century and universities when they began emerging, first in Bologna and Paris, toward the close of the twelfth century. This was the model of pedagogy—a term derived from the Greek words paid (meaning "child") and agogus (meaning "leading"). So "pedagogy" means, literally, the art and science of teaching children.

The pedagogical assumptions about learning and learners were, therefore, based initially on observations by the monks in teaching very young children relatively simple skills—originally mostly reading and writing. With the spread of elementary schools throughout Europe and North America—and much of the rest of the world, especially by missionaries—in the eighteenth and nineteenth centuries this model was adopted and reinforced. And when educational psychologists started scientifically studying learning around the turn of the twentieth century they further contributed to the enthronement of the pedagogical model by limiting their research mostly to the reactions of children and animals to didactic teaching. In fact, as we shall see later, we didn't get much knowledge about learning (in contrast to reactions to teaching) until studies on adult learning began to appear after World War II.

When adult education began to be organized systematically during the 1920s, teachers of adults began experiencing several problems with the pedagogical model.

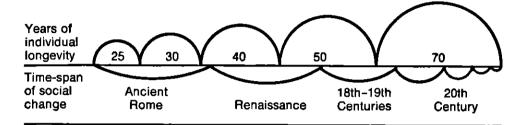
One problem was that pedagogy was premised on a conception of the purpose of education—namely, the transmittal of knowledge and skills that had stood the test of time-that adult learners seemed to sense was insufficient. Accordingly, their teachers found them to be resistant frequently to the strategies that pedagogy prescribed, including fact-laden lectures, assigned readings, drill, quizzes, rote memorizing, and examinations. Adults appeared to want something more than this, and drop-out rates were high.

Although the teachers were not aware of it, one of the great philosophers of this century, Alfred North Whitehead, was suggesting what was wrong. In an obscure footnote he pointed out that it was appropriate to define education as a process of transmittal of what is known only when the time-span of major cultural change was greater than the life-span of individuals. Under this condition, what people learn in their youth will remain valid and useful for the rest of their lives. But, Whitehead

emphasized, "We are living in the first period in human history for which this assumption is false . . . today this time-span is considerably shorter than that of human life, and accordingly our training must prepare individuals to face a novelty of conditions." An attempt is made in Exhibit 3 to portray Whitehead's concept graphically.

Exhibit 3

THE RELATIONSHIP OF THE TIME-SPAN OF SOCIAL CHANGE TO INDIVIDUAL LIFE-SPAN



Note that up to the early part of the twentieth century the time-span of major cultural change (e.g., massive inputs of new knowledge, technological innovation, vocational displacement, population mobility, change in political and economic systems. etc.) extended over several generations, whereas in the twentieth century several cultural revolutions have already occurred and the pace is accelerating. Under this new condition, knowledge gained at any point of time is largely obsolete within a matter of years; and skills that made people productive in their twenties become out-of-date in their thirties. So it is no longer functional to define education as a process of transmitting what is known; it must now be defined as a lifelong process of continuing inquiry. And so the most important learning of all-for both children and adults-is learning how to learn, the skills of self-directed inquiry.

Another problem the teachers of adults experienced with the pedagogical model was that many of the assumptions about the characteristics of learners did not seem to fit their adult students. And so they began experimenting with different assumptions and found out that they often produced better results.

Then Came Andragogy

Between 1929 and 1948 the Journal of Adult Education, published by the American Association for Adult Education, carried articles by successful teachers of adults² describing ways in which they were treating adults that deviated from the pedagogical model. Frequently the authors of these articles expressed a sense of guilt for violating academic standards (such as substituting interviews for quizzes). Obviously, they were feeling guilty because they had no theory to support their practices; they were simply being pragmatic and following their intuitions.

During the 1950s there began appearing books which analyzed these teachers' reports and extracted principles that were common to them-my first book, Informal

¹Alfred N. Whitehead, "Introduction," Wallace B. Donham, Business Adrift (New York: McGraw-Hill Book Co., 1931), pp. viii-xix.

^{2&}quot;Successful teachers of adults" is operationally defined as teachers who can retain their students; note that this is not a criterion of success for teachers of children under compulsory attendance.

Adult Education, published in 1950, was just such a listing of principles, but it made no attempt to envelop them in a unifying theory.

Then, in the 1960s, we began getting findings from scientifically designed research that focused on the internal processes of adult learning. The seminal study that launched this direction of movement was Cyril O. Houle's The Inquiring Mind, published by the University of Wisconsin Press in 1961. Houle found, through in-depth interviews with twenty-two "continuing learners," that his subjects fell into three subgroups:

The first, . . . the goal-oriented, are those who use education as a means of accomplishing fairly clear-cut objectives. The second, the activity-oriented, are those 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 purposes of the activity. The third, the learning-oriented, seek knowledge for its own sake. These are not pure types; the best way to represent them pictorially would be by three circles which overlap their edges. But the central emphasis of each subgroup is clearly discernible.3

One of Houle's students, Allen Tough, extended this line of investigation from his position on the faculty of the Ontario Institute for Studies in Education later in the same decade. Tough's research question was, paraphrased: "How do adults learn naturally—when they are not being taught." His first findings, reported in two reports, Learning Without a Teacher (1967) and The Adult's Learning Projects (1971), showed that 1) almost all adults engage in from one to twenty major learning projects each year-with the average number being around eight; 2) only about 10 percent of the learning projects were associated with educational institutions; 3) there is a fairly universal "natural" process of learning-adults who undertake to learn something on their own go through a similar sequence of steps; 4) adults almost always turn to somebody for help at one or more points in this sequence; 5) usually they go to "helpers" who have not been trained as teachers, but frequently when they go to teachers the teachers interfere with their learning by substituting their own pedagogical sequence of steps rather than flowing with the learners' natural sequence.

A great deal of other knowledge about adult learning was accumulating during the sixties from related disciplines—clinical psychology, developmental psychology (especially the new group of life-span developmental psychologists), gerontology, sociology, and anthropology-both in North America and Europe. By and large, this research-based knowledge supported the intuitions of the earlier teachers, and theorists began fitting the knowledge drawn from both sources into a comprehensive, coherent theory of adult learning.

Early in this process European adult educators felt the need for a label for this new theoretical model that would enable them to talk about it in parallel with pedagogy. They coined the label "andragogy," which is based on the Greek word aner (with the stem andr-), meaning "man, not boy" or adult. I first learned of the new label from a Yugoslavian adult educator in the mid-sixties and used it in an article in Adult Leadership in 1968. Since that time it has appeared with increasing frequency in the literature around the world, and presumably will be listed in the standard dictionaries before long.4

Originally I defined andragogy as the art and science of helping adults learn, in contrast to pedagogy as the art and science of teaching children. Then an increasing number of teachers in elementary and secondary schools (and a few in colleges) began reporting to me that they were experimenting with applying the concepts of andragogy to the education of youth and finding that in certain situations they were producing superior learning. So I am at the point now of seeing that andragogy is simply another model of assumptions about learners to be used alongside the pedagogical model of assumptions, thereby providing two alternative models for testing out the assumptions as to their "fit" with particular situations. Furthermore, the models are probably most useful when seen not as dichotomous but rather as two ends of a spectrum, with a realistic assumption in a given situation falling in between the two ends. For example, taking the assumption regarding dependency versus self-directedness, a six-year-old may be highly self-directing in learning the rules of a game but quite dependent in learning to use a calculator; on the other hand, a forty-year-old may be very dependent in learning to program a computer but completely self-directing in learning to repair a piece of furniture. As I see it, whenever a pedagogical assumption is the realistic one, then pedagogical strategies are appropriate, regardless of the age of the learner—and vice versa. But I would like to make one caveat: an ideological pedagogue—one who has a deep loyalty and commitment to the pedagogical model-may be tempted to underrate the extent to which an andragogical assumption may be realistic and may, for example, want to keep a learner dependent long after the learner has become able to be self-directing.

Assumptions of Pedagogy and Andragogy

Exhibit 4 portrays how I see the difference in assumptions between the two models:

Exhibit 4

A COMPARISON OF THE ASSUMPTIONS OF PEDAGOGY AND ANDRAGOGY

Regarding: Pedagogy

Concept of the learner

The role of the learner is, by definition, a dependent one. The teacher is expected by society to take full responsibility for determining what is to be learned, when it is to be learned, how it is to be learned, and if it has been learned.

Andragogy

It is a normal aspect of the process of maturation for a person to move from dependency toward increasing selfdirectedness, but at different rates for different people and in different dimensions of life. Teachers have a responsibility to encourage and nurture this movement. Adults have a deep psychological need to be generally self-directing, although they may be dependent in particular temporary situations.

Cyril O. Houle, The Inquiring Mind (Madison, Wis.: University of Wisconsin Press, 1961), pp. 15-16. For a detailed description of the evolution of the term "andragogy," see my The Adult Learner: A Neglected Species (Houston, Gulf Publishing Co., 2nd ed., 1978), pp. 48-51; and for further elaboration on the elymology of "andragogy" see the correspondence between the author and the publishers of Merriam-Webster dictionaries in Appendix A.

Pedagogy

Regarding:

experience

Role of learners'

The experience learners bring to a learning situation is of little worth. It may be used as a starting point, but the experience from which learners will gain the most is that of the teacher, the textbook writer, the audiovisual aid producer, and other experts. Accordingly, the primary techniques in education are transmittal techniques—lecture. assigned reading, AV presentations.

Readiness to learn

People are ready to learn whatever society (especially the school) says they ought to learn, provided the pressures on them (like fear of failure) are great enough. Most people of the same age are ready to learn the same things. Therefore, learning should be organized into a fairly standardized curriculum, with a uniform step-by-step progression for all learners.

Orientation to learning

Learners see education as a process of acquiring subjectmatter content, most of which they understand will be useful only at a later time in life. Accordingly, the curriculum should be organized into subjectmatter units (e.g., courses) which follow the logic of the subject (e.g., from ancient to modern history, from simple to complex mathematics or science). People are subject-centered in their orientation to learning.

Andragogy

As people grow and develop they accumulate an increasing reservoir of experience that becomes an increasingly rich resource for learning—for themselves and for others. Furthermore, people attach more meaning to learnings they gain from experience than those they acquire passively. Accordingly, the primary techniques in education are experiential techniques—laboratory experiments, discussion, problem-solving cases, simulation exercises, field experience, and the like.

People become ready to learn something when they experience a need to learn it in order to cope more satisfyingly with real-life tasks or problems. The educator has a responsibility to create conditions and provide tools and procedures for helping learners discover their "needs to know." And learning programs should be organized around life-application categories and sequenced according to the learners' readiness to learn.

Learners see education as a process of developing increased competence to achieve their full potential in life. They want to be able to apply whatever knowledge and skill they gain today to living more effectively tomorrow. Accordingly, learning experiences should be organized around competency-development categories. People are performance-centered in their orientation to learning.

To summarize, andragogy is premised on at least these four crucial assumptions about the characteristics of learners that are different from the assumptions on which traditional pedagogy is premised. These assumptions are that as individuals mature: 1) their self-concept moves from one of being a dependent personality toward being a

self-directed human being; 2) they accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning; 3) their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles; and 4) their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness.

Some Implications of the Assumptions for Practice

I would like to explore these assumptions a little more fully and suggest some of their implications for educational practice.

Self-Concepts and Teachers' Concepts of Learners

Children enter this world in a condition of complete dependency. Their needs, except for purely biological functions, must be taken care of by someone else. The first image children get of themselves as separate entities is that of dependent personalities whose lives are managed for them by the adult world. At home, often at play, in church, in the community, and in school, they expect the will of adults to be imposed on them. That is what life is like when you are a kid.

This self-concept of dependency is encouraged and reinforced by the adult world. In fact, society defines the appropriate role of children as that of learners, this is their full-time occupation, the source of their rewards and self-fulfillment. And on the whole, this role is defined as the more or less passive one of receiving and storing up the information adults have decided children should have.

As children's self-identities begin to take shape, they begin to see themselves as having the capacity to start making decisions for themselves, at first experimentally and in small matters that do not impinge on the adult world. But increasingly, as they mature, children's self-concepts move in the direction of greater self-direction, and during adolescence their need to take significant responsibility for managing their own lives becomes so strong that it often puts them in open rebellion against control by the adult world. The tragedy is that in our culture the adult world tends to hold onto its concept of the child as a dependent personality until the last possible moment.

Although this cultural lag between children's capacity to take responsibility and the freedom the adult world allows them to take responsibility applies to almost all aspects of their lives, it is especially evident in regard to their education. Interestingly, in the kindergarten and early primary years our teachers typically involve students in planning and conducting learning activities to a considerable degree. But as children move up the educational ladder, they encounter more and more of the responsibility for their learning being taken by the teachers, the curriculum planner, and their parents. The net effect is to freeze them into self-concepts of dependency.

But something dramatic happens to their self-concepts when people define themselves as adults. They begin to see their normal role in life no longer as being full-time learners. They see themselves increasingly as producers or doers. Their chief sources of self-fulfillment are now their performances as workers, spouses, parents, and citizens. Adults acquire a new status, in their own eyes and in the eyes of others, from these noneducational responsibilities. Their self-concept becomes that of a self-directing personality. They see themselves as being able to make their own decisions and face the

consequences, to manage their own lives. In fact, the psychological definition of adulthood is the point at which individuals perceive themselves to be essentially self-directing. And at this point people also develop a deep psychological need to be seen by others as being self-directing.

This fact presents a special problem to teachers of adults. Adults have been so deeply conditioned by their previous schooling (under the pedagogical model) to perceive the appropriate role of learner to be that of a dependent, more or less passive recipient of transmitted content, that even though they may be completely self-directing in all other aspects of their lives, the minute they enter into any activity labeled "education," they sit back, fold their arms, and say, "Teach me." The problem arises when teachers take this stance at face value and start treating adult learners as if they were dependent personalities, for this induces an inner conflict within the adults between this preconditioned intellectual model of the role of learner and the adults' deep psychological need to be self-directing. Hence there is the need to build into our program designs some preparatory experiences that will help adults get a new way of thinking about the role of learner and some new skills in self-directed learning.5

Often there is another ingredient in the self-concept of adults that affects their role as learners. They may carry over from their previous experience with schooling the perception that they are not very smart, at least in regard to academic work. This fact about the adult psyche has several consequences for adult education. In the case of some adults the remembrance of the classroom as a place where one is treated with disrespect and may fail is so strong that it serves as a serious barrier to their becoming involved in adult-education activities at all. This barrier can be reduced by interpreting adult learning activities as being different and enjoyable and perhaps by having the meetings in nonacademic locations. In the case of other adults, simply providing them with some early success experiences that will help them build positive self-concepts as learners will be sufficient.

Fortunately, once adults make the discovery that they can take responsibility for their own learning, as they do for other facets of their lives, they experience a sense of release and exhilaration. They then enter into learning with deep ego-involvement, with results that are frequently startling both to themselves and to their teachers. Teachers who have helped their adult students to achieve this breakthrough report repeatedly that it is one of the most rewarding experiences of their lives.

Implications for Practice

Several implications for practice flow from this difference in assumptions about learners.

1. The learning climate. The self-concept of being an adult has several consequences regarding the requirements of an environment that will be conducive to adult learning. It suggests that the physical environment should be one in which adults feel at ease. Furnishings and equipment should be adult-sized and comfortable; meeting rooms should be arranged informally and should be decorated according to adult tastes; and acoustics and lighting should take into account declining audiovisual acuity.

Even more importantly, the psychological climate should be one which causes adults to feel accepted, respected, and supported; in which there exists a spirit of mutuality between teachers and students as joint inquirers; in which there is freedom of expression without fear of punishment or ridicule. People tend to feel more "adult" in an atmosphere that is friendly and informal, in which they are known by name and valued as unique individuals, than in the traditional school atmosphere of formality, semianonymity, and status differentiation between teacher and student.

In andragogical practice, care is taken to determine what are the symbols of childishness to particular groups of adults, and to remove them. For some—particularly undereducated adults-it is a school building, in which case social-agency facilities, churches, commercial properties, or living rooms would probably be environments more conducive to learning. For others a podium on a stage makes them feel that they are being talked down to, in which case a small table on the floor would provide a more appropriate work space for the teacher. Many adults associate rooms in which chairs are placed in rows with childhood regimentation and passivity, and find rooms in which participants are seated in small groups in circles or around tables more conducive to adult-type relationships. A few adults report that chalkboards are a symbol of childishness to them, which may help to explain the growing popularity in adult education of newsprint-pads on easels.

The behavior of the teacher probably influences the character of the learning climate more than any other single factor, however. Teachers convey in many ways whether their attitude is one of interest in and respect for the students or whether they see the students essentially as receiving sets for transmissions of wisdom. Teachers who take the time and trouble to get to know their students individually and who call them by name (especially by first name) obviously convey the first set of attitudes. But probably the behavior that most explicitly demonstrates that a teacher really cares about students and respects their contributions is the act of really listening to what the students say.

The notion of a climate of adultness can be extended beyond individual classrooms and applied to total institutions. Indeed, such a climate is likely to be established in classrooms if it pervades the whole institution and is reflected in its architecture, decor, policies, procedures, leadership style, and human relations. One can sense rather quickly on entering an institution, for example, whether it cares more about people or things, whether it is concerned about the feelings and welfare of individuals or herds them through like cattle, and whether it views adults as dependent personalities or self-directing human beings.

2. Diagnosis of needs. The adult's self-concept of self-directivity is in direct conflict with the traditional practice of the teacher telling the students what they need to learn. Indeed it is even in conflict with the social philosophy that society has a right to impose its ideas about what they need to learn on them. Of course, adults will learn what others want them to learn if their power to punish them for not learning is strong enough. But they are more deeply motivated to learn those things they see the need to learn.

In andragogy, therefore, great emphasis is placed on the involvement of adult learners in a process of self-diagnosis of needs for learning. As will be described in greater detail in Chapter 11, this process consists of three phases: 1) constructing a model of the competencies or characteristics required to achieve a given ideal model of performance, so that the learner has some vision of the "good" supervisor, the "good" public speaker, the 'good" parent, and the like—and of the competencies

My Self-Directed Learning: A Guide for Learners and Teachers (Chicago: Association Press/Folleπ, 1975) was written as a resource for this purpose.

required to become "good." It is in this model-building phase that the values and expectations of the teacher, the institution, and society are amalgamated with those of the learner into a composite picture; 2) providing diagnostic experiences in which the learners can assess their present level of competencies in the light of those portrayed in the model; this is an underdeveloped area of andragogical technology, but one in which there is currently a ferment of invention. Such techniques as critical incident processes, sociodrama, computerized games, laboratory methods, and simulation exercises are being developed to enable learners to perform and then to get feedback that helps them in objectively assessing the strengths and weaknesses of their performance; 3) helping the learners to measure the gaps between their present competencies and those required by the model, so that they experience a feeling of dissatisfaction about the distance between where they are and where they would like to be, and so are able to identify specific directions of desirable growth. This experiencing of self-induced dissatisfaction with present inadequacies, coupled with a clear sense of direction for self-improvement, is in fact a good definition of "motivation to learn."

3. The planning process. There seems to be a law (or, at least, a tendency) of human nature that goes like this: human beings tend to feel committed to a decision (or an activity) to the extent that they have participated in making it (or planning it). Teachers of adults who do all the planning for their students, who come into the classroom and impose preplanned activities on them, typically experience apathy, resentment, and probably withdrawal. This imposition of the will of the teacher is incongruent with the adult's self-concept of self-directivity.

Accordingly, a basic element in the technology of andragogy is the involvement of the learners in the process of planning their own learning, with the teacher serving as a procedural guide and content resource. When the number of students is small enough, they can all be involved in the planning directly; when the number gets much over thirty, adult educators make use of representative councils, committees, task forces, teams, or other devices through which the learners feel that they are participating in the planning by proxy.

The function of planning, with which the remainder of this book is largely concerned, consists of translating diagnosed needs into specific educational objectives (or directions of growth), designing and conducting learning experiences to achieve these objectives, and evaluating the extent to which these objectives have been accomplished. In andragogy, responsibility for performing this function is a mutual one between the learners and the teacher.

4. Conducting learning experiences. In traditional pedagogical practice (and in contemporary programmed instruction) the function of the teacher is defined as "to teach." The teacher is expected to take full responsibility for what happens in the teachinglearning transaction. The learner's role tends to be that of a fairly passive recipient of the teacher's instruction.

In contrast, in congruence with the adult's self-concept of self-directivity, andragogical practice treats the learning-teaching transaction as the mutual responsibility of learners and teacher. In fact, the teacher's role is redefined as that of a procedural technician, resource person, and coinquirer; more a catalyst than an instructor, more a guide than a wizard. Andragogy assumes that a teacher cannot really "teach" in the sense of "make a person learn," but that one person can only help another person learn. (In my own practice, when I succumb to the compulsion to teach my students something I know they ought to know but that they do not yet know they ought to

know, which I sometimes do because bad habits take time to break, they report that it gets in the way of their learning. My practice has improved since I adopted the policy of authorizing them to signal me when they sense this happening.)

Later chapters describe procedures by which learners can responsibly share in taking responsibility for their own learning. Suffice it to say at this point that an andragogical learning situation, whether it be a course, an institute, a training program, or a conference, is alive with meetings of small groups-planning committees, learningteaching teams, consultation groups, project task forces-sharing responsibility for helping one another learn.

5. Evaluation of learning. Probably the crowning instance of incongruity between traditional educational practice and the adult's self-concept of self-directivity is the act of a teacher giving a grade to a student. Nothing makes an adult feel more childlike than being judged by another adult; it is the ultimate sign of disrespect and dependency, as the one who is being judged experiences it.

For this reason, andragogical theory prescribes a process of self-evaluation, in which the teacher devotes energy to helping the adults get evidence for themselves about the progress they are making toward their educational goals. In this process, the strengths and weaknesses of the educational program itself must be assessed in terms of how it has facilitated or inhibited the learning of the students. So evaluation is a mutual undertaking, as are all other phases of the adult learning experience.

In fact, what is happening in practice is that precisely the same procedures that are used for the diagnosis of learning needs are being employed to help the learners measure gains in competence. For instance, by comparing their performance in solving a critical incident at the end of a learning experience with their performance in a similar critical incident at the beginning of the experience, learners can quite precisely measure the changes produced by the experience. Because of the similarity of these two processes, I find myself now thinking less and less in terms of the evaluation of learning and more and more in terms of the rediagnosis of learning needs. And I find that, when my adult students perceive what they do at the end of a learning experience as rediagnosing rather than evaluating, they enter into the activity with more enthusiasm and see it as being more constructive. Indeed, many of them report that it launches them into a new cycle of learning, reinforcing the notion that learning is a continuing process.

This shift from evaluation to self-evaluation or rediagnosis places a heavy burden on teachers of adults. They must set the example of being open to feedback regarding their performance. They must be skillful in establishing a supportive climate in which hard-to-accept information about one's performance can be looked at objectively. And they must be creative about inventing ways in which students can get comprehensive data about their own performance. Some of the techniques available in carrying this burden are explored in later chapters.

My own feeling is that the single most critical difference between children and adults as learners is the difference in assumptions we make about their self-concepts, and this is why these assumptions and their technological implications have been dealt with in such detail. But there are other important differences.

The Role of Experience

Adults enter into any undertaking with a different background of experience from that of their youth. Having lived longer, they have accumulated a greater volume of experience. But they have also had different kinds of experience. Children have not had the experience of making their own living, marrying, having children, taking real community responsibility, or being responsible for the welfare of others (although they have observed all these things in their families and on television!).

There is, it seems to me, another subtle difference between children and adults as regards their experience. To children, experience is something that happens to them; it is an external event that affects them, not an integral part of them. If you ask children who they are, they are likely to identify themselves in terms of who their parents are, who their older brothers and sisters are, where they live, and what school they attend. Their self-identity is largely derived from external sources.

But adults derive their self-indentity from their experience. They define who they are in terms of the accumulation of their unique sets of experience. So if you ask adults who they are, they are likely to identify themselves by describing what their occupations are, where they have worked, where they have traveled, what their training and experience have equipped them to do, and what their achievements have been. Adults are what they have done.

Because adults define themselves largely by their experience, they have a deep investment in its value. And so when they find themselves in situations in which their experience is not being used, or its worth is minimized, it is not just their experience that is being rejected—they feel rejected as persons.

These differences in experience between children and adults have at least three consequences for learning: 1) adults have more to contribute to the learning of others; for most kinds of learning they are themselves a rich resource for learning; 2) adults have a richer foundation of experience to which to relate new experiences (and new learnings tend to take on meaning as we are able to relate them to our past experience); 3) adults have acquired a larger number of fixed habits and patterns of thought, and therefore tend to be less open-minded.

Implications for Practice

Several implications for practice flow from these differences in experience.

- 1. Emphasis on experiential techniques. Because adults are themselves richer resources for learning than is true of children, greater emphasis can be placed on techniques that tap the experience of the adult learners, such as group discussion, the case method, the critical-incident process, simulation exercises, role playing, skill-practice exercises, field projects, action projects, laboratory methods, consultative supervision, demonstration, seminars, work conferences, counseling, group therapy, and community development There is a distinct shift in emphasis in andragogy away from the transmittal techniques so prevalent in youth education—the lecture, assigned readings, and canned audiovisual presentation-toward the more participatory experiential techniques. Indeed, "participation" and "ego-involvement" are boldfaced words in the lexicon of the adult educator, with the assumption often being made that the more active the learner's role in the process, the more they are probably learning.
- 2. Emphasis on practical application. Skillful adult educators have always taken care to see that new concepts or broad generalizations were illustrated by life experiences drawn from the learners. But numerous recent studies on the transfer of learning and the maintenance of behavioral change indicate the desirability of going even further, and actually building into the design of learning experiences provision for the learners to plan-and even rehearse-how they are going to apply their learnings to their dayto-day lives.

3. Unfreezing and learning to learn from experience. A growing and ragogical practice is to build into the early phases of a course, workshop, conference, institute, or other sequential educational activity an "unfreezing" experience, in which the adults are helped to be able to look at themselves more objectively and free their minds from preconceptions. Many of the diagnostic procedures and structured exercises described in Chapter 11 help to serve this purpose.

Readiness to Learn

It is well accepted in our culture now that children learn best those things that are necessary for them to know in order to advance from one phase of development to the next. These have been dubbed "developmental tasks" by developmental psychologists:

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks.6

Each of these developmental tasks produces a "readiness to learn" which at its peak presents a "teachable moment." For example, parents now generally accept the fact that they cannot teach children to walk until they have mastered the art of crawling, their leg muscles are strong enough, and they have become frustrated at not being able to stand up and walk the way everybody else does. At that point, and only then, are they able to learn to walk; for it has become their developmental task.

Recent research suggests that the same phenomenon is at work during the adult years. Adults, too, have their phases of growth and resulting developmental tasks, readinesses to learn, and teachable moments. But whereas the developmental tasks of youth tend to be the products primarily of physiological and mental maturation, those of the adult years are the products primarily of the evolution of social roles. Robert J. Havighurst, one of the pioneers in this area of research, divides the adult years into three phases—"early adulthood," "middle age," and "later maturity"—and identifies ten social roles of adulthood: worker, mate, parent, homemaker, son or daughter of aging parents, citizen, friend, organization member, religious affiliate, and user of leisure time. The requirements for performing each of these social roles change, according to Havighurst, as we move through the three phases of adult life, thereby setting up changing developmental tasks and, therefore, changing readiness to learn.

For example, in a person's role of worker, the first developmental task is to get a job. At that point individuals are ready to learn anything required to get a job, but they definitely are not ready to study supervision. Having landed a job, they are faced with the task of mastering it so that they will not get fired from it; and at that point they are ready to learn the special skills it requires, the standards that are expected, and how to get along with fellow workers. Having become secure in a basic job, the next task becomes one of working up the occupational ladder. Now they become ready to learn to become a supervisor or executive. Finally, after reaching their ceiling, they face the task of dissolving the role of worker—and to learn about retirement or substitutes for work.

[•]Robert J. Havighurst, Developmental Tasks and Education (New York: David McKay Co., 1961), p. 2. By permission.

Havighurst illustrates the changes in developmental tasks during the three periods of adult life as follows:

Early Adulthood (ages 18 to 30):

- -Selecting a mate
- -Learning to live with a marriage partner
- -Starting a family
- -Rearing children
- -Managing a home
- -Getting started in an occupation
- —Taking on civic responsibility
- -Finding a congenial social group

Middle Age (ages 30 to 55):

- -Achieving adult civic and social responsibility
- -Establishing and maintaining an economic standard of living
- -Assisting teenage children to become responsible and happy adults
- Developing adult leisure-time activities
- -Relating to one's spouse as a person
- -Accepting and adjusting to the physiological changes of middle age
- -Adjusting to aging parents

Later Maturity (ages 55 and over):

- -Adjusting to decreasing physical strength and health
- -Adjusting to retirement and reduced income
- -Adjusting to the death of a spouse
- -Establishing an explicit affiliation with one's age group
- -Meeting social and civic obligations
- -Establishing satisfactory physical living arrangements⁷

As Havighurst concludes, "People do not launch themselves into adulthood with the momentum of their childhood and youth and simply coast along to old age. . . . Adulthood has its transition points and its crises. It is a developmental period in almost as complete a sense as childhood and adolescence are developmental periods."8

Since Havighurst's foundational work on developmental tasks, a number of other investigations of the life stages, transitions, passages, crises, and transformations of the adult years have been published; they are listed in the suggested readings at the end of this chapter. I have included my own list of "Life Tasks of American Adults" in Appendix C. The chief value of these lists for the adult-educational practitioner is to stimulate ideas as to what adults at different stages of development are ready to learn. But one word of caution about them: most of the lists are based on studies of middleclass Americans.

Implications for Practice

At least two sets of implications for practice flow from this difference in readiness to learn:

1. The timing of learnings. If the teachable moment for particular adults to acquire a given learning is to be captured, it is obvious that the sequence of the curriculum must be timed so as to be in step with their developmental tasks. This is the appropriate

Robert J. Havighurst and Betty Orr. Adult Education and Adult Needs (Boston: Center for the Study of Liberal Education for Adults, 1956), p. 1.

organizing principle for an adult-education program, rather than the logic of the subject matter or the needs of the sponsoring institution. For instance, an orientation program for new workers would not start with the history and philosophy of the corporation, but rather with real-life concerns of new workers: Where will I be working With whom will I be working? What will be expected of me? How do people dress in this company? What is the time schedule? To whom can I go for help?

There have been some classic examples of the consequences of violating this organizing principle. One was the introduction of courses on supervision in trade schools, nursing schools, and other preservice vocational programs after World War II, when there was a great shortage of experienced supervisors. The courses were plagued with absenteeism, flunk-outs, and drop-outs-simply because it was not yet a developmental task of people who have not become secure about doing a job themselves to learn how to supervise others in doing the job. Other examples of failure of programs resulting from violation of the readiness-to-learn principle are the several attempts by corporations and at least one national social agency to institute programs on "preparation for retirement" that are geared to people in their forties. Almost universally these programs have resulted in low enrollment, for the simple reason that people whose eyes are still set on going up the occupational ladder are not ready to invest energy in studying how to get off the ladder.

2. The grouping of learners. The concept of developmental tasks provides some guidance regarding the grouping of learners. For some kinds of learnings homogeneous groups according to developmental task are more effective. For instance, in a program on child care, young parents would have quite a different set of interests from the parents of adolescent children. For other kinds of learnings, heterogeneous groups would clearly be preferable. For instance, in a program of human-relations training in which the objective is to help people learn to get along better with all kinds of people, it would be important for the groups to cut across occupational, age, status, sex, and perhaps other characteristics that make people different. In my own practice, I have adopted the policy of making provision in the design of any adult-learning activity for a variety of subgroups so as to give the students a flexibility of choice; and I find that they quickly discover colleagues with similar developmental tasks.

Orientation to Learning

Adults enter into education with a different time perspective from children, which in turn produces a difference in the way they view learning. Children tend to have a perspective of postponed application on most of their learning. For example, most of what I learned in elementary school I learned in order to be able to get into high school; and most of what I learned there I learned to prepare me for college; and most of what I learned in college I hoped would prepare me for a happy and productive adult life. To a child, education is essentially a process of the accumulation of a reservoir of subject matter-knowledge and skills-that might be useful later in life. Children tend, therefore, to enter any educational activity in a subject-centered frame of mind.

Adults, on the other hand, tend to have a perspective of immediacy of application toward most of their learning. They engage in learning largely in response to pressures they feel from their current life situation. To adults, education is a process of improving their ability to cope with life problems they face now. They tend, therefore, to enter an educational activity in a problem-centered or performance-centered frame of mind.

⁷lbid., pp. 72-98.

Implications for Practice

Several implications for practice flow from this difference in orientation to learning.

- 1. The orientation of adult educators. Just as adults have a different orientation to learning from that of children, so it would seem to follow that a different orientation toward learning is required on the part of educators of adults from the orientation traditionally inculcated in educators of children. Where youth educators can, perhaps appropriately, be primarily concerned with the logical development of subject matter and its articulation from grade to grade according to levels of complexity, adult educators must be primarily attuned to the existential concerns of the individuals and institutions they serve and be able to develop learning experiences that will be articulated with these concerns.
- 2. The organization of the curriculum. The original basis of organization for the curriculum of youth education was the seven subjects—the trivium (grammar, rhetoric, and logic) and quadrivium (arithmetic, music, geometry, and astronomy) of the medieval schools. Although the number of subjects has proliferated since the Middle Ages, the subject-matter concept of curricular organization still remains relatively intact. But with the emergence of the insights of andragogy the curriculum—which, incidentally, in adult education is increasingly referred to as "program"-of adult education is coming to look less and less like the curriculum of youth education.

Because adult learners tend to be problem-centered in their orientation to learning, the appropriate organizing principle for sequences of adult learning is problem areas, not subjects. For example, instead of offering courses on "Composition I" and "Composition II," with the first focusing on grammar and the second on writing style, andragogical practice would put in their place "Writing Better Business Letters" and "Writing Short Stories." In the adult courses, matters of grammar and style would be treated in the context of the practical concerns of the learners. Even the broad curricular categories used to describe what adults study have departed from the traditional categories of the academic disciplines. In the Handbook for Adult Education, for example, such labels were given to the "Program Areas" as "Education for Family Life," "Education for Social and Public Responsibility," and then "Education for Self-Fulfillment."9

3. The design of learning experiences. The problem-orientation of the learners implies that the most appropriate starting point for every learning experience is the problems and concerns that the adults have on their minds as they enter. Whereas the opening session of a youth-education activity might be titled "What This Course Is All About," in an adult-educational activity it would more appropriately be titled "What Are You Hoping to Get Out of This Course?" Early in the session there would be a problem census or a diagnostic exercise through which the participants would identify the specific problems they want to be able to deal with more adequately. This is not to suggest that a good adult-learning experience ends with the problems the learners are aware of in the beginning, but that is where it starts. There may be other problems that the teacher or institution expects to be dealt with, and these are put into the picture along with the students' problems for negotiation between teacher and students.

Some Other Assumptions about Learning and Teaching

The critical element in any adult-education program is, of course, what happens when a teacher comes face-to-face with a group of learners. As I see it, the andragogical approach to the learning-teaching transaction is premised on three additional assumptions about learning and teaching:

1. Adults can learn. The central proposition on which the entire adult-education movement is based is that adults can learn. One of the great moments in the history of the movement occurred at the annual meeting of the American Association for Adult Education held in Cleveland in 1927, when Edward L. Thorndike reported for the first time his findings that the ability to learn declined only very slowly and very slightly after age twenty. Until that moment adult educators had based their whole work on blind faith, in direct opposition to the prevailing belief that "you can't teach an old dog new tricks." But now their faith had been vindicated; there was scientific proof that adults can learn.

Actually, Thorndike's early studies did seem to indicate a decline in learning capacity of about 1 percent per year after age twenty-five. But later studies, especially those of Thorndike's colleague Irving Lorge, revealed that what declined was the speed of learning, not intellectual power-and that even this decline was likely to be minimized by continued use of the intellect.

The research to date of adult learning clearly indicates that the basic ability to learn remains essentially unimpaired throughout the life span and that therefore, if individuals do not actually perform as well in learning situations as they could, the cause must be sought in such factors as the following:

- -Adults who have been away from systematic education for some time may underestimate their ability to learn, and this lack of confidence may prevent them from applying themselves wholly.
- -Various physiological changes occur in the process of aging, such as decline in visual acuity, reduction in speed of reaction, and lowering of energy levels, which operate as barriers to learning unless compensated for by such devices as louder sound, larger printing, and slower pace.
- -Adults respond less readily to external sanctions for learning (such as grades) than to internal motivation.
- 2. Learning is an internal process. In our inherited folk wisdom there has been a tendency to look upon education as the transmittal of information, to see learning as an almost exclusively intellectual process consisting of the storing of accumulated facts in the filing drawers of the mind. The implicit assumption underlying this view of learning is that it is essentially an external process in the sense that what the student learns is determined primarily by outside forces, such as the excellence of the teacher's presentation, the quality of reading materials, and the effectiveness of school discipline. People holding this view even today insist that teachers' qualifications be judged only by their mastery of subject matter and clamor against their wasting time learning about the psychology of learning. For all practical purposes this view defines the function of the teacher as being to teach subject matter, not students.

A growing body of research into what really happens when learning takes place has put this traditional conception of learning in serious jeopardy. Although there is not yet agreement on the precise nature of the learning process (in fact there are many theories which seem to explain different parts of it), there is agreement that it is an

R. M. Smith, George Aker, and J. R. Kidd, Handbook of Adult Education (New York: Macmillan, 1970).

internal process controlled by the learners and engaging their whole being—including intellectual, emotional, and physiological functions. Learning is described psychologically as a process of need-meeting and goal-striving by the learners. This is to say that individuals are motivated to engage in learning to the extent that they feel a need to learn and perceive a personal goal that learning will help to cohieve; and they will invest their energy in making use of available resources (including teachers and readings) to the extent that they perceive them as being relevant to their needs and goals.

The central dynamic of the learning process is thus perceived to be the experience of the learners; experience being defined as the interaction between individuals and their environment. The quality and amount of learning is therefore clearly influenced by the quality and amount of interaction between the learners and their environment and by the educative potency of the environment. The art of teaching is essentially the management of these two key variables in the learning process-environment and interaction—which together define the substance of the basic unit of learning, a "learning experience." The critical function of the teacher, therefore, is to create a rich environment from which students can extract learning and then to guide their interaction with it so as to optimize their learning from it.

The important implication for adult-education practice of the fact that learning is an internal process is that those methods and techniques which involve the individual most deeply in self-directed inquiry will produce the greatest learning. This principle of ego-involvement lies at the heart of the adult educator's art. In fact, the main thrust of modern adult-educational technology is in the direction of inventing techniques for involving adults in ever-deeper processes of self-diagnosis of their own needs for continued learning, in formulating their own objectives for learning, in sharing responsibility for designing and carrying out their learning activities, and in evaluating their progress toward their objectives. The truly artistic teachers of adults perceive the locus of responsibility for learning to be in the learner; they conscientiously suppress their own compulsion to teach what they know students ought to learn in favor of helping students learn for themselves what they want to learn. I have described this faith in the ability of individuals to learn for themselves as the "theological foundation" of adult education, and I believe that without this faith a teacher of adults is more likely to hinder than to facilitate learning. This is not to suggest that teachers have less responsibility in the learning-teaching transaction, but only that their responsibility lies less in giving ready-made answers to predetermined questions and more in being ingenious in finding better ways to help students discover the important questions and the answers for themselves.

One of the clearest statements of this insight about adult learning was made in 1926 by the great American pioneer adult-education theorist, Eduard C. Lindeman:

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 relevancy of his facts and experiences. In short, my conception of adult education is this: a cooperative venture in nonauthori-

tarian, 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.10

3. There are superior conditions of learning and principles of teaching. It is becoming increasingly clear from the growing body of knowledge about the processes of adult learning that there are certain conditions of learning that are more conducive to growth and development than others. These superior conditions seem to be produced by practices in the learning-teaching transaction that adhere to certain superior principles of teaching as identified below:

Conditions of Learning

The learners feel a need to learn.

The learning environment is characterized by physical comfort, mutual trust and respect, mutual helpfulness, freedom of expression, and acceptance of differences.

The learners perceive the goals of a learning experience to be their goals.

The learners accept a share of the responsibility for planning and operating a learning experience, and therefore have a feeling of commitment toward it.

Principles of Teaching

- 1) The teacher exposes the learners to new possibilities for self-fulfillment.
- 2) The teacher helps the learners clarify their own aspirations for improved behavior.
- 3) The teacher helps the learners diagnose the gap between their aspirations and their present level of performance.
- 4) The teacher helps the learners identify the life problems they experience because of the gaps in their personal equipment.
- 5) The teacher provides physical conditions that are comfortable (as to seating, smoking, temperature, ventilation, lighting, decoration) and conducive to interaction (preferably, no person sitting behind another person).
- 6) The teacher accepts the learners as persons of worth and respects their feelings and ideas.
- 7) The teacher seeks to build relationships of mutual trust and helpfulness among the learners by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness.
- 8) The teacher exposes his or her own feelings and contributes resources as a colearner in the spirit of mutual inquiry.
- 9) The teacher involves the learners in a mutual process of formulating learning objectives in which the needs of the learners of the institution, of the teacher, of the subject matter, and of the society are taken into account.
- 10) The teacher shares his or her thinking about options available in the designing of learning experiences and the selection of materials and methods and involves the learners in deciding among these options jointly.

PRobert Gessner (ed.), The Democratic Man: Selected Writings of Eduard C. Lindeman (Boston: Beacon Press, 1956), p. 160. By permission.

Conditions of Learning

The learners participate actively in the learning process.

The learning process is related to and makes use of the experience of the learners.

The learners have a sense of progress toward their goals.

Principles of Teaching

- 11) The teacher helps the learners to organize themselves (project groups, learning-teaching teams, independent study, etc.) to share responsibility in the process of mutual inquiry.
- 12) The teacher helps the learners exploit their own experiences as resources for learning through the use of such techniques as discussion, role playing, case method, etc.
- 13) The teacher gears the presentation of his or her own resources to the levels of experience of particular learners.
- 14) The teacher helps the learners to apply new learnings to their experience, and thus to make the learnings more meaningful and integrated.
- 15) The teacher involves the learners in developing mutually acceptable criteria and methods for measuring progress toward the learning objectives.
- 16) The teacher helps the learners develop and apply procedures for self-evaluation according to these criteria.

Some Implications for Youth Education

The differences between children and adults are not so much real differences, I believe, as differences in assumptions about them that are made in traditional pedagogy. Actually, in my observation (and retrospection), the children start fairly early to see themselves as being self-directing in broadening areas of their lives; they start accumulating experience that has increasing value for learning; they start preparing for social roles (such as through part-time jobs) and therefore experiencing adultlike readinesses to learn; and they encounter life problems for which they would like some learnings for immediate application. Therefore, many of the principles of andragogy have direct relevance to the education of children and youth.

The fact is that many of the new developments in the curricula of our elementary and secondary schools have some of the flavor of andragogy. The "new math," "new biology," and linguistics programs start with the concerns of the students and engage them in a process of largely self-directed discovery. Some of the products of today's schools who become adults in the 1980s and 1990s will, therefore, presumably be better equipped to continue a process of lifelong learning than are today's adults.

But these developments are quite piecemeal, and the practitioners have lagged far behind the curriculum theorists in helping students learn how to learn rather than just teaching them what they "ought" to know. What is required, if youth education is to produce adults who are capable of engaging in a lifelong process of continuing selfdevelopment, is a whole new set of assumptions about the purpose of youth education and a new technology to carry out that purpose. I can foresee that the result would be a more andragogical approach to the education of children and youth. As my contribution toward movement in this direction I am presenting in Appendix D a schema I prepared for UNESCO, "Toward a Model of Lifelong Education."

The Andragogical Process of Program Development

When the principles of andragogy are translated into a process for planning and operating educational programs, that process turns out to be quite different from the curriculum planning and teaching processes traditionally employed in youth education. The rest of this book is concerned with describing this process as it applies to the planning of comprehensive programs of adult education (Chapters 5 through 10) and to the management of specific learning experiences (Chapter 11).

As I see it, this andragogical process involves the following phases consistently in both levels of application (total programs and individual learning activities):

- 1) The establishment of a climate conducive to adult learning;
- 2) The creation of an organizational structure for participative planning;
- 3) The diagnosis of needs for learning:
- 4) The formulation of directions of learning (objectives);
- 5) The development of a design of activities:
- 6) The operation of the activities:
- 7) The rediagnosis of needs for learning (evaluation).

How Do We Know That It Is Better?

People frequently ask me what research has been done vis-à-vis the andragogical model that supports the proposition that it is superior to the pedagogical model. My automatic-reflex response is, "That is not the question; nobody-at least, not I-is saying that."

This kind of question arises from a curious disease that seems to be endemic in the world of learning theory. It might be called panacea-addiction. Philosophers call it either-or thinking. It is a compulsion for neat, simple, single solutions to complex problems.

As I said in an earlier chapter, I have the impression that many traditional teachers (and learning theorists, for that matter) have an almost ideological attachment to the pedagogical model. It is something they have to be loyal to, enforce with sanctions (like normative grading), and protect from heresy. I don't see andragogy as an ideology at all, but a system of assumptions about learners that needs to be tested out for different learners in different situations. In a sense, it is a system that encompasses the pedagogical model, since it makes legitimate the application of pedagogical strategies in those situations in which the assumptions of the pedagogical model are realistic.

The appropriate question to ask, I think, is "What research has been done to indicate under what conditions the andragogical model is appropriate, in whole or in part?" And to satisfy the curiosity of those of you who are asking that question, I am including in Appendix E a list of the papers, research reports, books, and experiments regarding andragogy that I know about.

For Your Continuing Inquiry . . .

Regarding the Pedagogical Model

Bigge, Morris L. Learning Theories for Teachers. New York: Harper & Row, 1971. Bruner, Jerome S. Toward a Theory of Instruction. Cambridge, Mass.: Harvard University Press, 1966.

Crawford, W. R., and DeCecco, John P. The Psychology of Learning and Instruction. Englewood Cliffs, N.J.: Prentice-Hall, 1974.

Eble, Kenneth E. The Craft of Teaching. San Francisco: Jossey-Bass, 1976.

Farnham-Diggory, Sylvia. Cognitive Processes in Education. New York: Harper & Row, 1972.

Gagne, Robert M. The Conditions of Learning. New York: Holt, Rinehart & Winston, 1965.

Hyman, Ronald T. (ed.). Contemporary Thought on Teaching. Englewood Cliffs, N.J.: Prentice-Hall, 1971.

Joyce, Bruce, and Weil, Marsha. *Models of Teaching*. Englewood Cliffs, N.J.: Prentice-Hall, 1972.

Mueller, Richard J. Principles of Classroom Learning and Perception. New York: Praeger Press, 1974.

Postman, Neil, and Weingartner, C. Teaching as a Subversive Activity. New York: Delacorte Press, 1969.

Skinner, B. F. The Technology of Teaching. New York: Appleton-Century-Crofts, 1968.

Taba, Hilda. Curriculum Development: Theory and Practice. New York: Harcourt Brace & World, 1962.

Travers, Robert. Second Handbook of Research on Teaching. Chicago: Rand McNally, 1973.

Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1957.

Regarding Adult Learning

Bischof, Ledford J. Adult Psychology. New York: Harper & Row, 1969.

Howe, Michael J. A. Adult Learning: Psychological Research and Applications. New York: John Wiley & Sons, 1977.

Ingalls, John D., and Arceri, J. M. A Trainer's Guide to Andragogy. (SRS 72-05301)
U.S. Department of Health, Education & Welfare. Washington, D.C.: Government Printing Office, 1972.

Kidd, J. R. How Adults Learn. Chicago: Association Press/Follett, 1973.

Knowles, Malcolm S. The Adult Learner: A Neglected Species. 2nd ed. Houston, Texas: Gulf Publishing Co., 1978.

Thorndike, Edward L. Adult Learning. New York: Macmillan, 1928.

Tough, Allen. The Adult's Learning Projects. 2nd ed. Toronto: Ontario Institute for Studies in Education, 1979.

Regarding Self-Concept

Adams-Webber, J.R. Personal Construct Theory: Concepts and Applications. New York: Wiley-Interscience, 1979.

Bannister, D. (ed.). Perspectives in Personal Construct Theory. New York: Academic Press, 1970.

Erikson, Erik H. Dimensions of a New Identity. New York: Norton, 1974.

Felker, Donald W. Building Positive Self-Concepts. Minneapolis, Minn.: Burgess, 1974. Kelly, G. S. The Psychology of Personal Constructs. New York: Norton, 1955.

Klapp, Orrin E. Collective Search for Identity. New York: Holt, Rinehart & Winston, 1969.

Lefcourt, H. M. Locus of Control. Hillsdale, N.J.: Erlbaum, 1976.

Loevinger, Jane. Ego Development: Conceptions and Theories. San Francisco: Jossey-Bass, 1976.

Thompson, W. Correlates of the Self Concept. Nashville, Tenn.: Dede Wallace Center, 1972.

Tyler, Leona. Individuality: Human Possibilities and Personal Choice in the Psychological Development of Men and Women. San Francisco: Jossey-Bass, 1978.

Regarding Self-Directed Learning

Block, J. H. Mastery Learning: Theory and Practice. New York: Holt, Rinehart & Winston, 1971.

Dressel, Paul L., and Thompson, Mary M. Independent Study. San Francisco: Jossey-Bass, 1973.

Gross, Ronald. The Lifelong Learner: A Guide to Self-Development. New York: Simon & Schuster, 1977.

Houle, Cyril O. Continuing Your Education. New York: McGraw-Hill, 1964.

Hunkins, Francis P. Involving Students in Questioning. Rockleigh, N.J.: Allyn & Bacon, 1975.

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

Massialas, B. G., and Zevin, J. Creative Encounters in the Classroom: Teaching and Learning Through Discovery. New York: John Wiley & Sons, 1967.

Rogers, Carl R. Freedom to Learn. Columbus, Ohio: Charles E. Merrill, 1969.

Silberman, M. L.; Allender, J. S.; and Yanoff, J. M. The Psychology of Open Teaching and Learning: An Inquiry Approach. Boston: Little, Brown, 1972.

Tough, Allen. Learning Without a Teacher. Toronto: Ontario Institute for Studies in Education, 1967.

Regarding Developmental Stages

Baltes, Paul D. (ed.). Life-Span Development and Behavior. Vol. 1. New York: Academic Press, 1978.

Bromley, D. B. The Psychology of Human Aging. Baltimore: Penguin, 1966.

Bruno, Frank J. Human Adjustment and Personal Growth: Seven Pathways. Somerset, N.J.: John Wiley & Sons, 1977.

Coleman, James S., et al. Youth: Transition to Adulthood. Chicago: University of Chicago Press, 1974.

Datan, Nancy, and Ginsberg, Leon H. Normative Life Crises. New York: Academic Press, 1975.

Erikson, Erik. Identity and the Life Cycle. New York: International Universities Press, 1959.

Goulet, L. R., and Baltes, Paul B. Life-Span Developmental Psychology: Research and Theory. New York: Academic Press, 1970.

Gubrium, Jaber F., and Buckholdt, David R. Toward Maturity: The Social Processing of Human Development. San Francisco: Jossey-Bass, 1977.

Havighurst, Robert. Developmental Tasks and Education. 2nd ed. New York: David

McKay, 1970.

Kaluger, George, and Kaluger, Meriem. Human Development: The Span of Life. St. Louis: C. V. Mosby, 1974.

Kastenbaum, Robert. Humans Developing: A Lifespan Perspective. Rockleigh, N.J.: Allyn & Bacon, 1979.

Knox, Alan B. Adult Development and Learning. San Francisco: Jossey-Bass, 1977. Kuhlen, Raymond G. (ed.). Psychological Studies of Human Development. New York: Appleton-Century-Crofts, 1963.

Levinson, Daniel J. The Seasons of a Man's Life. New York: Alfred A. Knopf, 1978. Lowenthal, Marjorie F., et al. Four States of Life: A Comparative Study of Women and Men Facing Transitions. San Francisco: Jossey-Bass, 1975.

Maas, Henry S., and Kupers, Joseph A. From Thirty to Seventy: A Forty-Year Longitudinal Study of Adult Life Styles and Personality. San Francisco: Jossey-Bass, 1975.

Neugarten, Bernice L. (ed.). Middle Age and Aging. Chicago: University of Chicago Press, 1968.

Newman, B. M., and Newman, P. R. Development Through Life. Homewood, Ill.: Dorsey Press, 1975.

Pressey, Sidney L., and Kuhlen, Raymond G. Psychological Development Through the Life Span. New York: Harper, 1957.

Sheehy, Gail. Passages: Predictable Crises of Adult Life. New York: E. P. Dutton, 1974. Stevens-Long, Judith. Adult Life: Developmental Processes. Palo Alto, Cal.: Mayfield Publishing Co., 1979.

Troll, Lillian E. Early and Middle Adulthood. Monterey, Cal.: Brooks/Cole, 1975.