

DOCUMENT RESUME

ED 127 478

CE 007 745

AUTHOR Pierce, William F.
 TITLE Lifelong Education--Into the Nation's Third Century.
 INSTITUTION Ohio State Univ., Columbus. Center for Vocational Education.
 SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
 PUB DATE Jul 76
 CONTRACT NE-C-00-4-0012
 NOTE 24p.; Paper presented at the Career Education National Forum (2nd, Washington, D. C. February, 1976)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
 DESCRIPTORS *Adult Education; *Adult Learning; Career Education; *Continuous Learning; Educational Objectives; Educational Policy; Speeches

ABSTRACT

This document, a presentation made at the Second Career Education National Forum, discusses concepts related to increasing the awareness and importance of lifelong education. Three kinds of education--formal, informal, and non-formal--are defined and described in relation to the need for non-restrictive educational settings and attitudes which would enhance and support lifelong education. Two things are cited that career education should impart to adults: first, it should provide each individual those skills required for him or her to take maximum advantage of every occupational and educational opportunity; and second, it should develop in each person a predeliction toward continuing to learn throughout his/her life. In reference to adults, the facts remain that: (1) Large numbers of adults already express dissatisfaction with the three arbitrary stages of life (youth, adulthood, and old age), which assign educational activities to youth, (2) a large number of adults suggest that they have been conditioned to believe that education is for youth, (3) access to continuing education has been eased by advances in technology, increased leisure time, and other situations, and (4) there is no clearly formulated policy framework for adult activities and educational opportunities. Suggestions are made for ways of establishing lifelong learning attitudes and how such attitudes are significant. References are included. (WL)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED127478

LIFELONG EDUCATION—
INTO THE NATION'S THIRD CENTURY

by

William F. Pierce
Deputy Commissioner
for Occupational & Adult Education,
United States Office of Education

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING
IT. POINTS OF VIEW OR OPINIONS STATED
HEREIN DO NOT NECESSARILY REPRESENT
THE NATIONAL INSTITUTE OF EDUCATION.

The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

July 1976

CE 007 745

This publication was prepared pursuant to contract (No. NE-C-00-4-0012) with the National Institute of Education, U. S. Department of Health, Education and Welfare.

Presentations prepared under the auspices of the NIE do not necessarily represent official NIE or CVE position or policy.

THE CENTER MISSION STATEMENT

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- . Generating knowledge through research
- . Developing educational programs and products
- . Evaluating individual program needs and outcomes
- . Installing educational programs and products
- . Operating information systems and services
- . Conducting leadership development and training programs

PREFACE

The Center for Vocational Education is pleased to have provided a forum for Ohio's vocational educators to share their ideas, research, and experiences with their colleagues from other regions. Our first two forums were held in 1987 and 1988 at the Center and were the first of a series of forums on vocational education. The present forum was held in Columbus, Ohio, in 1990, and was presided over by leading practitioners in the field. It was held to provide a forum for ideas, research, and information on topics relevant to vocational education. We are hopeful that this exchange will help to stimulate a continuing impact upon future developments at the state level. We would like to thank Corinne Rieder, Associate Director of the NDE Education and Work Task Force, and look forward to her role in coordinating the Third Forum, with hope that the interest and participation of career educators will again form the foundation for stimulating discussion and thoughtful critique.

The Center is indebted to the National Institute of Education, sponsor of the Forum, for its support and advice in Forum planning. We also appreciate the time and efforts of those presenters who shared their insights with us all.

This monograph series includes Forum keynote presentations and additional papers from distinguished lectures presented at the Forum.

The Ohio State University and The Center are proud to share these papers with you.

Robert E. Taylor, Director
The Center for Vocational
Education

INTRODUCTION

William Pierce has been involved in the exploration and study of the "lifelong learning" concept for several years in his role as Deputy Commissioner for Occupational and Adult Education, as well as being a U.S. representative to both the UNESCO Experts Conference on Lifelong Learning and the OECD Experts Conference on Adult Education in Paris in 1975.

Dr. Pierce, a native Texan, has an educational background in various specialties related to vocational education: a B.S. in agriculture education and an M.Ed. in education from the University of California at Davis and a Ph.D. in education from Michigan State University.

Having completed six years of teaching experience, Dr. Pierce joined the staff of the Michigan Department of Education as a consultant in Manpower Development and Training. Within eight years, he rose to positions of Director, Division of Vocational Education and finally Deputy Superintendent of Public Instruction.

In January 1973 he was appointed Deputy Commissioner for Occupational and Adult Education, U.S. Office of Education.

Dr. Pierce has authored numerous articles on career education, among them "Career Education - Career Renewal" a chapter in the book titled *In Quest of Knowledge*.

The Center for Vocational Education and the National Institute of Education are proud to share with you this recent paper, "Lifelong Education - Into the Nation's Third Century."



Lifelong Education—
Into the Nation's Third Century

William F. Pierce

The education process long ago burst the seams of the school building designed specifically for giving and receiving knowledge. One's education *may* be centered in the school, but incredible amounts of education and learning take place in other settings as well—on a job, in a community program, and through independent efforts via various media forms. My own thinking in this regard was guided by three definitions recently developed by the International Council for Educational Development. These definitions contribute to my feeling that the “Work to School” theme of this Second Career Education National Forum is too restrictive. ICED defined informal, formal and non-formal education in the following ways.¹

- *Informal education* . . . is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment—at home, at work, at play; from the example and attitudes of family and friends; from travel, reading newspapers and books; or by listening to the radio or viewing films or television. Generally, informal education is unorganized and often unsystematic; yet it accounts for the great bulk of any person's total lifetime learning—including that of even a highly “schooled” person.

1

7

- *Formal education* . . . is, of course, the highly institutionalized chronologically graded and hierarchically structured "education system" spanning lower primary school and the upper reaches of the university.
- *Non-formal education* . . . is any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children. Thus defined, non-formal education included, for example, agricultural extension and farmer training programs, adult literacy programs, occupational skill training given outside the formal system, youth clubs with substantial educational purposes, and various community programs of instruction in health, nutrition, family planning, cooperatives, and the like.

Given these definitions for the individual who views learning as a continuous process, and who is dedicated to the value of informal and non-formal, as well as formal continuing education, having education and learning restricted to any one setting is not only ridiculous but operationally impossible.

The various aspects of career education are designed, when reduced to their simplest terms, to optimize each individual's ability to function in our society. I noted with interest, however, that most of the topics discussed at The Second Career Education National Forum were related to activities which typically take place within secondary or post-secondary institutions. Far too many of us have failed to worry about or even consider the contribution that career education should make to the thought process, attitudes, and the behavioral patterns of adults *after* they leave the formal educational system. Willard Wirtz,⁹ in his book *The Boundless Resource* presents a possible explanation. He says:

2

8

The place to start toward a more productive inter-relating of education and work remains at that critical passage through which young people move from school to jobs. This is not where the real roots of the difficulty lie. But it is here that the gap between the two worlds is now most clearly perceived. It is here that the problems surface in a way they can be dealt with. And it is here that processes can be most readily designed that, while meeting immediate needs, are of a nature to permit later application to the deeper causes and longer-range prospects. It is at the youth passage that we have had the most institutional experience, and it will be out of this experience, rather than from any broader logic, that more comprehensive programs will take shape.

Because we have developed a front loaded education system we seem to have lost sight of the residual effect of education. We've apparently made the assumption that if we do certain things to children, adulthood will take care of itself. I think we need to challenge that assumption. As a matter of fact, I believe that most educators still think of the educational process as finite, and learners think of schools as something they have to "get through." We've all heard such statements as: "When I *get through* school I'm going to . . ." or "Where do you plan to live when you *get through* school?" or "Boy, I can't wait to *get through* school so I can go to work." Wirtz,³ again in *The Boundless Resource*, says we've categorized life into three stages and assigned certain functions to each stage. "Youth for education, adulthood for work, old age for retirement." He then suggests that as a result of this type of mind set "any seventeen-year-old not in school is a dropout, any healthy forty-year-old not at work a laggard, any seventy-year old still at work an anomaly."

It is as though people thought that the body of knowledge available to the learner is so small that when one "got through" elementary school, high school and college they had acquired, for all intents and purposes, the majority of the available knowledge known to man. That never was true, and it is trite to even consider such an approach in today's world. When we complete any level of schooling today we can be characterized as having read the fly leaf of man's book of knowledge. And unless we're content with a society which goes through life only reading the dust covers and never the books, we will have to continue to be learners throughout our lifetime, not only to strive to become as fully knowledgeable as possible, but also, to be able to cope with the world as it changes around us. Young and old alike must not only learn to adjust to all types of changes, but, more importantly, to look ahead and take measures to *control* what is happening.

I do not need to dwell on the consequences of failure to adjust to and to control for change. Nor is it difficult to predict the magnitude of such changes. Just consider these statements, selected at random from such weighty predictive documents as *Time*, *U.S. News and World Report* and *Newsweek*.

- The gasoline combustion engine has enabled present-day man to transport more goods, harvest more crops and travel further and more comfortably than any man in all past history. Few could foresee how the automobile would disrupt social life. It gave youth a new way of courtship, the criminal a faster escape from the scene of the crime. It contributed to urban sprawl and to the pollution of the air we breathe.
- Census Bureau predictions call for an additional 50 million Americans by the year 2000. This means additional housing and services.

- Limits are predicted for industrial expansion and single family housing, while apartment living will flourish in cities and close-in suburbs. Public transit will increase sharply; two-car families will become rare. There is presently a trend toward smaller homes, fewer appliances and simpler clothing by consumers.
- The effects of science and technology will be global, with the thrust coming chiefly from the United States in such areas as computerization, lasers, atomic energy, and satellite communications.
- The laser will make an impact on the medical profession soon. The removal of tonsils, for example, could become a routine, outpatient procedure. The laser beam can cut out the tonsil and cauterize the bleeding wound all in one quick burst. It has also been used successfully on a number of other bloodless surgical procedures including removal of malignant tumors and treating bleeding ulcers. Researchers are also exploring ways of using the laser in dental applications.
- Increased oil prices in America and Europe will spur an all-out search for clean, renewable alternatives. As known and accessible oil reserves dwindle, the urgency of alternative sources will be stepped up. Solar heating and cooling will call for changes in new home construction.
- Increased leisure time will continue, with working hours meshed with personal interests--family excursions, gardening, concerts, athletic events.
- The growth of education beyond the early years of life is likely to accelerate. People of all ages and economic

groups are likely to be going to college full-time or part-time, for a few days or several years, for pleasure or for vocational or academic courses. By 1990, education will probably be accepted as "a lifetime process."

These predictions of future changes are obviously not meant to be all inclusive nor are they necessarily the most significant. They are simply illustrative of differences with which you and I, and most importantly, our children, must cope. And since these predictions are futuristic, the educational system can't teach us *about* them, but can only teach us how to deal with them appropriately whenever we encounter them.

Using this background, I would like you to consider with me the contention that career education must impart two things to every adult. First, career education should provide each individual those skills required for him or her to take maximum advantage of every occupational and educational opportunity; and second, career education should develop in each person a predilection toward continuing to learn throughout his/her life. Having imparted both the necessary skills and the necessary attitudes to the individual, we must then see to it that we, as a society, and particularly as educators, provide an appropriate learning environment to those millions of adults who continue the quest for knowledge. Let me emphasize an earlier comment—a school building is not always an appropriate learning environment—certainly not the sole one!

In this bicentennial year we find ourselves engaged in a great deal of introspection. What we find both thrills and disturbs us. The idea is perhaps best illustrated by a bicentennial bumper sticker I saw recently. That sticker did two things. First, it undoubtedly set every grammar teacher's teeth on

edge, and second, it captured the honesty, the optimism, the pioneer spirit of this country. It showed our pride in what we have and, at the same time, our willingness to constantly strive to improve it. The sticker said, simply and ungrammatically, "America--it ain't perfect, but we ain't done yet!" As an educator, I'm compelled to change the language slightly but, at the same time, I'd like to capture the flavor of that bumper sticker as it relates to American education. Therefore, may I suggest this paraphrased thought: "American education--it isn't perfect, but we're not finished yet!" As we try to perfect the system, as we rush headlong into our third century, I ask you to consider lifelong learning as one absolutely necessary ingredient.

So, I would ask you, again within the context of career education, to consider an education movement that we in the United States seem to be becoming aware of much later than planners in other countries. That movement is, of course, lifelong education or lifelong learning. One of the best descriptions of lifelong learning that I've seen can be found in an Organization for Economic Cooperation and Development document entitled *Recurrent Education: A Strategy for Lifelong Learning*. The OECD document puts it this way:

The concept of recurrent education . . . expounds the relationship between learning and "education" by putting it in the perspective of the necessity for a lifelong process of assimilation of new knowledge and experience at the service of a continuous openness to new situations and of enhancing people's ability to take destiny into their own hands . . . The view is put forward that, because of the complexity of modern society, due in great part to technological development, the need for opportunities to alternate

incidental and informal lifelong learning with more organized and intentional educational opportunities is rapidly increasing.⁴

The United States has never opposed adult learning; indeed we've encouraged it in many ways. One needs to point only to such programs as college extension courses, the agricultural extension service, off-campus continuing education programs, night school, as well as certain federal programs, such as adult basic education, designed to serve predetermined groups of people. And millions of adults take advantage of these programs and opportunities every year.

Exact figures for adult enrollments are difficult to obtain because reporters of enrollments use widely differing criteria for including a program or a certain age group. There are data available, however. The National Center for Education Statistics,⁵ for example, projects that in 1975 approximately 18 million people or 13.3% of those eligible to participate will have participated in adult education. The 1973 Carnegie Commission report,⁶ *Toward a Learning Society*, estimated that, as early as 1970, about 57 million people were enrolled in higher and other post-secondary education. That figure includes enrollments in short-term, non-formal educational programs. Even using the Carnegie Commission figure there were an estimated 78 million adult Americans who had the opportunity to participate in adult learning, but who did not perceive themselves as lifelong learners.

Even though exact data are difficult to obtain, four facts remain.

- *First*—large numbers of adults already express dissatisfaction with our three arbitrary stages of life, which assign educational activities to youth. In addition to the figures I've quoted let me share with you an example of the magnitude of non-formal education in this country.

Several years ago the National Center for Education Statistics' reported the findings of a survey of education programs in community organizations such as churches, American Red Cross, civic and cultural groups. They found that nearly 70,000 organizations provided three hours or more of organized instruction to nearly 11 million individuals using about 2 3 of a million staff. Only 43,000 were paid and over half a million were volunteers. That's big business! But somehow all of the incredible energy those activities represented are not considered "education" by policy makers.

Most of the American populations, whatever their age, class, ethnicity or background, learn *outside* any of the educational establishments of their country. Therefore, policy making and planning for lifelong learning must consider the scope of the population to include all citizens.

- *Second*—The vast number of adults who *do not* participate in educational activities suggest to us that they have been conditioned to believe that education is for youth. That conditioning of the thought process of adults needn't prevail. It is being overcome in other countries through such movements as lifelong learning; and can and should be overcome in the United States. As Wirtz says in the source previously cited, "For putting life into three time traps—education, then work, then obsolescence—

is a human convention that became reality because it first became custom.”

- *Third*--Advances in technology, increased leisure time, improved working conditions, increased income and a greater social conscience on the part of business and industry all should contribute to easing the individual's access to continuing education. An examination of the participation rate has shown that we have, unfortunately, taken surprisingly little advantage of those conditions. Two questions suggest themselves. Why is that so and what can we do to correct the situation--or must it be so in the future?
- *Fourth*--All of the adult activities which currently go on and all the educational opportunities which are available to adults exist without a clearly formulated policy framework. They are excellent as far as they go but, like informal education, they are unorganized and often unsystematic. In short, we have no delivery system for lifelong education.

It is the fourth fact, the lack of a policy framework, which has motivated some of us in the Bureau of Occupational and Adult Education, U.S.O.E., to undertake a cooperative effort designed to articulate a framework for a lifelong education policy for the U.S.

As we've met over the last couple of years to explore this issue, we have raised more questions than we've provided answers. For example, our last two-day conference resulted in our agreement to finding answers to the following questions:

1. What conceptual framework and definitions for lifelong learning are needed?

2. What are the public policy concerns in lifelong learning?
3. Can increased opportunities for lifelong learning help resolve national problems? If so, which problems, to what extent, how?
4. Should there be more or less governmental (federal or state) intervention in lifelong learning?
5. Should public policy focus on lifelong *learning* or on *education* and how can the differences between the two be clarified?
6. What are the best delivery systems for providing lifelong learning?
7. What are the best methods of promoting lifelong learning?
8. What are the appropriate roles for federal, state and local governments, for educational institutions, for other educating agencies and for individuals? How should the assignment of roles be made and how should conflicts be resolved?
9. What is the audience for lifelong education? What are their most immediate needs?
10. What is the appropriate relationship between the self-directed learning conducted by most adults and the formal system of education provided through institutions?
11. How can opportunities for lifelong learning be financed?

12. How should the non-educational resources of our society be involved--business, industry, labor unions, mass media, voluntary associations, etc.?
13. What is the role, if any, of accreditation, certification, evaluation?
14. How should the interests of "consumers" and "providers" be protected?
15. How can the special needs of the disadvantaged and other minorities be met, particularly if there is a broadening of access to all groups in society?
16. How can learners generally be more involved in the development of lifelong learning policies and programs?
17. How can a better integration of work and learning be achieved?
18. How can the lifelong learning concept help to provide a better transition from youth to adulthood?
19. What are the barriers to lifelong learning?

That's a long list of unresolved questions. I share it with you because I want to make it clear that in raising the issue of lifelong learning with you I am prepared only to present the need—not to offer pat answers or easy solutions. I simply wanted to take the opportunity, as we consider ways to broaden the scope of the formal, youth-oriented educational endeavors, to ask that we also heighten our sensitivity to the educational needs of adults who should become lifelong learners.

Some answers are beginning to emerge; however, Patricia M. Coolican⁹ has done important research on what she calls "self-initiated learning" of adults. From her analysis of several major studies, including her own works, she has described the characteristics of the learning activities of all American adults:

- Almost every adult undertakes learning as a consciously pursued activity. "Learning" is the conscious, sequential pursuit of a knowledge objective.
- Most learning activities are initiated for practical reasons related to knowledge and skill needs for job, home, family, or recreation.
- The major planner of adult learning is the learner himself. Self-planned, self-initiated, and self-achieved learning accounts for approximately *two-thirds of the total learning efforts* of adults.
- Group-planned learning activities only account for 10 to 20 percent of the total adult effort in this country.
- Learning for credit constitutes only a minor proportion of the educational undertaking and investment of American adults.

Most significantly, the adults studied in several of these major investigations were asked to name their *preferred learning environment*. The clear majority (55%) named their homes as the site most suitable to their needs; the job locale was a distant second choice (19%), and at the low end of the spectrum only 3.5% name "school" as a "most suitable place" for undertaking their learning pursuits.

Thus, we find ourselves with a large universe of learners in this country; many of them are the youth, enrolled in formal schooling, but as we move along the age continuum, we find increasingly larger numbers of adults who have elected to satisfy their learning needs in institutional educational settings.

It occurs to me that if I have argued my case regarding the need for lifelong learning effectively, on an economic as well as a humanistic base, educators may be experiencing two reactions.

The first reaction, hopefully, is "OK. That's cool! We need to do that." The second possible reaction is "so what's that got to do with me? I'm a third grade teacher interested in career education. Why do I have to worry about lifelong learning?"

As I said earlier, we currently have more questions than answers, so I'm afraid my responses to those reactions will be, by necessity, a bit vague. There is no vagueness in my belief, however, that everyone, whether an elementary teacher, a junior high, high school or college instructor, or an administrator, has a direct responsibility for the establishment of a lifelong learning attitude in our citizens.

Let me suggest some of the ways it is significant for all educators.

- Through their own example and through their classes, educators need to convince young people that they should expect to change jobs 5 to 7 times, and occupational fields once or twice during their life times and, consequently, they should *expect* to continue to learn throughout their lives.

- Educators should convince students that not only is it appropriate, but recommended that a person learn to appreciate classical music at the age of 35.
- They should learn to understand that anyone who wishes to do so, should learn to paint in oils at the age of 50 or learn to understand electronics at age 60.
- Administrators will need to establish an atmosphere with both students and parents which suggests that it is perfectly appropriate to leave formal education for a while and return later when it becomes important to the individual to do so. The learner, as well as non-learners, must come to understand that there is no magic about the time one acquires knowledge. The magic which must be understood is that the individual never stops trying to acquire that knowledge.
- Teachers, administrators and learners must accept different learning environments as appropriate—including the home.
- Young people should learn that, as potential entrepreneurs, they have a responsibility to assist those who may work for them in the future as they strive to learn.

These are only a few of the new attitudes that educators involved in career education can instill—indeed must instill—to support the lifelong learning movement.

An awareness of, interest in, or a commitment to lifelong learning won't require many behavioral changes for most teachers. The important factor is an awareness of the need to instill these attitudes in students, and that can be accomplished

as a natural part of daily teaching activities. And there are incredibly innovative ways to do it--just as there are innovative ways to instill career education concepts into the curricula.

If lifelong learning is to become a reality in this country, there are critical "musts" educators need to obey. I will mention only a few.

- We must abandon for all time the belief that education is only for the young. Indeed, in terms of cost effectiveness, it may be most inappropriate when assigned to that age.
- We must learn how to instill in our people a positive, personal commitment to learning throughout their lives.
- We must recommit ourselves, as educators, to satisfying the learning needs of individuals (as lifelong learners *where they are* rather than insisting they respond to the institutional needs of the system).
- We must find ways to harness and take advantage of the almost immeasurable learning which occurs to each of us through informal education. In my opinion, it need *not* remain totally unstructured, unorganized, and unsystematic.
- We must recognize that adults will be motivated to pursue further education for a variety of reasons (occupational, cultural, social) and consequently, we must design a system which responds to all their motivations.
- We must redesign our institutions, our businesses, our industries so that they do not serve as barriers to an individual's positive personal commitment to the acquisition of lifelong education.

There are surely other imperatives which one could mention. These, however, strike me as the most crucial if we are to accomplish a commitment to lifelong learning.

Toffler¹⁰ tells of the 65-year-old man who enrolled in a course on futures he was teaching. In response to a question of why was he there, the old gentleman replied, "I want to die an educated man." How many people do we know who at 65 still have such a positive attitude toward further education and self-improvement that they would enroll in a course dealing with occurrences they'll probably never live to experience? Far too few I'm afraid.

The challenges to career educators in the next few years are:

- First, to develop in all our young people an attitude toward lifelong learning similar to that held by Toffler's 65-year-old student, and
- Second, to provide each person access to an educational system designed to allow them to carry out that attitude in the most efficient manner possible.

If those two goals become kind of a nagging desire to most of you, even if it's almost at the subconscious level, then my purpose has been accomplished.

REFERENCES

1. International Council for Educational Development. Reproduced in the report by the Organization of Economic Cooperation and Development. *Learning Opportunities for Adults*. Paris: Center for Educational Research and Innovations, Ed(75)9, 1971, p. 11.
2. William Willard Wirtz. *The Boundless Resource*. Washington, D.C.: The New Republic Book Co., Inc., p. 4.
3. Ibid.
4. Organization for Economic Cooperation and Development. *Recurrent Education: A Strategy for Lifelong Learning*. Paris: Center for Educational Research and Innovations, 1973, p. 18.
5. National Center for Education Statistics. *Digest of Education Statistics*. Washington: Department of Health, Education and Welfare, 1975.
6. Carnegie Commission Report. *Toward a Learning Society: Alternative Channels to Life, Work and Service*. New York: McGraw, 1973.
7. National Center for Educational Statistics. *CONTINUING EDUCATION: Adult Education in Community Organizations*. Washington: Office of Education, DHEW, 1972.
8. Wirtz. *The Boundless Resource*, p. 7.
9. Patricia M. Coolican. *Self Planned Learning. Implications for the Future of Adult Education*. A paper prepared for the U.S. Office of Education, Division of Adult Education, Syracuse University Research Corporation, Syracuse, N.Y., 1974.
10. Alvin Toffler. *Future Shock*. New York: Random House, 1970.