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ABSTRACT

This document provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration. The first four sections discuss: the need for continuous education in the later years as a means to improve the circumstances of the older people; long-range goals of educational programs for the elderly; knowledge available on the present status of educational organizations and programs specifically related to the aging; and identifiable gaps involved in meeting their educational needs. The fifth section of the paper raises several issues relevant to education for older people. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the educational needs of the older population.

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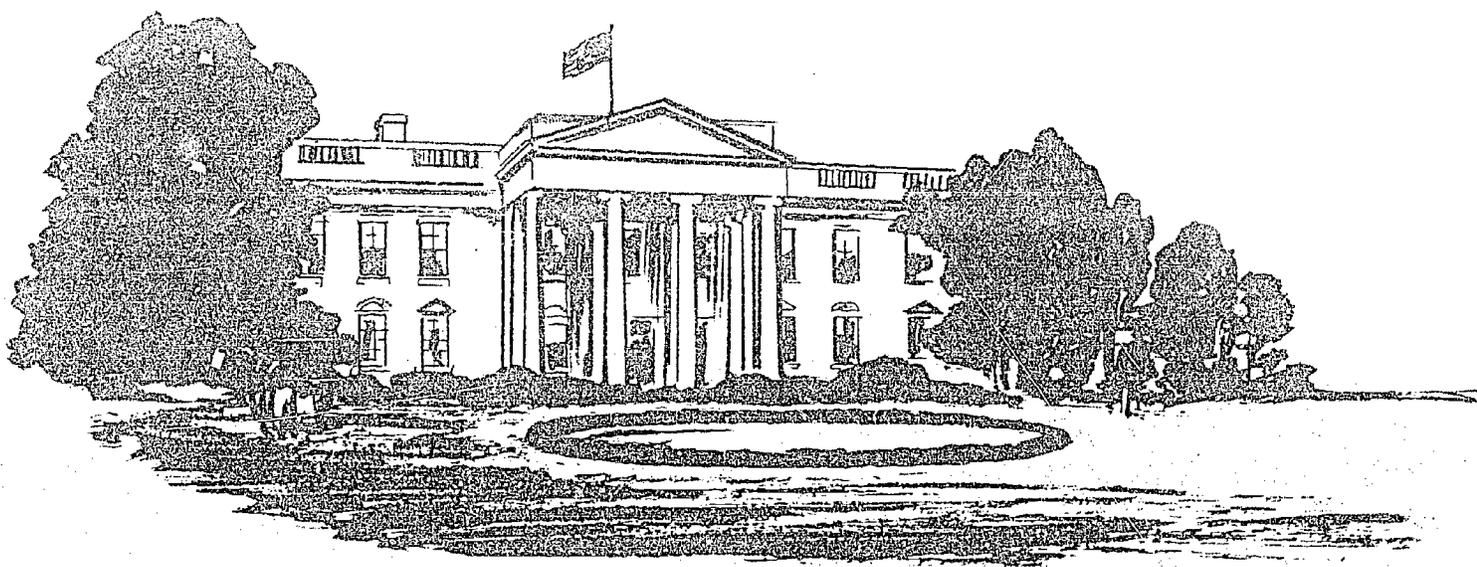
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1971 WHITE HOUSE CONFERENCE ON AGING

EDUCATION

BACKGROUND

Howard Y. McClusky, Ph.D.

ISSUES

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with the collaboration of the author

John W. McConnell, Ph.D., Chairman

White House Conference on Aging
Washington, D.C. 20201
February 1971

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FOREWORD

The paper on Education provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the national White House Conference on Aging to be held in Washington, D.C., in November – December 1971.

The first four sections of the paper discuss: the need for continuous education in the later years as a means to improve the circumstances of the older people; long-range goals of educational programs for the elderly; knowledge available on the present status of educational organizations and programs specifically related to the aging; and identifiable gaps involved in meeting their educational needs. These sections of the paper were prepared for the Conference by Howard Y. McClusky, Ph.D., Emeritus Professor of Education, The University of Michigan, Ann Arbor, Michigan, with guidance from the Technical Committee on Education.

The fifth section of the paper raises several issues relevant to education for older people. The issues were formulated by the Technical Committee on Education for consideration by participants in White House Conferences on Aging at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the educational needs of the older population. The proposals and recommendations developed in community and State White House Conferences and by national organizations will provide the grist for the delegates to the national White House Conference in their effort to formulate a National Policy for Aging.

Arthur S. Flemming, Chairman
National Advisory Committee for the
1971 White House Conference on Aging

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I. INTRODUCTION—THE NEED

A. INTRODUCTORY REMARKS

From an educational standpoint, the impressive and distinguishing characteristic of our times is that we are now living in a "learning society." Within recent decades—and at an ever increasing pace—we have been arriving at a stage in societal development where learning is an essential condition for participation in the world about us and equally mandatory for advancement and personal development.

This new condition of society is largely the result of profound and accelerating change. Change is now so pervasive that all aspects of living and all kinds of people of all ages are affected. Moreover, change has become so much a part of the fabric of our lives that for the first time in the history of mankind—and promising to be even more so in the future—learning must be as continuous as change itself and inevitably lifelong in character.

The implications of this new educational mandate for the entire enterprise of education can scarcely be exaggerated. Its implications for meeting the educational needs of older persons are even more far-reaching and urgent. For, in the case of older people, change appears in a double and uniquely aggravating dimension. First, there is the change that is occurring in the surrounding society, to which we have already referred. But second, there are changes in the life situation itself as we grow older. Because of their drastic consequences, such changes produce a kind of "double jeopardy" for people in the later years. Thus, if learning is an attempt to adjust to and master change both within and without the individual, and, if that learning is to be relevant to one's particular situation, any consideration of the educational needs of the older person must, without compromise, confront the realities of the multiple impact of change inherent in the stage of the life cycle which older people occupy. Such a confrontation should lead to an educational program markedly different from that associated with the "credential" system of formal education in the earlier years.

B. A MARGIN THEORY OF NEEDS

It would be helpful as well as cognitively economical if early in our discussion we could introduce a central theme to which an otherwise miscellaneous array of "need items" could be related. If it can be demonstrated that different needs tagged with different labels are in fact interrelated to a central idea, then presumably our discussion will have greater meaning and have a wider range of application.

For this purpose, then, I would like to propose a "theory of margin." According to this theory, older people are constantly engaged in a struggle to maintain the margin of energy and power they have enjoyed in earlier years. At worst, with diminishing reserves, they may be fighting a losing rearguard battle for survival. At best, by happy acquisition of new resources or an equally fortunate reallocation of responsibilities, they may be winning in their effort to reach new levels of development.

More abstractly, "margin" is a function of the relationship of "load" to "power." By "load" we mean the self and social demands made on a person in order for him to maintain a minimal level of autonomy. By "power" we mean the resources, abilities, possessions, positions, allies, etc. which a person can command to cope with load. We can increase margin by reducing load or by increasing power, or we can decrease margin by increasing load or reducing power. In other words, we can control margin by modifying either load or power.

In this perspective, the later years can be viewed as a period in which significant and drastic changes in the load-power ratio are taking place. Inflation, increased taxes, new responsibilities for kin, are common examples of increasing load; change of residence to more modest housing, a reduction in standard of living, the increasing independence of kin, are examples of reduced load. On the other hand, retirement, involving loss of position and reduction of income, declining physical energy, if not illness, are examples of diminished power, while part or full-time re-employment, and appointment to positions of authority, may represent increased power.

A key factor, therefore, for the individual at any stage in life, and particularly in the later years, is the ratio between load and power. Whatever the load and whatever the power (up to a practical level), the crucial element is the surplus or margin of power in excess of load. It is this margin that confers autonomy on the individual, gives him an opportunity to exercise a range of options, and enables him to reinvest his psychological capital in growth and development. The rearrangement of load and power so as to preserve a favorable margin is one way of stating the major task of the later years. In fact, it is in the nature of this rearrangement that we may find the key to continuing development for older people. For example, if the aging person could replace the load required by the achievement of upward mobility or by the maintenance of social status, with the load or tasks of community service, or the preservation of things (natural or manmade) of beauty, and if by a program of study and training the older person could increase his ability to engage in such activities, his resulting margin could conceivably be more productive, satisfying, and growth-inducing than anything done earlier in life.

It is the thesis of this paper that education can, if properly conceived and implemented, be a major force in the achievement of this outcome. Thus, the preeminent and universal educational need of the aging is the need for that kind of education that will assist them in creating margins of power for the attainment and maintenance of well-being, and continuing growth toward self-fulfillment.

C. CATEGORIES OF NEED—A FUNCTIONAL APPROACH

Turning more specifically to a delineation of the educational needs of older persons, let us begin first, by explaining what we mean by need, and second, by making a clear distinction between "educational" and other kinds of "needs-meeting" procedures.

The word "need" implies the existence of a desirable condition requiring the operation of certain factors for its attainment. The thing wanted may be minimal or it may be more desirable, if not optimal—or may simply be the least or the best we can attain. In common usage need is often associated with lack or deficit. Thus, according to one definition, a need is a "condition marked by the lack of something requisite" (Webster, 1967). But as another definition indicates, a "need is a requirement for survival, growth, health, social acceptance, etc." (Good, 1959). Thus, using some sort of minimal-optimal scale, survival is minimal, while growth, health, etc., are certainly better than minimal, if not optimal.

Hence, in analyzing the educational needs of the aging, we will be dealing with a *range of need*. For example, a minimum of physical adequacy is needed for survival; more than mere adequacy is needed for health. A minimal level of income is needed for a cliff-hanging level of subsistence, while substantially more is required for the maintenance of self-respect, and the freedom to choose those options which lead to personal growth.

On the second point regarding the distinction between procedures, it is important to bear in mind that educational procedures are only one kind of measure that may be employed to meet needs. There is possibly an educational component involved in trying to induce Congress to vote higher rates for Social Security, or in persuading employers to adopt retirement policies more favorable to the economic support of older people. But to be realistic, in a highly interdependent society moved in large part by powerful economic and political

forces, it requires more than "mere education" to meet the margin-producing needs of the aging. If this is not recognized it would be easy to lapse into a "cloud 9" form of romantic speculation that would confuse rather than clarify our understanding of the situation with which older people must learn to cope. In brief, then, in the following paragraphs we will be discussing a range of needs, from survival, through maintenance, to growth and beyond, realizing that although education has a significant and potentially powerful role to play, it must be supplemented by other kinds of measures in order to satisfy the basic requirements of the aging.

1. Coping Needs

At this point we return to our theory of margin. Since transition through the later years of maturity to old age involves, for the vast majority, substantial reductions in such things as income, position, influential affiliations, and energy, the power aspect of our load-power ratio becomes a matter of central concern. Coping with this reduction in power becomes a preeminent need at this stage in the life cycle, for, in a hierarchical sense, unless minimal coping needs are met, no surplus or margin of power is left over with which to meet higher needs. Thus, in any scale of priority, there is solid justification for placing the coping needs first.

Within the "coping" category, we have no alternative but to place basic education at that level which has first claim on the resources of education. This means simply that a minimal ability to read, write, and compute must be attained before a person can take part in the satisfaction of needs requiring more complex and advanced kinds of instructional procedures.

Basic education is placed first for three reasons. First, as already indicated, the three R's (reading, writing, and arithmetic-computation) are inescapably prerequisite to all other and higher levels of education. Second, the lack of these skills is far, far greater for older people than for persons in any other age segment of the population. Third, except for financial support, the acquisition of these skills depends on measures almost wholly educational in character. We teach people to read, write, and compute by instruction and not by political or economic pressure. Thus, in any ranking of the relative urgency of the educational needs of older people, basic education should come first.

Continuing, in descending order, with other coping needs, we would next include the category of educational need within which physical considerations come first and economic considerations second. Here, again, we encounter a hierarchical application of the theory of margin. A minimum of physical energy and health is a prerequisite to participation in other kinds of activity, and after health, a minimum of financial resources becomes necessary. Thus, after the acquisition of basic skills, we would place the need to educate for physical fitness at the top of any list of educational needs for older persons, followed by the need to educate for a minimum of economic self-sufficiency. To achieve physical fitness we would propose the use of instructional procedures to formulate and carry out programs for healthful living, including such measures as the use of nutritious diets, proper exercise, the practice of periodic physical checkups, and the management of convalescence. For economic self-sufficiency, we would expect education to be used in such areas as the maintenance and increase of income, money management, etc.

Other coping needs to be served are education for making the legal decisions which the later years require; education for selecting good housing and residential facilities; education to help adjust to and make the most of changing relations with the immediate and the extended family; and, while having less of the urgency that we associate with the notion of coping, education as to how to make the most rewarding use of leisure time.

It is not necessary for our argument to detail the content that might be included in a syllabus of instructional materials geared to meet the various kinds of needs mentioned above. Neither is there any advantage, beyond that already suggested—i.e., first, basic education,

followed by education for health and economic self-sufficiency—in attempting to rank the needs within the coping category in a hierarchical order or priority. The point is that coping needs are central. Deficits here threaten the elementary capacity of the older person to deal autonomously with his life situation. If education for the aging is needs-centered, then their needs as persons must be the foundation on which a program for the education of older people must be built.

2. Expressive Needs

The category of expressive needs is based on the premise that people have a need to engage in activities for the sake of the activity itself and not always to achieve some goal to which the activity has only an instrumental relationship. In this realm, motivation arises from an interest intrinsic to the expression which participating in the activity requires. There are plausible reasons for believing that the expressive need exists. In the first place, much of our sense of well-being consists in large measure of the enjoyment of the healthy expression of our natural physical capacities. It is enjoyable to exercise our muscles, and to use our senses of sight, sound, and taste. In the second place, expressive activity is characteristically spontaneous and open in character making possible the liberation of deeper and more primitive levels of personality. In the third place, it is generally accepted by psychologists that the human personality is capable of a far wider range of expression than the habitual maintenance routines and the specialization of modern life permit. It is postulated, therefore, that in most people—especially in the later years because of postponed desires—there is a large domain of unexpressed and underexpressed talent and interest which, if properly cultivated, could be activated to enrich one's living.

The later years, therefore, should be the vital years for the liberation of the expressive needs. For one thing, there is more time. For another, given a margin of health and income, there are fewer restraints to interfere with the cultivation of expressive activity.

3. Contributive Needs

Underlying the category of "contributive needs" is the assumption that older people have a need to give. They have a need to contribute something acceptable to others and to the community, blending the need to be useful and to be wanted. In a practical sense, this need can be identified as a desire to be of service. It could take the form of assistance to persons in special categories of deprivation, such as tutoring for the culturally deprived, counseling school dropouts, transporting shut-ins, or visiting the homebound. It could take the form of acting as a part-time staff member of such groups and organizations as day care centers, YM and YWCA's, and the Red Cross—organizations whose programs are geared primarily to community service. At a different level, such service could consist of contributed time for data collection and decisionmaking as a member of and/or consultant to the administrative boards of such agencies as hospitals, city councils, planning commissions, boards of education, etc. Moreover, it would not be necessary that all these services be given without pay. Because many older people live on incomes lower than that to which they were previously accustomed, some payment for service would not be incompatible with the satisfaction of the contributive need. This point can be confirmed by the success of the rapidly developing program for "foster grandparents."

But there is another dimension to the contributive need which is largely ignored and which deserves much greater recognition. We refer to the wisdom latent in the reserves of the older person's cumulative experience.

For operational purposes, let us say that the wisdom of the aging is a blend of at least two related factors. One is a capacity built up over the years to cope with the demands and emergencies of living; the other is the time perspective which the same years have made

possible. In spite of the sentimental and unrealistic overtones associated with talk about wisdom—especially in a society skeptical of anything unsupported by “hard data”—it is a thesis of this paper that the coping strategies and the sense of “time past” and “time to come” possessed by older people is a resource greatly needed by a turbulent, rapidly changing society demanding “instant solutions” to difficult problems. To be sure, age is not *per se* necessarily a mark of wisdom. Moreover, like all abilities, possession of wisdom is unevenly distributed and subject to the law of individual differences. Some older people are wise, and some are less wise, and some are stupid. But the argument here is that in the dimension of wisdom there is a resource that society greatly needs and has not yet learned to exploit.

4. Influence Needs

Although it receives uneven and only occasional attention in the literature, it is not difficult to make a case for the fact that people in the later years have a need to exert far greater influence on the circumstances of their living and the world about them than they are apparently and customarily able to do. Not necessarily, and not inevitably, but in general the later years are years of declining power. In the personal area, older people usually have less power, i.e., less income, less resilience, less assurance of vigorous health, than they had earlier, and, with some notable exceptions, less power than younger people. In the social realm, the power of older people is also problematic and highly contingent. They occupy fewer positions of influence and have access to fewer of the political and economic resources with which power is usually associated.

Although older persons may be less powerful, they are not powerless. With the right kind of education their power decline could be arrested, if not reversed.

Our discussion so far of the need of education for coping, expressing, and contributing, indicates how education can increase an older individual's influence in the personal realm. But education can also be designed to help older people bring about constructive change in society as well. More specifically, older persons have a need to become agents of social change, and therefore a need for that kind of educational experience which will enable them effectively and responsibly to assume this role.

Again, it is not necessary to detail here the content for this kind of instruction. In passing, however, we can note that there is an abundance of material from which such content may be built. To mention a few leading items, such material would obviously include an incisive examination of the power available to the citizen via the political process. Also, as a minimum, it would include the dimensions of power and decisionmaking structures at the community, state, and national levels. It would concentrate on those practical issues of vital concern to older people themselves, such as health, income, and housing, and, equally important, help older people to have a stronger voice in the broader issues of fiscal policy and human relations affecting the welfare of the community at large.

In brief, it is argued that older people have a vital need for that kind of education that will enable them to exert influence in protecting and improving their own situation, and in contributing to the well-being of the larger society. Thus, if transfer from instruction to practice were direct and explicit, it could be aimed at bringing about constructive social change. New “influence roles” in society would no doubt result, and a social climate more favorable for the development of self-respect might well ensue. Such a course would also help to shift the emphasis—so common in current programs—from “doing for” older people to helping them “do for themselves” as well as “do for the community.”

D. THE NEED FOR PRETRANSITION (PRERETIREMENT) EDUCATION— A PROBLEM OF TIMING

So far, little has been said about the time when education for the later years should take place. In the discussion of coping, expressive, contributive, and influence needs above, if one were looking for some cue concerning the time when education in these areas would be

most effective, the "teachable moment" would seem to appear when a problem confronts the older person with an urgent need for decision and/or action. Thus, by implication, the later years, would appear to be the best time for studying the problems of those years.

But both practice and theory indicate that education for the state of being old should occur much earlier—some argue as early as the elementary and secondary school. A discussion of the latter view is beyond the scope of this paper. It is urged here, rather, that about 45 is a plausible age to begin the process of educating for old age.

The basis for arguing that one start to think constructively about retirement and its meaning twenty years ahead of time, is a clear one. An early introduction to the issues an adult will encounter as he or she makes the transition from a working to a nonworking style of life will enable that individual to anticipate the hazards and opportunities of the later years. By so doing, he will be able to regulate his living in advance so that when hazards appear they will be defused, and the opportunities can be exploited. To illustrate, proper exercise, periodic health examinations, weight control, the practice of good nutrition, and the like, if started early and responsibly pursued, would greatly diminish the probability of suffering a crippling illness later on, would increase physical fitness, and lead to the maintenance of a higher energy level. Early attention to problems of money management, planning for an adequate retirement income, the cultivation of leisure time activities that would transfer to the future, and the appraisal of legal affairs, too, would vastly increase the chances that the issues arising inevitably from shifts in these requirements in the later years would be more effectively resolved.

But there is a need to begin education in the pretransitional (preretirement) years not only to acquire information for making vital decisions, but also for the purpose of developing attitudes which would help persons in both the middle and later years to view the aging process as a means of fulfillment and not as a depressing limitation to be resisted, if not ignored. In a youth-oriented society, the problem of persuading a middle-aged person to admit that some day he will move on into the later years and should therefore take some systematic and thoughtful measures in anticipation thereof, often presents frustrating difficulties in motivation, the resolution of which requires much more information and research than are now available. This, however, is an additional and compelling argument for the need for preretirement education.

In concluding this section, we can accent the thrust of our argument by referring to the themes often used for delineating educational needs-meeting systems which we have *not* used. We have *not* said that we need an enterprise of instruction to take older people off the labor market. We have *not* proposed that there is an educational need to socialize older people into the culture. By age 65 and beyond this presumably has already been accomplished. We have *not* stated that there is a need to educate older people for upward mobility, expertness, and achievement in the cultural and societal terms usually expressed. The comparative irrelevance of such terms for the realities and unique opportunities of the later years is striking evidence for *the drastic reorientation of thinking and planning essential if any program adequately related to the education of older people is to be developed.*

We have been proposing here a basically "person-centered" approach to the determination of the educational needs of older people. The ultimate validation of this approach will in the longrun come from older people themselves. If such a course is to be validated, older persons must be released from all the apparatus of "credentialism" such as prerequisites, grades, promotions, and degrees which tax so much of the energy of the professional educator. Old people must also be spared from the disposition of the educational system to use the elderly as it does younger people, placing the needs of the system ahead of the needs of the student. The opportunity to create something educationally significant, authentic, and fulfilling is unlimited and awaits the allocation of sufficient resources and the activation of imaginative leadership.

II. LONG-RANGE GOALS

The "education section" of The 1961 White House Conference on Aging, as part of its report stated:

...as a Nation we realize that continued planning and preparation are needed to insure the well-being, the strength, and the happiness of the older adult, his family, and his society. People need to prepare through continuing education as they prepare for earlier periods of life. Older adults can make a substantial contribution to the education of others. It is clear that National leadership is essential, that State leadership must be developed and expanded, and that there must be coordinated efforts among all agencies involved in education of older people (U.S. Senate Special Committee on Aging, 1961).

The long-range goals of education for older people may be summarized as follows:

- (1) To help older people grow in the fulfillment of their lifetime potential, thus assuring them the means of attaining a self-respecting level of well-being, freedom to cultivate a good life, and freedom to develop a partnership role in promoting the welfare of society.
- (2) To assist older people in developing the abilities uniquely available in the later years (e.g., wisdom and contributive abilities), and to assist the society in utilizing the abilities so developed.
- (3) To help older people serve as models of lifelong fulfillment for emulation and for the guidance of oncoming generations.
- (4) To create a climate of acceptance by both older persons and the society of the desirability, legitimacy, and feasibility of the preceding goals.
- (5) To help society understand the need and provide the support for quality education for everyone of all ages as a continuing opportunity in lifelong learning.
- (6) As an essential part of this comprehensive program of continuing education (goal 5), to provide specialized programs to meet the particular needs of the older segment of the population, illustrative of which (but not definitive) are the need for mental and physical health, for adequate income, for adequate housing, for adjusting to and making the most of relations with the immediate and the extended family, for making wise use of leisure time, and especially for preretirement education for dealing with these and related issues.
- (7) To make special provisions for delivering educational programs to "hidden populations" of older people, usually nonparticipant and isolated from the mainstream of community services.

III. KNOWLEDGE AVAILABLE

When we search the world of scholarship for "hard data" related to the education of older people, we emerge from our inquiry with several substantial impressions. First, such data on the education of older persons is extremely limited: obviously, this is a domain much neglected by educational research. Second, with respect to the amount of formal education attained, older persons are extremely disadvantaged. Third, rates of participation by the aging in activities designed for the education of adults are very low, in fact the lowest for all age segments of the population. Fourth, the ability of older people to learn continues at a high functional level well into the later years, age, therefore, in itself, being no barrier to learning.

In brief, then, older people are for the most part seriously deficient in formal education, generally nonparticipant in educational activities, but at the same time capable of an educational response far greater than that offered by existing opportunities and presumably expected by the society.

A. LEVELS OF FORMAL EDUCATION

Let us look in greater detail at the hard data concerning levels of formal education. When compared with 1960 norms, the level of education attained by older people is far below the national average for all portions of the population. One-fifth of persons 65 or more with four years of schooling or less are regarded as functionally illiterate; only one-third of those over 65 have continued in school beyond the eighth grade. The level of educational achievement is somewhat lower for those in rural than in urban areas, for men than for women, for nonwhites than for whites. Thus, in any random group of the population the oldest are the most poorly educated, and within this group levels of education decline in the following order: white women in urban areas, white rural women and white urban men (about the same), white rural men, nonwhite urban women, nonwhite urban men, nonwhite rural women, with nonwhite rural men at the bottom of the educational ladder. Such is the hierarchy of deprivation in formal education for people 65 years and over (Riley and Foner, 1968; also see Appendix A).

The meaning of this low level of educational attainment by older people takes on a new dimension when related to the levels of formal education attained by young people. For example, 72 percent of those 75 years and over have eight or fewer years of schooling compared with 17 percent of those aged 25 to 29. On the other hand, only 8 percent of those 75 or more have attended college compared with 33 percent of those 25 to 29 who have. While it is true that the level of education of older people is steadily improving as the less educated generations are replaced by the oncoming generation of the better educated, in relative terms the educational level of older people will continue to be lower than that of younger persons (Riley and Foner, 1968).

In brief, then, the data indicate that in terms of formal schooling, older people are the most poorly educated segment of the population.

The situation takes on a worse dimension when we turn from the amount to the quality and probable relevance of the instruction received. For example, since the education of older persons occurred early in their lives, it took place at a time when teachers were no doubt less qualified than those today and when instructional facilities were less adequate; furthermore, the subject matter offered then is now for the most part obsolescent in terms of today's needs. Thus, older people have had not only less education than younger people, but

education probably poorer in quality and almost certainly much less in tune with contemporary problems and requirements.

For example, take the case of a person 65 years old in 1970, born in 1905, who dropped out of school at the eighth grade. Entering presumably the first grade at age six in 1911, he discontinued his formal schooling in 1919. One may quite properly ask, does the instruction of 1911-19 constitute enough educational capital for a person now 65 or more in the totally different world of the 1970's? And how will this meager amount of instruction stand up against the more recent education of a 25-year-old who on the average completed 12, not eight, years of schooling between 1951 and 1963?

B. PARTICIPATION IN ADULT EDUCATION

Turning now from the realm of formal schooling, what do the "hard data" show regarding the participation of older people in educational activities?

Here, again, the picture is bleak. Our most dependable evidence at this juncture comes from a study conducted by Johnstone and Rivera under a Carnegie subsidy for the National Opinion Research Center (Johnstone and Rivera, 1962, p. 73). The results indicate that persons under 50 were substantially overrepresented in the population participating in educational activities, while those over 50 were underrepresented as follows: thirteen out of an expected 16 percent of the 50 to 59 group participated; six, or only half, out of an expected 12 percent in the 60 to 69 group took part; while only two out of an expected nine percent in the 70-plus group reported having engaged in educational activities. In a summary of recent research Knox came to a similar conclusion (Knox, 1965).

Both of the above cited studies are based on participation in all forms of adult education offered by all kinds of agencies. What do the data show concerning participation in a specialized program area like adult basic education? Information here should be especially relevant since the need for adult basic education is overwhelmingly strong among older people. The question is, where the need is greatest, is participation any greater?

According to a report recently issued by the U.S. Office of Education (National Center for Educational Statistics, 1970), of the 479,912 persons who took part in the adult basic education programs in 1969 subsidized largely by grants from the U.S.O.E., 24 percent were age 18-24, 26 percent age 25-34, 25 percent age 35-44, 15 percent age 45-54, seven percent age 55-64, and only three percent 65 and over. The trend for peak participation in the period 18 to 45 and a sharp decline thereafter to virtual nonparticipation holds true for all states in all regions of the United States (Appendix B).

The above data are only a sample of the many studies of participation in adult education with which age is correlated. In all of these investigations without exception, participation declines after age 50 and declines sharply after 65. This is true not only in terms of absolute numbers but is even more true with respect to the ratio between those participating and the percentage of their age group in the population as a whole. In other words, as persons advance in years they become more and more under-represented as participants in adult education, and after 70 the overwhelming majority could be registered as nonparticipants.

C. ADULT ABILITY TO LEARN

But what about the ability of adults to learn? Is it possible that declining rates of participation is a reflection of a declining ability to participate?

Again, what do the "hard data" show? In general, they show that age *per se* is no barrier to learning. Indeed, a good case can be made for the fact that *we can not only teach an old dog new tricks, but there are probably some tricks that an old dog can learn better*. Let us look at the evidence.

In general, there have been two kinds of data employed to deal with this issue. One is cross-sectional and the other longitudinal in character. The cross-sectional study looks at a random number of persons in different groups at successive age levels, while the longitudinal studies the same persons over various intervals of time. The first, of the horizontal type, was reported by Thorndike in his classic volume on adult learning published in 1928 (Thorndike, 1928). He administered diverse learning tasks such as encoding messages, learning an artificial language, and learning to write with the nonpracticed hand, to a wide range of subjects from 14 to 50 years of age. The results were measured in terms of the amount of the task performed per unit of time. Thus, Thorndike's was a study of the *rate of learning* over time. From this investigation was derived the famous Thorndike age curve of learning with a peak performance at 22 and a decline of about 1 percent a year to age 50.

Another investigation by Jones and Conrad of the intelligence (defined as the ability to learn) of about 1,200 persons ranging from 10 to 60 years of age in several New England villages yielded similar results. They showed a steady rise in performance from 10 to 21, followed by a decline in each of the subsequent age groups (Jones and Conrad, 1933).

Using the Otis intelligence test, Miles and Miles found comparable results. Again, their report revealed a peak at about 20 with regular declines in the years following (Miles and Miles, 1932). Yet again, Wechsler in his standardization of the Bellevue Intelligence Scale in 1935 showed a high point in the performance of his subjects at 22 with gradual decline thereafter. Wechsler's data are particularly pertinent since they were derived from the use of an instrument especially designed to measure adult intelligence (Lorge, 1955).

Thus, from the horizontal studies we get a picture of intelligence peaking in the early twenties with performance gradually diminishing thereafter.

But the longitudinal studies, most of which have been conducted since those cited above, have revealed a somewhat different and more favorable situation for age related to ability to learn. Beginning with studies at midadulthood of change in learning ability with age, it is interesting to note the outcome of a follow-up investigation of the famous study of gifted children conducted by Terman at Stanford University. On one occasion, Terman and Oden, and on another, Oden and Bayley were able to locate and retest a number of the original sample who, by the time of the later inquiry, were in the middle adult years. In general, the results of both investigations revealed a *gain* in each of four age groups on tests constituting measures of conceptual thinking (Terman and Oden, 1955).

In a study covering an even wider interval of time, Owens has reported a convincing body of data particularly relevant for the problem at hand. In 1950 when his subjects were about 50, he retested a group of college graduates who had originally taken the same test (Army Alpha) as freshmen at Iowa State College. About 11 years later, when his subjects were 61, he administered the same test a second time. Thus, there were two follow-up administrations of the same test to the same persons—the first after an interval of about 32 years and the second after an additional interval of about 11 years. At 50, the subjects showed a slight gain over their performance as college freshmen, and at 61, in general, they maintained the level they had attained at 50, with a decline only in tests of numerical ability (Owens, 1953, 1963).

Support for the Owens picture of the mental ability of adults over 50 is reported by Eisdorfer who, after a three-year interval, found little change in the performance of 165 adults on the WAIS scale (Eisdorfer, 1963). The research of Duncan and Barrett yielded similar outcomes with 28 men after a ten-year interval (Duncan and Barrett, 1961).

What is the meaning of this apparent discrepancy in the results of horizontal and longitudinal types of studies?

In attempting to answer this question Lorge, a student of Thorndike, made a distinction between speed or rate of response, on the one hand, and power of response on the other. He noted the fact that as persons move through the adult years there is a decline in the speed of their reaction. But he was quick to point out that this did not necessarily signify a

Intellectual decline in the power to react. By using tests of power under timed and untimed conditions, he conducted a series of investigations that tended to confirm his theory.

Others have objected to the results of the horizontal studies on the ground that they reflect declines in the formal education of the successive age groups involved and not a decline in intelligence as a capacity. Moreover, some have claimed that tests of intelligence and learning are biased in favor of youth. Young people have usually had more experience in taking tests than older people, and their contact with the material in the test items is more recent and the material more available.

Finally, perhaps the most serious objection relates to the criterion problem. What is a valid criterion with which to correlate measures of adult intelligence? Is it academic achievement, a dimension often used in the validation of intelligence tests? Probably not. But effective performance in coping with the stresses and requirements of the adult years is a valid criterion, and if this could be measured, we might come out with a different view of the structure and growth of adult intelligence. The criterion problem is one of the most difficult to solve in the whole arena of psychological inquiry. It permits no easy answer, but it raises questions so fundamental that when related to the measurement of adult intelligence the problem is whether its decline or increase must be viewed in a different perspective.

But in this discussion we are concerned not only with the late middle or pretransitional (middle retirement) years but also the later years, i.e., 65 plus, as well. Unfortunately, studies of learning ability with age, of both the horizontal and longitudinal variety, have in most cases not involved persons in the years beyond 65. If we can be optimistic about the ability of adults to learn up to 65, what about the status of their ability in the years thereafter?

Our data here are less firm. Some studies show substantial decline in the 70's, while others reveal high levels of performance well into the 80's, especially if the subjects are healthy and motivated. But the problem of change in ability in the years beyond 70 can be better understood if we keep three factors in mind.

First, if a person is reasonably healthy, and if skills and abilities are used, they can be maintained at a substantially high level of performance.

Second, the evidence indicates there is a tendency toward a greater differentiation of performance in the later years. It is therefore closer to the facts to think of intelligence and learning ability in this period more in terms of a profile than in terms of a general factor. Thus, variation in scores on subsections of intelligence tests are likely to increase at this time. This means simply that in some tasks, decline may be quite substantial while in others performance can be maintained at customary levels or may actually improve.

Finally, decline *per se* need not necessarily be interpreted in a negative fashion. We can be helped here by Thorndike's analysis of intelligence into three dimensions: (1) power or altitude of response, (2) speed or rate of response, and (3) range of response within a fairly homogeneous level.

Usually, when we are talking about changes in learning ability with age we are talking about Thorndike's power or altitude dimension. This should not obscure the fact that there are many worthy tasks to perform, useful things to learn, facts, insights, and concepts to acquire, which do not require a top level of activity. In fact, an honest appraisal of life's typical requirements suggests that much, if not most, of what we do, learn, and enjoy is done, learned, and enjoyed substantially, if not well below, peak levels.

All of which is to say, what if older people, or what if any one at any age, experiences a decline in some aspects of his range of response? Such a decline does not mean that the opportunity for learning is thereby necessarily and irreparably diminished. What one may lose (in most cases this appears to be slight) in power or altitude, one may for practical purposes make up for by increasing the range of activity.

As a result of some of his recent studies, Bruner has proposed the idea of a spiral curriculum. He makes the point that many concepts may be introduced for learning in a simplified form as early as the fifth grade, reappear in a more complicated form in the 10th

grade, and then be introduced in successively more complicated forms at the undergraduate and graduate levels (Bruner, 1961). The idea, then, that a skill or ability may be exercised at various points on Thorndike's altitude dimension places the whole problem of decline—especially when linked with the cumulative experience of the adult—in an entirely new, more realistic, and optimistic frame of reference.

In general, then, we are justified in saying that even into the 70's and 80's, and for all we know as long as we live on the functioning side of senility, age *per se* is no barrier to learning. There is no one at any age, even the most gifted, who is without limitation in learning. Thus limitation *per se*—age-related or otherwise—should not be our criterion for appraising the capacity of older people for education. *We can teach an old dog new tricks for it is never too late to learn.*

IV. THE PRESENT SITUATION

The picture with respect to the present status of the response systems presumably available for meeting the educational needs of older persons is extremely mixed, difficult to categorize, but somewhat less difficult to assess. The picture has all the features of ambiguity, unevenness, and promise, which often appear in the early stages of such a programmatic response, one which is attempting to meet a wide range of needs through a varied array of institutional auspices. Education for aging is served by the newest and least established response system, as a subdivision of general adult education. Adult education, in turn, is a comparatively recent stepchild of the "educational establishment." There are few, if any, surveys and few, if any, guidelines by which to chart a systematic appraisal of the situation in which education for aging now finds itself.

But there is useful and collateral precedent in the field of adult education as a whole and also a growing body of experience with education for aging as a specialized effort, out of which some tentative formulation may be fashioned.

A. FORMAL RESPONSE SYSTEMS

Beginning at the national level, and more specifically with the Governmental response, it is discouraging to report that there is apparently no unit in the Federal Government to which education for aging has been explicitly assigned as a major or exclusive function: there is none in the Office of Education, and none in the Administration on Aging. We find a parallel, though somewhat better, situation in the private sector. We "drew a blank" when we queried the American Council on Education and the National Education Association as to assignment of special units on aging. The situation at the Adult Education Association is a bit brighter for, ever since its founding in 1951, this association has had a section on "education for aging." Moreover, a special committee of the association has recently conducted a survey of literature concerned with education for the aging, in cooperation with the Eric Clearing House on Adult Education at Syracuse University (Jacobs, Mason, and Kauffman, 1970).

By and large, however, in both the public and private domains at the national level we find little evidence of leadership in the field of education for aging. If we encounter any activity here it will be found in the programs of such organizations as the American Association of Retired Persons and the National Council on the Aging. But in these groups as elsewhere, such programs are essentially subordinate to the more comprehensive goals which the organization has set for itself and are certainly not designed to exert the aggressive and statesmanlike kind of leadership which a national program of education for aging requires.

The situation at the State level is better, but not so by much. Here, the chief effort, when present, is located in the programs of the State Commissions (or offices) for Aging which now exist in all the 50 states. But again, if there is any activity in the realm of education it is usually subordinate to the requirements of interagency and public relations and the responsibilities involved in working on problems deemed more urgent, such as those of legislation, housing, health, and income protection.

Turning to State departments of public instruction—of all the 50 States, only New York has a unit devoted exclusively to education for aging. In spite of the admirable accomplishments of the New York unit under the leadership of Mrs. Henrietta Rabe during its 21 years of existence, no other state has shown any serious disposition to follow New York's pioneering example. Possible exceptions in recent years may be found in the state programs of Florida and California, but even here the efforts have been comparatively minor and intermittent.

Continuing our search, we find the beginnings of some promising work in the universities. Following the acceptance, success, and example of the trailblazing programs at the Universities of Chicago and Michigan, a number of other universities in various parts of the country have established institutes and centers for the development of gerontological studies and services.¹ The research and the scholarly activities sustained by these institutes will produce the basic material out of which the substantive portion of programs of education for aging may be formulated. University extension divisions, either unilaterally or in cooperation with institutes of gerontology in their respective institutions, have in recent years been giving more attention to activity in the education field. But in general this effort (except for the University Extension Service at the University of Michigan) has been ad hoc, intermittent, and sporadic. In the case of both the institutes of gerontology and the extension services, it is safe to conclude that education for aging has not become a major thrust in the universities' agenda on aging.² As in the case of other institutions and organizations, education *per se* has so far been a matter of only occasional and peripheral concern.

Since the 1971 White House Conference on Aging has been mandated to develop policies for the educational needs of the aged, it is especially appropriate at this juncture to give attention to any institutional trends which show great promise. One such trend is contained in the phenomenal growth of the Community College movement in all parts of the country. The basis for this optimism is contained in the fact that the new breed of community colleges by franchise, by policy, and even more importantly, by their budget allocations, is designed to make community services and adult education a major part of its overall program and to make those concerns coordinate with the status of the more traditional transfer programs of credit instruction. Already there is evidence, as disclosed in the projects subsidized by Title I of the Higher Education Act (1965), that community colleges are beginning to take seriously their responsibility for providing educational services for older people. At this stage, however, only a beginning has been made, but the potential of the community college to serve the elderly is very great.

The public school is the next aspect of the formal enterprise of education that should be considered in our assessment of response systems. Because of sheer volume and the closeness of their facilities to the clientele they are designed to serve, the potential response of the public school system is obviously impressive. Some cue to this potential may be found in the program of the Flint, Michigan, public schools; a special unit within the larger adult education division is devoted exclusively to education for aging. A similar emphasis is currently found in Los Angeles and San Francisco and, because of the 21 years of State department support, in many localities throughout New York State. At the same time, although not to the same degree, retirees are being encouraged to take part in local programs of public school adult education through reduced or eliminated fees and through the occasionally provided classes and workshops set up especially for their needs.

But again, departments of adult education in public schools do not as a whole constitute a very effective and extensive response system for meeting the educational needs of older people. As already indicated above, the National Association of Public Continuing and Adult Education (NAPCAE) frankly and without apology makes no claim to education leadership in the aging field, and also, as mentioned above, the New York State unit devoted exclusively to the education of the aging is the only one of its kind in the entire country. It is not surprising therefore that in the study by Johnstone and Rivera (1965) only seven percent of persons 55 and over, out of an expected 28 percent, mentioned the elementary and secondary school as the institution where they received any instruction.

¹For example, there is the Levinson Institute for Gerontological Policy (Brandeis University), the Gerontology Center (University of Southern California), and the Center for the Study of Aging and Human Development (Duke University).

²A recent and encouraging exception is a program to prepare professional workers in educational gerontology, which began its first year of operation at the University of Michigan during the 1970-1971 academic year.

As in the case of the community college, however, there are institutional trends beginning to surface and giving promise of a better situation for the future. We refer here to the current development of the community *school* movement. Stimulated to a large extent by the experience of the public schools of Flint, Michigan, and in part encouraged by subsidies from the Mott Foundation, the Flint type community school is being adopted as a part of the regular school system in all parts of the country. The essence of the community school idea is service to all people of all ages in terms of their needs and preferences, often as a result of their participation in program development. There is a strong indication already apparent that the community school is more responsive to the educational needs of older people than the traditional K-12 institution. *It is quite possible therefore that the community school movement, either alone or in combination with the community college—as is happening in Iowa—will in the future be the most feasible, responsive, and certainly the most universal vehicle available for providing educational services for older persons.*

B. INFORMAL RESPONSE SYSTEMS

So far we have been discussing the present status of the formal part of the response system. While such formal institutions are greatly understaffed and underprogrammed for educating older people, and older people are equally underrepresented among these systems' participating clientele, we predict that participation will probably increase here as elsewhere as programs designed for the later years become more and more informal. Among other things this development is one of the reasons for anticipating brighter days ahead for older people in the programs of the community school and the community college. For one of the distinguishing features of both these institutions is the breaking away from the traditional "credential" system of instruction.

It is not surprising, therefore, to discover that informal systems of instruction appeal to adults as a category as much or even more than formal systems, and in the case of older persons the preference for the informal is vastly greater. One of the unexpected outcomes of the Johnstone and Rivera study (1965) was the fact that the institutions most patronized by adults for educational purposes were churches and synagogues as well as the colleges and universities, with both categories tying for first place in the ranking of institutional involvement. But even more unexpected was the fact that the attraction of church and synagogue-sponsored programs for participating older people was almost universal. More specifically, the Johnstone and Rivera's data indicated that the rate of participation in programs offered by churches and synagogues was 85 percent!

This may in part be due to the fact that churches and synagogues are relatively numerous and usually conveniently located. It is also consistent with the point that interest in religious matters appears to increase with increasing years (a fact also supported by the Johnstone and Rivera study). But whatever the cause, a figure of 85 percent in any investigation of participation is highly significant. *This finding does not mean that 85 percent of all older people participate in church-sponsored programs of adult education, but rather, when they do participate, 85 percent do so under church and synagogue auspices.* Among the extremely important implications here is that of all established institutions with an educational component in its programs, the church and synagogue apparently have the best opportunity of reaching older people, a group typically difficult to reach and nonparticipant.

Again, according to the survey by Johnstone and Rivera, the category next most frequently patronized by older people was "community organizations." In this group are included community service organizations where instruction is offered to the general public rather than privately to members only. Such organizations include community and adult education centers (nonpublic school), YM and YWCA's, libraries, and museums. The rate of participation here is slightly more than 50 percent. In contrast, the rate of participation for business and industry is 25 percent.

In our discussion of the present situation one other agency should receive special consideration. We refer to what is coming to be known as the "multi-purpose center for senior citizens." This type of agency is beginning to appear under a variety of institutional auspices, in a variety of settings, and with a wide range of program categories. Among other things, it is accessible; provides a casual, informal climate conducive to the development of friendly personal relations; provides for information and counseling services on such problems as social security, medicare, housing, re-employment, and educational opportunities; and often organizes programs more specifically educational in character. The Administration on Aging has recently published a directory of senior centers which surveys the present situation (U.S. Administration on Aging, 1970).

C. PRERETIREMENT (PRETRANSITION) EDUCATION—A SPECIAL CASE³

Anyone who has struggled with the highly unsettled and amorphous terrain of adult education is constantly confronted with the necessity of attempting to discover a dominant theme around which a systematic program of instruction may be organized. There is no doubt that the field of education for aging is both formless and in ferment. This is why a responsible appraisal of preretirement education should be a high priority item. For such education shows substantial promise of ultimately constituting a plausible format for creating the substantive structure which programs in education for aging so urgently require.

More specifically, preretirement education compels a person to place the processes of lifelong learning in a workable time perspective. Because of the highly personal character of the issues it raises, motivation in the field can be readily stimulated. And because of the range of problems with which retirement is inevitably related, preretirement education helps the individual anticipate most of the crucial decisions involved in the transition from a working to a nonworking life style, about which he will ultimately have to take some action.

A number of different labels have been used to identify the field: (1) preretirement counseling, (2) preretirement education, (3) preparation for retirement, and (4) retirement planning. But whatever the label, either one of two approaches has tended to be used. One is the individual or unilateral approach, usually conducted at the place of employment and usually featuring counseling as the principal method. The other is the group approach, conducted both inside and outside the place of employment in a variety of settings, in which discussion and lectures, supplemented by audio-visual aids, are the prevailing modes of instruction. The individual approach usually consists of counseling sessions to which the employer or his representative invites an employee and his wife to discuss such topics as terminal pay, pension benefits, and various forms of insurance. In recent years the agenda of these sessions has broadened to include such additional items as health, housing, and use of leisure time. On the other hand, the group approach has from the beginning been more inclusive in topical scope, more systematic in the organization of subject matter, and more specifically geared to transfer to a wider range of situations. The character of these two formats has undoubtedly been influenced by the fact that the individual approach has been largely the responsibility of the employing company, while the group approach had its origin in the outreach programs of the Universities of Chicago and Michigan.

While preretirement education is of relatively recent origin, enough experience has been accumulating in the field to provide background material for an assessment of its present status.

In the first place, preretirement education is rapidly emerging as a principal concern of practically every category of agency becoming active in the field of education for aging. For at least 15 years such education has been a growing interest of business and industry and more recently of the Federal Government and labor. In very recent years preretirement education

³The author is indebted to Woodrow Hunter of the University of Michigan for his assistance in the preparation of this section.

has been adopted by an increasing number of universities, public schools, churches, YM and YWCA's, and other community agencies as a major feature of their instructional offerings. While, according to Woodrow Hunter (1962), there have been few systematic surveys of the field or any portion thereof since the early sixties, the growing number of inquiries for assistance in setting up preretirement education programs, the projects subsidized by grants from the Older Americans Act, and an increasing reference to the field in popular and professional literature, all attest to the growing activity and importance of this aspect of education.

As a result, a common curricular core is beginning to emerge, a growing array of instructional materials (e.g., films, tape recordings, pamphlets) are now available for general use, and some dependable instruments are also available for purposes of evaluation and research. In other words, there is increasing evidence to support the assertion made above that preretirement education is well on its way to becoming a central curricular thrust for the field of education for aging as a whole. The author believes that preretirement education is probably at the stage adult basic education was ten years ago. Given greater financial support, greater emphasis on program development, and greater commitment in institutional policy, preretirement education could soon become one of the most significant developments in the growing domain of adult education.

But before this happens there is much work to do.

First, as an area of substantive inquiry—i.e., for demonstration, evaluation, scholarly writing and research—preretirement education needs to be cultivated far more than before.

Second, many more professionally trained personnel are needed at all levels of activity before the field can flourish as it should.

Third, those responsible for the substantive and professional development of the field must give more attention to the resolution of such issues as the following:

(1) Which is a better approach to program development in the field: a problem-solving or a process-and-skills-centered approach? That is, should programs of preretirement education deal primarily with the solution of ad hoc problems which preretirees and the retired must face, or should it concentrate on skills of problem-solving, communications, human relations, and information retrieval, which transcend particular issues and therefore have a wider range of application?

(2) What agency or institution or combination thereof should have primary responsibility for preretirement education?

(3) What kind of methods, materials, and procedures are most appropriate for reaching and enlisting the response of those who rarely if ever take part in programs of adult instruction? What are the best procedures for reaching all classes of people, persuading them to participate, and maintaining their interest in participation in programs of preretirement education?

(4) What should be the ultimate goal of preretirement education? Should it be (1) the continuation of preretirement activities at a slower pace, (2) a phasing out of former activities into a stage of disengagement, or (3) the replacement of earlier activities, responsibilities, and roles with new ones?

(5) And not least, but finally, what can be done to give women who don't enter the labor force a stronger position in programs of preretirement education? Admitting that women do not retire from a career as housewife, if ever, in quite the same way that a man retires from work as breadwinner, women are entering the labor market in ever-growing numbers and will increasingly encounter

problems of retirement peculiar to their situation. In this connection, except for the practice of inviting wives to attend preretirement education sessions designed for their husbands, nowhere in the literature or in consultation with leaders in the field of gerontology did the writer find any evidence that the problems of women in preretirement education have been or are even now an issue of programmatic concern. This oversight is an example of the kind of deficiency that the 1971 White House Conference on Aging is clearly mandated to overcome.

D. REACHING, RECRUITING, AND INVOLVING THE NONPARTICIPANT

Any thoroughly candid appraisal of the present situation must come to grips with the hard fact that education for aging is an orphan living in the attic of the home of the stepchild (adult education) of the educational and gerontological establishments. As the preceding statement implies, education for aging has the lowest priority in program development in both adult education and gerontology, and, as has been reported earlier in this paper, older people of all age segments of the adult population are the most nonparticipant in educational activities.

By way of defense, both adult educators and gerontologists may point out that the inferior status of education for aging is a reflection of the equally inferior financial support which this need has been able to attract. But having stated this, the fact of massive nonparticipation of older people still remains. We do not need to wander very far over the educational landscape to discover some interesting factors accounting for this situation.

First, returning to our themes of coping and margin, the first priority of the aging is to keep a roof over their heads, and to remain healthy and economically solvent. It is quite possible in more cases than we are willing to admit, that the unrelenting struggle to provide for these utter necessities leaves little margin (time and energy) for the luxury of pursuing educational objectives.

Second, it is also possible that older people, especially in the later years, have gnawing, unacknowledged doubts about their continuing ability to learn. This loss of "educational nerve" may have become so regressive that the elderly are extremely reluctant to expose themselves to the embarrassment, and in their eyes even ridicule, that participation might possibly entail.

Third, older people are essentially "hidden," perhaps the most hidden element of the general population. Because of their relative isolation they are not easily located. Except for nursing homes and residential facilities specializing in services to the aging, their names appear on the roster of few organizations, and if so, not separately identifiable as older persons. In fact, for the most part, they are on the fringe or outside of the usual channels of communication. And finally, age-related difficulties, or even lack of transportation, can interfere with their ability to attend such educational events that may be available.

Such are the hard, resistant factors which make older people, of all categories of adults, the most difficult to reach, recruit, and involve.

If there is an overarching lack in the present situation this is it, and if there is an overarching need, it is a need for the response systems to make the alleviation and/or correction of this deficit an item of the highest priority.

No one can complain about or denigrate the work now going forward for the production and improvement of curricula, the pre- and in-service training of personnel, the increase in research and scholarly activity, and the growing commitment of a widening range of agencies to the field. But we can complain, and do so emphatically, that *the problems of reaching, recruiting, and involving the great mass of the "hidden" nonparticipants has yet to become an item of central concern*. For if we search the literature, note the titles of projects subsidized by State and Federal grants, comb the topics covered by leading conferences, analyze the curricula of instructional programs, all in a search for some awareness of the seriousness of people's nonparticipation, we run into a dead end. In fact, the magnitude of

nonparticipation is so great, and its neglect by the relevant field so striking that if we accept the present situation as a standard, education for aging could plausibly be accused of being not intentionally but in fact an elitist movement geared primarily to the needs and circumstances of the middle and upper class "participant prone," and largely oblivious to the needs of the mass of older persons who are almost totally unaware of the possibility of continuing education and if aware, only as a dream remotely capable of fulfillment.

Fortunately, there are grounds for believing that this deficiency can be alleviated and to a substantial degree overcome. To do so would involve a much more aggressive use of television and correspondence study, either alone or combined, along with circuit-riding personnel, mobile learning laboratories, bookmobiles, and the like. In addition, remedying the situation would require using the best (and this "best" is impressive) that is already known about measures designed to (1) locate target populations, (2) secure from older people *their* perceptions of educational needs and the best way to meet them, (3) acquaint older persons with existing and prospective programs, (4) recruit the elderly for participation, and (5) counsel older people for effective entry.

V. ISSUES

The foregoing sections have discussed the potential contribution and the long-range goals of education for older people, current knowledge about their learning interests and capabilities, and present practices and shortcomings of institutional efforts to provide educational opportunities and to attract older people to them. The present section presents eight questions or issues for participants in the 1971 White House Conference on Aging. It is hoped that discussion and resolution of these issues will provide the basis for setting national policy for present and future generations of older people.

Issue 1.

If public expenditures for education for older people are increased, should the size of the expenditures be related (a) to ~~the~~ proportion of older people in the total population, or (b) to their remaining ~~life~~ expectancy?

Both of the options stated in Issue 1 assume the importance of increased public support for education for older adults. Neither option assumes, however, that funds should be available in the same amount per person for older people as are now available for the formal schooling of children and youth. The issue, then, is what should be the basis for determining the amount of support to be given?

Criterion (b) is clearly implied in present practice. That is, since children and youth are preparing for adulthood and presumably have 50 or more years ahead of them, investment in their education is and should be optimal. The comparatively fewer years that older people have to live appears to justify minimal educational expenditures on their behalf.

On the other hand, criterion (a) recognizes the legitimacy of educational needs of older people and suggests that expenditures should be related to their numbers in the population rather than to their life expectancy.

Issue 2.

Should money and manpower devoted to providing educational opportunities have a higher priority among the various services provided for older people than is now the case? Or, should education for older people be allowed to remain at its currently low level of emphasis and support in relation to support for health services, housing, etc.?

The issue here does not involve the relative importance of education for older versus younger persons, but it does involve the low position of education as the "orphan in the attic" of the house of services for older persons, and its inferior rating as a postscript somehow tacked on after such essential needs as health, income, housing, etc., are cared for. Those advocating a higher priority could argue that education properly conceived and programmed could help older persons greatly in coping with such urgent necessities as just mentioned and is, therefore, deserving of increased attention. On the other hand, those observing current practice could argue that, while education for many people may have value, it is primarily designed to fill leisure time and therefore does not have a claim on supporting resources comparable to the claim that can be made for the more obvious and compelling needs of health, financial adequacy, etc.

Issue 3.

Should responsibility for initiating, supporting, and conducting education for older people be vested in the established educational system, beginning with the U.S. Office of Education and extending through State educational agencies to universities, community colleges, and local school districts? Or should the responsibility be placed with specialized agencies serving older people: the Administration on Aging, State agencies on aging, and corresponding agencies at the community level?

Anything as needful but as neglected if not ignored as education for older persons requires a high degree of persistent and explicit cultivation for its development. A case can be made for utilizing existing systems of education: they may be found everywhere; they possess extensive instructional resources; and their primary function is education and not the maintenance of health, income, provision of housing, etc.

On the other hand, the weight of tradition and the competition for available funds of programs for the schooling of children, youth, and young adults could easily smother the feeble efforts of older persons to secure a foothold in the educational establishment. Thus, it can be pointed out that the only assurance that education for older persons will receive the emphasis it requires is to place the responsibility for its development under the jurisdiction of that category of agencies established and mandated to give exclusive attention to meeting the needs of older persons whatever those needs may be.

In brief, this is not an either/or issue. It does not mean that every agency must wait for a signal from the "responsible" agency to initiate and develop programs of their own. Nor does it mean that the responsible, initiating, and promotional agency does all the work. Much of this could be co-opted or delegated. The issue is where should the primary responsibility for the development of the field be lodged? What agency or category of agencies should be held accountable for seeing that something on behalf of the education of older persons takes place?

Issue 4.

Should education for older persons be: (a) conducted apart from or (b) integrated with education for persons at other ages?

An integrated approach to the education of older persons has the virtue of feasibility since it would make heavy use of the vast array of programs already in existence for the instruction of younger persons. As suggested in the main section of this report, this would be especially true as the community school and the community college movements develop. Moreover, an integrated approach could be more challenging to older persons, help them alleviate if not overcome the "generation gap," and enable them to remain in and contribute to the mainstream of society.

At the same time, however, teaming up with younger persons in educational activities may be too competitive for older persons, and thus become too threatening to their self-esteem. By contrast, they may much prefer to engage in educational programs designed for persons of their own age, with common needs and experiences and with mutual tolerance of their respective efforts to learn. But it should also be pointed out that a segregated approach may also lead to the development of a subculture of older persons more or less separate from the dominant culture of society.

Which of the two approaches would more likely enable older persons to make a contribution of wisdom, time perspective, and a cooperative, service-oriented life style to the world about them depends on so many other factors as to leave this point highly debatable.

Issue 5.

In view of the limited financial resources available, which should receive the highest priority: (a) research and innovation? or (b) expansion of existing programs having a demonstrated record of success?

The background papers indicate that comparatively few older people have evinced much interest in continuing their education. Some people feel that part of this lack of interest lies in lack of knowledge on the part of educators about the educational needs of older adults, about effective methods of attracting them and helping them learn, and about the learning environment. Such persons argue that there is need for research on education for older people.

Innovative or experimental educational projects can give no assurance of success. Moreover, research may divert resources that might otherwise be devoted to the expansion of services. At the same time each one, either alone or in combination, may lead to a breakthrough to new levels of performance with a widespread effect.

At the same time, existing programs which have already demonstrated their value contain fewer risks and can be multiplied, with their prototypes installed in new locations.

In the case of innovation and research on the one hand and expansion of "best practice" on the other, it is assumed that the delivery systems to new programs are equivalent, thus delineating the issue to be clearly that of priority.

Issue 6.

Should education (a) place emphasis on the development by older persons of greater collective (group) influence (or power) in political processes in meeting their needs or (b) should it concentrate mainly on instruction in more effective use of political processes on an individual basis?

As was stated in the background paper, older people characteristically lose most of the influence they may have had when they retire from the work force and play lesser roles in social organizations. Thousands of older people testified to unmet needs in the Older American Community White House Forums held in September 1970. It is well recognized that there is relatively little effective support for efforts aimed at providing such things as adequate income, tax relief, transportation, housing, medical services for them. The question raised in the issue statement was whether education should help older people acquire knowledge and techniques that would enable them to exert group influences for measures designed to improve their circumstances. Alternative approaches are: to provide no education in the political process or to aim at education which will enable the older person to participate as an individual. Both of the positive options stress the importance of political processes as a means of achieving power. The issue at stake is simply that of the relative merits of collective (or group) versus an individual approach to making an impact on public policy and programs.

Issue 7.

In the light of scarce financial and manpower resources, which should be given the higher priority: (a) educational services to those most ready and most in the habit of participating or (b) education for those "hidden," relatively unknown and difficult to reach?

Usually persons most "ready," accessible, and with a history of participation in other activities will give a greater response to education programs than those who have not been active. Also, achievement will be more visible, will become better known in the circle of those "who count," and will usually show up better in annual reports to governing boards and other

supporting agencies. On the other hand, programs for serving the hidden, less accessible, under-participant (or nonparticipant)—such as the “homebound” or disadvantaged, etc.—will require more resources, often a drastic modification of conventional procedures (e.g., mobile mini-laboratories, door-to-door interviewing, use of paraprofessionals, home located instruction, etc.), and in all probability will yield a lower outcome per unit of input. The issue here is one of feasibility, visibility, and volume of achievement on the one hand and an obligation to the less favored on the other. In which direction should the limited resources go?

Issue 8.

Should available facilities, manpower, and funds be used for educational programs designed and offered by educators to the elderly on the basis of their presumed needs and interests? Or, should such support be available only when older people request educational services and participate in developing them, or develop and conduct the programs themselves?

There would probably be general agreement to the proposition that educational services should be provided in response to requests by older adults and that the older adults should be major participants in determining what kinds of educational services should be offered and where. Some might even urge that educational facilities should be made available only to older people who organize and conduct their own programs. Characteristically, however, most of the educational programs that have been offered to older adults have been designed and conducted by professional educators and others who presume to know the needs of older people and where and how older adults can best be taught.

The issue is clear; the implications are not. Experience thus far would indicate that there will be little action if we wait for older people themselves to request, initiate, or set up and operate educational programs. The Background Paper indicates that there has been some—though not much—response to educational services offered by educators who have become interested in the learning needs of older adults. The issue is: what national policy, if any, should be recommended with regard to this matter?

BIBLIOGRAPHY

- Bayley, Nancy, and Oden, M. S. 1955. "The Maintenance of Intellectual Ability," *Journal of Gerontology*, X, 91-107.
- Bruner, Jerome S. 1961. *The Process of Education*. Cambridge, Mass.: Harvard University Press.
- Duncan, D. R., and Barrett, A. M. 1961. "A Longitudinal Comparison of Intelligence Involving the Wechsler Bellevue I and the WAIS," *Journal of Clinical Psychology*, XVII, 318-19.
- Eisdorfer, C. 1963. "The WAIS Performance of the Aged: A Retest Evaluation," *Journal of Gerontology*, XVIII, 169-72.
- Good, Carter V. (ed.). 1959. *Dictionary of Education*. New York: McGraw-Hill.
- Hunter, Woodrow. 1960. "Pre-Retirement Education." Ann Arbor, Mich.: Division of Gerontology, University of Michigan. (Mimeographed.)
- _____. 1962. "Trends in Pre-Retirement Education." Ann Arbor, Mich.: Division of Gerontology, The University of Michigan. (Mimeographed.)
- _____. 1969. "Guidelines for Pre-Retirement Education Programs." Ann Arbor, Mich.: Division of Gerontology, University of Michigan. (Mimeographed.)
- Jacobs, H. Lee, Mason, W. Dean, and Kauffman, Earl. 1970. *Education for Aging: A Review of Recent Literature*. Washington, D.C.: Adult Education Association of the U.S.A. and Eric Clearing House on Adult Education.
- Johnstone, John W. C., and Rivera, Ramon J. 1965. *Volunteers for Learning*. Chicago: Aldine Publishing Company.
- Jones, H. E., and Conrad, H. S. 1933. "The Growth and Decline of Intelligence: A Study of a Homogeneous Group Between the Ages of Ten and Sixty," *Genetic Psychology Monographs*, XIII, 223-98.
- Knox, Allan. 1965. "Clientele Analysis," *Review of Educational Research*, XXXV, (June). Washington, D.C.: American Educational Research Association.
- Lorge, Irving. 1955. "Capacities of Older Adults," in *Education for Later Maturity*, (ed.), Wilma Donahue. New York: Whiteside, Inc. and William Morrow and Company, Inc.
- Miles, C. C., and Miles, W. R. 1932. "The Correlation of Intelligence Score and Chronological Age from Early to Late Maturity," *American Journal of Psychology*, XLIV, 44-78.
- National Center for Educational Statistics. 1970. *Adult Basic Education Program Statistics—Students and Staff Data*. Washington, D.C.: U.S. Office of Education.

wens, William A., Jr. 1953. "Age and Mental Abilities: A Longitudinal Study," *Genetic Psychology Monographs*, XLVIII, 3-54.

_____. 1963. *Life History Correlates of Age Changes in Mental Abilities*. Lafayette, Ind.: Purdue University.

iley, Matilda W., and Foner, Anne. 1968. *Aging and Society*. Vol. I: An Inventory of Research Findings. New York: Russell Sage Foundation.

erman, L. M., and Gennep, M. H. 1955. *The Gifted Group at Mid-Life*. Stanford, California: Stanford University Press.

horndike, E. L., et al. 1928. *Adult Learning*. New York: Macmillan Company.

.S. Administration on Aging. 1970. *Senior Centers in the United States: A Directory*. Social and Rehabilitation Services. Washington, D.C.: Administration on Aging.

.S. Senate Special Committee on Aging. 1961. *The 1961 White House Conference on Aging—Basic Policy Statements and Recommendations*. Washington, D.C.: U.S. Government Printing Office.

ebster's *International Dictionary*, 3rd edition. 1967. Springfield, Massachusetts: G. & C. Merriam.

APPENDIX A

Median Years of School Completed, By Sex, Color, and Urban-Rural Residence, United States, 1960

Age	Total				White				Nonwhite			
	Total	Urban	Rural non-farm	Rural farm	Total	Urban	Rural non-farm	Rural farm	Total	Urban	Rural non-farm	Rural farm
Male												
25+	10.3	10.9	9.0	8.6	10.6	11.2	9.3	8.7	7.9	8.5	5.8	4.8
25-29	12.3	12.4	12.0	11.5	12.4	12.5	12.1	12.1	10.5	11.1	8.7	7.0
30-34	12.1	12.3	11.1	10.6	12.2	12.4	11.5	11.0	9.7	10.3	7.8	6.2
35-39	12.1	12.2	11.0	10.0	12.2	12.3	11.4	10.5	8.9	9.7	7.2	5.7
40-44	11.6	12.0	10.2	8.9	12.0	12.1	10.6	9.2	8.3	8.7	6.4	5.2
45-49	10.3	10.9	9.0	8.7	10.7	11.3	9.4	8.8	7.4	8.1	5.6	4.9
50-54	9.4	10.1	8.7	8.5	9.8	10.4	8.8	8.6	6.8	7.4	5.1	4.7
55-59	8.7	8.9	8.4	8.3	8.8	9.1	8.5	8.4	6.0	6.7	4.4	4.3
60-64	8.5	8.7	8.3	8.2	8.6	8.8	8.4	8.3	5.5	6.1	4.1	4.1
65-69	8.3	8.4	8.1	8.1	8.4	8.5	8.2	8.2	4.7	5.3	3.6	3.8
70-74	8.1	8.2	7.7	7.9	8.2	8.3	8.0	8.1	4.4	5.0	3.4	3.7
75+	8.0	8.1	7.3	7.5	8.1	8.2	7.7	7.8	3.9	4.4	3.0	3.3
Female												
25+	10.7	11.1	9.9	9.2	11.0	11.5	10.3	9.7	8.5	8.9	6.9	6.5
25-29	12.3	12.3	12.1	12.1	12.3	12.4	12.2	12.2	11.1	11.5	9.5	8.3
30-34	12.2	12.3	12.0	12.1	12.3	12.3	12.1	12.1	10.5	10.9	8.7	7.8
35-39	12.2	12.2	11.9	11.5	12.2	12.3	12.1	12.0	9.7	10.2	7.9	7.2
40-44	12.0	12.1	10.9	10.4	12.1	12.2	11.3	10.9	8.7	9.1	7.3	6.9
45-49	10.8	11.1	10.0	9.6	11.2	11.6	10.4	10.1	8.1	8.5	6.8	6.5
50-54	10.1	10.4	9.1	8.9	10.4	10.7	9.5	9.2	7.6	8.1	6.4	6.3
55-59	9.0	9.2	8.7	8.7	9.2	9.6	8.8	8.8	6.9	7.4	5.7	5.8
60-64	8.7	8.8	8.5	8.5	8.8	8.9	8.6	8.6	6.4	6.8	5.1	5.4
65-69	8.5	8.6	8.3	8.4	8.6	8.6	8.4	8.4	5.6	6.1	4.5	4.7
70-74	8.4	8.5	8.2	8.2	8.5	8.5	8.3	8.3	5.2	5.7	4.3	4.5
75+	8.3	8.4	8.1	8.1	8.4	8.5	8.2	8.2	4.5	5.0	3.7	3.8

Source: Riley and Foner, 1968.

APPENDIX B

Students in Adult Basic Education Programs, By Age, Region, and State: United States, Fiscal Year 1969

Region and State	Total	Age group					
		18-24	25-34	35-44	45-54	55-64	65-over
U.S. Totals	484,626	--	--	--	--	--	--
Nonclassified	4,714	--	--	--	--	--	--
Classified	479,912	113,461	127,757	120,116	70,148	35,220	13,210
Region I	29,275	8,494	9,035	6,124	3,518	1,699	405
Connecticut	9,497	2,516	3,392	2,009	946	473	161
Maine	1,431	287	386	371	261	91	35
Massachusetts	13,930	4,563	3,998	2,790	1,646	784	149
New Hampshire	1,024	222	281	214	182	87	38
Rhode Island	1,691	422	492	358	245	174	98
Vermont	1,702	484	486	382	238	90	22
Region II	41,801	13,252	11,629	8,299	5,351	2,471	799
Delaware	987	345	272	164	94	48	64
New Jersey	9,947	2,580	3,013	2,194	1,498	662	0
New York	13,112	3,111	4,082	3,254	1,718	777	170
Pennsylvania	17,755	7,216	4,262	2,687	2,041	984	565
Region III	84,331	20,768	21,091	26,373	10,478	4,571	1,050
Kentucky	11,446	3,033	3,317	2,721	1,628	632	115
Maryland	5,943	1,097	1,794	1,402	911	558	181
North Carolina	22,542	1,127	4,508	13,525	2,254	902	226
Puerto Rico	20,239	10,833	4,594	2,727	1,384	594	107
Virginia	10,761	2,228	3,134	2,425	1,886	819	269
Virgin Islands	323	88	114	66	42	12	1
West Virginia	10,195	1,465	2,972	2,925	1,906	797	130
District of Columbia	2,882	897	658	582	467	257	21
Region IV	91,548	17,981	21,377	22,046	17,117	9,429	3,598
Alabama	10,955	2,126	2,150	2,515	2,265	1,333	566
Florida	25,946	3,580	6,925	7,512	5,130	2,183	616
Georgia	17,825	3,544	4,030	3,677	2,946	2,409	1,219
Mississippi	9,354	2,532	1,864	2,048	1,804	864	242
South Carolina	13,164	2,724	3,023	3,133	2,511	1,308	465
Tennessee	14,304	3,475	3,385	3,161	2,461	1,332	490
Region V	58,979	13,230	16,972	15,015	8,383	3,779	1,600
Illinois	25,314	4,810	8,100	6,582	3,797	1,519	506
Indiana	5,616	1,492	1,535	1,481	672	385	51
Michigan	11,909	2,993	3,010	2,806	1,887	836	377
Ohio	12,739	2,668	3,376	3,423	1,714	913	645
Wisconsin	3,401	1,267	951	723	313	126	21

**Students in Adult Basic Education Programs, By Age, Region, and State:
United States, Fiscal Year 1969 – Continued**

Region and State	Total	Age group					
		18-24	25-34	35-44	45-54	55-64	65-over
Region VI	21,470	5,909	5,987	4,738	2,930	1,495	411
Iowa	6,232	1,976	1,685	1,294	698	427	152
Kansas	2,357	236	318	671	703	391	38
Minnesota	2,384	637	830	508	278	95	36
Missouri	6,841	2,297	2,120	1,372	659	274	119
Nebraska	1,740	285	320	448	391	240	56
North Dakota	691	147	199	189	112	40	4
South Dakota	1,225	331	515	256	89	28	6
Region VII	77,159	15,614	19,032	19,652	12,745	6,803	3,313
Arkansas	6,122	1,285	1,286	1,469	1,041	796	245
Louisiana	13,425	2,858	2,871	2,897	2,240	1,525	1,034
New Mexico	3,294	698	923	852	532	229	60
Oklahoma	8,147	2,492	2,798	1,602	969	275	11
Texas	46,171	8,281	11,154	12,832	7,963	3,978	1,963
Region VIII	7,279	2,133	2,211	1,636	832	351	110
Colorado	3,033	875	876	721	339	167	55
Idaho	1,732	520	598	362	196	44	12
Montana	*	*	*	*	*	*	*
Utah	1,602	425	491	380	178	93	35
Wyoming	912	319	246	173	119	47	8
Region IX	68,070	16,074	20,423	16,233	8,794	4,622	1,924
Alaska	1,064	319	386	205	92	51	11
Arizona	1,589	510	388	379	194	86	32
California	50,378	12,188	15,617	12,366	6,208	3,174	825
Guam	476	111	157	118	70	16	4
Hawaii	7,078	710	1,503	1,654	1,331	898	982
Nevada	1,339	599	529	143	55	8	5
Oregon	2,397	620	690	610	332	116	29
Washington	3,749	1,017	1,153	758	512	273	36

* Not available.

Source: National Center for Educational Statistics, 1970.

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