Education for the Elderly: The Need for Future Curriculum Development

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Global aging is happening almost everywhere; it is a new problem for humankind. Changes in human behavior have occurred: lower birth rate and longer life expectancy. The year 2000 will mark the first time in history that people over 60 will outnumber children 14 and younger in industrial countries. Although the fiscal consequence of an increasing elderly population is going to be serious, it is not the only problem. Housing adequacy, institutionalized leisure activities, health care, and education are all potential problems that need to be carefully planned.

Educational institutions have been age-segregated in the past, enrolling primarily children and young adults. Increasingly, though, since the 1970s enrollments have grown dramatically for more "mature" students, including those returning to school after many years of involvement in work, family, or both. This trend portends a gradual transition of education to an age-integrated, rather than an age-segregated, social institution. There is an urgent need to design a curriculum suitable for both young and older students.

This essay will address the need for education to the elderly. The essay will first explore the social world of the elderly through a comparison between the theory of disengagement and the theory of activity. The essay will then focus on the necessity of the development of leisure-oriented educational programs for the elderly. The main body of the essay will examine various issues concerning school environment and curriculum development.

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Global Aging in the New Millennium

The size of the world's elderly population has been growing for centuries; what is new is its rapid ascent. Demographers have found that worldwide life expectancy, currently 68 years, will reach 73 years by 2025 - a 50 percent improvement on the 1955 average of only 48 years. The number of people aged over 65 will have risen from 390 million in 1997 to 800 million - from 6.6 percent of the total population to 10 percent. Industrialized nations such as Japan and the western European nations have already experienced the growth of their elderly population. In the near future the pressure of a growing elderly population will also be felt in many Third World nations. The world's 60-and-over population increased by more than 12 million in 1995; nearly 80 percent of this increase occurred in less-developed countries. The increase in the 60-and-over population in the industrialized nations of Europe and North America generally has outpaced total population growth in recent decades. In less-developed nations, the growth rate of the elderly accelerated sharply after 1960 and is now substantially higher than that of the world's population of all ages. Clearly, the graying of population is a worldwide phenomenon.

Global aging is happening almost everywhere; it is a new problem for humankind. Coincidentally, a change has occurred in human behavior that is as revolutionary as it is unheralded: Around the world, fertility rates are plummeting. According to one account, women today on average have just half the number of children they did in 1972. In 61 counties, accounting for 44 percent of the Earth's population, fertility rates are now at or below replacement levels. Life expectancy is also up. The year 2000 will mark the first time in history that people over 60 will outnumber children 14 and younger in industrial countries, and by 2050 the age group of those 60 and above will reach 22.1 percent of the world population, whereas the 14 and younger age group will only reach 19.6 percent. Globally, the average life span has jumped from 49.5 years in 1972 to more than 63 years. By 2050, more than 1 of every 5 people in the world will be over age 60 and those aged over 85 will increase sixfold. Consequently, the world's population will slowly increase at an average rate of 1.3 percent a year during the next 50 years, but it could decline by mid-century if fertility continues to fall (Longman 1999:32).

As data in Table 1 demonstrated, the projected population of those aged 60 and above in the world in 2050 will represent approximately 22 percent of the world's total population. The situation is more serious in

the more developed regions that will have 33 percent of their population aged 60 or above, roughly 1 of every 3 people. Moreover, the proportion of the old old group (those aged 80 and over) is also growing rapidly; 19 percent in the world population, 27 percent in the more developed regions, and 17 percent in the less developed regions.

Table 1 World's Aging Population, 1999 and 2025

Country or Area	Number		60 years and over as % of total population		80 or older as % of 60 years and over population	
	1999	2050	1999	2050	1999	2050
World Total	593,111	1,969,809	10	22	11	19
More Developed Regions	228,977	375,516	19	33	16	27
Less Developed Regions	364,113	1,594,293	8	21	9	17
Least Developed Regions	30,580	180,983	5	12	7	10

Source: the statistics are taken from the web-page of the Department of Economic and Social Affairs the United Nations at p.1

In fact, aside from the Muslim countries of North Africa and the Middle East, it is hard to find any part of the world that isn't aging. For many Third World countries, the challenge of supporting a growing elderly population is compounded by huge out-migrations of younger people (Schulz, Borowski &Crown, 1991; Hooyman & Kiyak, 1999).

Available data have shown that among the industrialized nations, governments are faced with serious budget deficits that will be exacerbated by increased government-pension liabilities. This is happening in the United States and other industrialized nations; it is also happening in non-industrialized nations today. The cost of supporting a burgeoning elderly population will place enormous strains on the world's economy. Instead of having more workers to support each retiree—as was the case while birthrates were still rising—there will be fewer. (Longman,1999:32).

In the developed world, the fiscal consequences of these trends are dire. Firstly, over the next 25 years, the number of persons of pensionable age (65 and over) in industrial countries will rise by 70 million, predicts the Organization for Economic Cooperation and Development (OECD), while the working-age population will rise by only 5 million. Today, working taxpayers outnumber nonworking pensioners in the developed world by 3 to 1. By 2030, this ratio will fall to 1.5 to 1. Secondly,

throughout the developed world, total public spending per old person is two to three times as great as public spending per child. In the future, that gap will probably widen. The elderly consume far more health care resources than do children, and new technologies to extend life are bound to escalate health care costs (Abel, 1991).

The Soviet Union and the Eastern European nations also face similar pressure because of their expanding elderly populations. In all Eastern European former communist states, the former Soviet Union, and China, the failures of communism have created a new wave of social and economic problems. Thousands lost their pensions in recent years when state-sponsored enterprises folded and when the state ended its socialist ideology in favor of capitalist practices. As one nursing home operator in China said, "It is a market economy now, and people have no time to take care of their parents."(Longman, 1999:38).

Although most of the Third World nations are still comparatively youthful, their population is aging faster than that of the rest of the world. For example, it took 140 years for the proportion of the population age 65 or older to double from 9 percent to 18 percent in France. In China, the same feat will take just 34 years, and in Venezuela only 22 years. If projected declines in fertility and mortality rates in the Third World nations proceed as expected, the overall population age structure will lose its strictly triangular shape, and the elderly portion of the population will increase. "The developed world at least got rich before it got old. In the Third World the trend is reversed," notes Neil Howe, an expert on aging (Longman, 1999:32). Such demographic transition in the Third World undoubtedly will affect the economic well-beings of the elderly but also the social and political power of the elderly (Cowgill, 1986; Tsai, 1997, 1999).

The purpose of this essay is to explore the possibility of education that is targeted to the elderly. The essay will explore the issues facing education for the elderly and the development of a leisure-oriented curriculum that targets specifically to the elderly and the growing importance of computer information technology that will serve as a medium to the education of the elderly in the future.

Life After Retirement: Two Major Theories

As life expectancy at birth and at older ages lengthens, the quality of that longer life becomes a major issue. The 21st century offers a bright

vision of better health for all. The World Health Organization, in its 1998 world health report, shows that humanity has many good reasons to hope for unprecedented advancement in health in the future. The 20th century has laid the foundations for further dramatic progress in the years ahead. Supported by solid scientific evidence of declines in disability among older people in most populations, the report found that, "The most important pattern of progress now emerging is an unmistakable trend towards healthier and longer life expectancy." (The elderly life holds the prospect not merely of longer life, but superior quality of life.

Until now, however, most of the attention on old age tends to be preoccupied with physical health and financial well-being of the elderly. The concept of healthy life expectancy looks beyond the average number of years that persons may expect to be free of limitations due to one or more chronic disease condition and to be free of financial insecurity. Healthy life expectancy is concerned with the average number years a person may expect to enjoy the meaning of life in family, community, and society, actively and enthusiastically.

In most of cases, life in the old age is referred to as the life after retirement. In the eyes of the general public, old age and retirement seem to refer to the same thing. While these two phenomena may be closely related to each other, they nevertheless are not the same. In the evolution of human history, the two are quite distinctive. People have always gained age and become old biologically, while the concept of retirement is a modern phenomenon.

Throughout most of human history people from all social classes were required to work in order to ensure their survival and the survival of their kin (Quadagno 1982; Reskin and Padavic 1994). Labor started early in life and people continued to work until they were physically incapable of carrying out work. If we define retirement as leaving employment, then retirement is clearly a social construction. Although retirement was not entirely unknown prior to industrialization, the option of having a block of unstructured free time in which to pursue non-gainful activities at the end of one's life cycle is rather new. This is particularly true in a society such as the United States where the majority of people work for and are employed by others. Sociologists have called this type of society an "employee society." Retirement is seen as a carefree life style that dominates the later stage of the life cycle.

The functional school of sociology sees human life as having two basic dimensions. There is the "people" dimension of life that sociolo-

gists call expressive and the "work and activities" dimension that sociologists call instrumental. According to Talcott Parsons and Robert Bales (1955), behaviors associated with the instrumental dimension of life include such qualities as autonomy, activity, creativity, drive, ambition, courage, assertiveness, leadership abilities, mastery - qualities associated with getting a job done, whereas behaviors associated with the expressive dimension of life include nurturance, tenderness, warmth, caring, empathy, showing affection through words and gestures, and everything else concerned with interpersonal relations. In short, instrumental behaviors are task-oriented, whereas expressive behaviors are person-oriented. According to this perspective, people spend most of their adult life performing social roles that are instrumental in nature. Retirement gives people a chance to play the expressive role that centers around individuals as people.

There are two general competing theories that describe life after retirement among the elderly in contemporary societies. **Disengagement theory**, put forward by Cumming and Henry (1961), has followed the footsteps of early functional theory by proposing that the process of disengagement is normal and to be expected when people settle to retirement and old age. This theory sees disengagement as an inevitable, rewarding, and universal process of mutual withdrawal of the individual and society from each other with advancing age. The theory therefore argues that expressive role performance is beneficial for both the aging individual and society for it is beneficial to the well-being of the individual and it minimizes the social disruption caused by the arrival of the youth in work and activities.

Reaction to disengagement theory has been swift and negative. It has been widely criticized as being unfalsifiable, a major failing of any theory (Achenbaum and Bengtson 1994). In response to disengagement theory, the **Activity theory** was proposed to emphasize the positive relationship between activity and life satisfaction (Lemon, Bengtson, and Peterson 1972). The theory argues that although we might be able to identify the loss of social roles as individuals move into categories of advanced age, this loss does not necessarily signify an inevitable or beneficial process of disengagement. The activity theory maintains that older people eventually will be able to locate some other engaging activity that will substitute for employment. The goal of activity in old age is not financial gain, but individual personal fulfillment (Atchley 1976).

The activity theory has received considerable research attention and remains a dominant ideology of successful aging (Marshall 1996). Many

argue the transition from instrumental to expressive role does not have to be a disengagement or withdrawal from the society. Rather, the elderly can and should actively perform expressive roles that are socially meaningful. The large number of elderly involved in volunteer work in many communities is evidence of such activity. Unfortunately, the fact remains that whether elderly people are active or disengaged, they face a loss of social significance.

The Need for Education for the Elderly

There are several factors that are responsible for the non-existence of educational programs for the elderly.

Definition of Successful Aging

Definitions of successful aging in gerontological theories seem to be preoccupied with physical and psychological aging. Success typically refers to the prolonging of the length of life with physical health and a sound mind. Very often it is measured by the avoidance of the plight of old age: losses in the physical and cognitive domains. However, good physical health, functional autonomy, and psychological well-being cannot stand alone to build a successful aging without a positive social support and an active lifestyle.

The research question needs to be broadened from a primary focus on the physical and psychological success of aging to include social aging. Moreover, the key question in our strive to understand the elderly world must be shifted from asking "What is successful aging?" to "How do people age successfully in health, psychology, and social life style?" The key issue here is how to educate the elderly so that they will feel worthy of social participation. The modernization theory of aging suggests that loss of elderly status in an industrialized society is caused by the inability of the elderly to catch up with the fast path of technological change. At issue then is how to prepare the retired elderly to adjust to the rapid pace of social and technological changes. If we agree with the activity theory of the elderly world, the main goal of education for the elderly is to make the elderly active, not disengaged.

Education for the Young

In the broadest sense, education includes those experiences that train, discipline, and develop the mental and physical potentials of the matur-

ing person. Although people are being educated regularly through experiences and social interactions with others, they depend on institutionalized formal education to develop functional skills and behavioral conformity in society. Formal education is a systematic process in which someone designs the enriching, liberating, or positive experiences to be internalized. Formal education is considered a success when the people instructed internalize (or take as their own) the skills and modes of thought that those who design the experiences seek to impart.

Unfortunately, education today in most countries is primarily focused on the education of the young. From nursery schools to colleges, throughout the world the school system, textbooks, curriculums, and physical environment are all geared to educate the young. Until recently, educational programs made available for the elderly were often viewed as residual and supplementary. They are in general grouped under the large umbellar of "continued education." In many advanced countries, including the United States, schools are supported by tax fund that is collected for the purpose of teaching "our children" and not to be wasted on the social welfare of "entertaining" the elderly. As a consequence, children's education programs take priority over the education of the elderly.

Disengagement and Social Withdrawal

Another factor that is commonly found in the process of modernization is the emergence of a social prejudice against the aged sector of the society's population. Cowgill and Holmes (1972) saw an inevitability of decline of power among the elderly in the process of global modernization. Their comparison of 15 different societies has found that (1) the status of the aged is high in primitive societies and is lower and more ambiguous in modern societies; (2) In primitive societies, older people tend to hold positions of political and economic power, but in modern societies such power is possessed by only a few; (3) the status of the aged is inversely proportional to the rate of social change; (4) the status of the aged is high in those societies in which they are able to continue to perform useful and valued functions; and (5) disengagement is not characteristic of the aged in primitive or agrarian societies, but an increasing tendency toward disengagement appears to accompany modernization. Modern schools are built to meet the dual challenge of training the young to meet technological competence and of solving social problems that accompany societal modernization. Elderly individuals are encouraged to disengage and withdraw, and thus need no

more education.

Physical Landscape of Schools
   Because school education is geared toward the young, the physical environments of schools are designed for the young who are physically energetic, and not easily accessible to the elderly who are likely to be limited by the biology of aging.

The New Challenge in Education: Leisure-Oriented Curriculum for the Aging Population and Issues in Elderly Education

   Despite the above-mentioned obstacles in education, individuals of all ages in modern society undertake countless literary tasks each day: completing forms, reading notes, balancing checkbooks, following written instructions, comparing prices, browsing through news articles. As noted by the authors of the results of the U.S. National Adult Literacy Survey, "The ability to perform these tasks allows each of us to negotiate wide-ranging aspects of everyday life and to continue learning, growing, and participating in society" (Brown, et. al., 2000:1). Aging persons as well as society as a whole will benefit if older adults are valued as sources of wisdom and experience and perceived as vital and productive individuals who continue to learn, grow, and contribute throughout their later lives. (Butler, et.al., 1990) Learning is an essential part of what it means to be human, regardless of age, and economic realities continue to require that many older persons remain active in the labor force. (Tsai, 1999). The National Adult Literacy Survey does indeed indicate that "older adults who are equipped with strong literacy skills can contribute a great deal to society. These individuals are more likely to participate in civic activities and less likely to need assistance with everyday literacy tasks than are those with limited skills." (Brown, et.al., 2000:2)
   In recognition of differences between young and old in education, the Lifelong Learning NCES Task Force of the U.S. Department of Education has identified 12 issue areas within lifelong learning that need to be addressed. They are: (1) the adult population, (2) learning attitudes and skills of adults, (3) labor market demand for adult learning, (4) participation levels and patterns, (5) goals, incentives, and disincentives, (6) investments in adult learning, (7) adult learning providers, (8) instructional delivery and new technologies, (9) informal learning, (10) services and accommodations for adults, (11) outcomes and effectiveness, and (12) government role in adult learning (NCES Lifelong Learning

Task Force, 2000:6).

Although education for the elderly is slightly different from continued education for the middle aged, the issue areas listed by the Task Force are useful in the preparation for educating the elderly. Table 2 is a modified list of these final lifelong learning issue areas that are elderly specific.

Table 2. Major Elderly Education Issue Areas

The Demography of Adult Population
Learning Attitudes and Skills of the Elderly
Goals, Incentives, and Disincentives
Investments in Elderly Learning
Elderly Learning Providers
Instructional Delivery and New Technologies
Government Role in Elderly Learning

The Demography of Adult Population

Unlike K-12 education, adult learning among the elderly is not compulsory; this learning is often voluntary, or linked to work requirements. As a result, participation can vary among groups of adults, such as those with different levels of formal education. It is thus informative to monitor who participates in lifelong learning and to understand why some elderly participate and others do not.

Learning Attitudes and Skills of the Elderly

Just like other adults, the elderly participate in learning because they want to. Thus it is necessary to fully understand the skills available within the elderly population, their attitudes toward continued learning, and the skills they need in making themselves useful in the labor market. Much of the learning adults engage in is related to work, the elderly with work skills will be in greater demand after retirement in labor market as the result of the shrinking pool of young workers from lowering birth rate.

Goals, Incentives, and Disincentives

Elderly education and learning encompasses a broad array of activities that individuals may engage in for personal, social, economic, or other reasons. Goals, incentives, and disincentives need to be identified in any design for elderly education.

Investments in Elderly Learning

Two major policy issues concern the costs involved in elderly education. One issue is the extent to which employers invest in elderly employee training and skill development. The second issue is the extent to which the costs borne by elderly individuals restrict access to learning opportunities, particularly for physically handicapped elderly.

Elderly Learning Providers

One important feature in elderly education is to identify who provides or sponsors learning activities. Unlike education for the young that has a centralized and standardized pool of learning providers, providers for the elderly education are varied and decentralized. To construct a list of provider is crucial to the success of elderly education.

Instructional Delivery and New Technologies

Since the elderly are likely to be less mobile than young learners, instructional delivery must be different. New technologies such as computers, the internet, television, and other forms of electronic media will serve as important means of instructional delivery. New technologies will allow the elderly to learn in an informal setting, at home and at their leisure.

The Government Role in Elderly Learning

Finally, the government, functioning as a coordinating agency, needs to take an active role in encouraging participation in elderly education and policymakers need to know whether these efforts are working. An active role on the part of the government is particularly crucial in third world countries where private sectors are not equipped with the resources and manpower to allow them to be actively involved in elderly education.

A Leisure-Oriented New Curriculum for the Elderly

Central to the success of education for the elderly is the nature and substance of a well developed curriculum that is suitable to the elderly. This curriculum must take into account the two unique attributes of the elderly population in the society: older age and freedom from the responsibility of work. Most of the elderly go back to school for the purpose of self maintenance, physically, mentally, and financially, and in

order to actively participate in leisure time.

An ideal curriculum for elderly education therefore should include three important areas of study: Self-maintenance, leisure-oriented, and self enrichment as listed in Table 3.

Table 3 New Curriculum for the Education for the Elderly: A Proposal

I. Self Maintenance Block
Courses on Financial Management
Courses on Physical Health
Courses on Psychological Well-being
Courses on Family and Grandparenting

II. Leisure-Oriented Block
Sport Activities: Participation and Spectator Sports
Travel
Mass Media
Reading and Art Appreciation

III. Self Enrichment Block
Basic Computer Training
Internet: e-mail and World Wide Web
Volunteerism and the Community

The Self-maintenance block should include courses on financial management, physical health, psychological well-being, and family and grandparenting. The main goal in the self-maintenance block of education is to develop awareness of risks and challenges in old age and the necessity of purposeful self maintenance.

The Leisure-oriented block courses are scheduled to take advantage of the free-from-work elderly who take educational courses not in the pursuit of job and/or career advancement, but to spend time enjoying life. The courses in the leisure-oriented block may include both participatory and spectator sports, travel, the use of mass media, and reading and art appreciation. The main goal of the leisure-oriented curriculum is to encourage the elderly to be socially active and mentally positive.

The Self-enrichment block courses go beyond self-maintenance and the fulfilment of idle time. They are aimed at expanding the elderly's knowledge of fast growing technology, notably the use of computers

and internet world wide web resources. Courses in this block may include basic computer training, internet usage and volunteerism in the community. The rapid development of computers and the internet is changing the world with significant impacts. The learning and use of this new technology will not only enrich the self but also provide the elderly a ready-made means to be in touch with the outside world. Computers and the internet will also make the elderly closer to their adult children and grandchildren who may live hundreds or thousands of miles away.

Although various courses in the above list can be found in the catalogues of colleges and universities and in many senior centers throughout the United States and other advanced countries, often these courses are offered infrequently and fragmentally. There is an urgent need to design a curriculum exclusively for the elderly that will systematically integrate all or most of the courses listed above.

Educational Environment: Mainstreaming or Segregation

In designing new curriculum for education for the elderly, one can not ignore the crucial importance of the educational environment. Schools must not only be easily accessible to the elderly in consideration of the latter's possible physical limitations, but where the elderly students should be placed must also be taken into consideration: mainstreaming or segregation. Physical accessibility is easy to solve with the redesign of school buildings and transportation routes, but the debate on mainstreaming or segregation has pros and cons.

Those advocating mainstreaming want to promote maximum integration of older returning students into the population of younger students so that they may interact with each other and learn from each other; they feel that courses offered in colleges and universities should be opened to all students from young to old. The danger of the mainstreaming style of education is that older students may feel pressure from being in constant competition against younger students for school assignments and grades.

Those in favor of segregation, on the other hand, would like to see older returning students studying in schools or learning centers that are especially designed for them, such as the "Evergreen Academies" in Taiwan and mainland China. They argue that older students have special needs and thus must be placed in a separate educational environment.

The danger of such age segregation is the possibility that the education older returning students receive may be viewed as inferior and less qualified.

A third alternative in elderly education is learning through distance education and telework. Distance education and telework offer real opportunities to overcome certain physical handicaps and accessibility inconvenience.(Ollivier, et.al., 2000). They enable the elderly individual to work flexible hours at home or at a telecentre via a telecommunications network in the capacity of a teleservices provider. The widespread use of home computers has made this possible. Distance education and telework can also help the elderly to feel less isolated and restore their social identity with newly acquired skills and knowledge.

Conclusion: A New Challenge

Whether one likes it or not, global aging is inevitable. Aging of the individual no longer merely means   growing old. It must signify life-long growth and development in physical, economic, psychological, cultural, spiritual and other aspects of life. In its 1999 International Year of Older Persons statement, the United Nation emphasized the necessity of life-long learning in the following (www.un.org/esa/socdev/iyop/iyopcf2.htm: 1):

> Individual development through the different stages of the life cycle requires both individual initiative and an enabling environment. Individual development can be viewed as a process of interaction between the individual and society which can be mutually beneficial. At the individual level, this implies conscious effort to combine individual independence with contributory/ participatory behaviour, while striving towards self-development through life-long education, upgrading of skills and healthy lifestyles. Society, for its part, needs to accord equal importance to the challenges of each stage of the life cycle.

Education for the elderly is essential to the success of aging. When the majority of the elderly can pursue life-long individual learning, the years added to life can then be infused with a new sense of purpose and liveliness appreciated at both individual and societal levels. In the United States and other advanced countries, older people are returning to schools at proportionately high rates in pursuit of continued education. Although

courses in finance and in information technology are particularly popu-
lar among the elderly (www.policy.com:2), a well-designed curriculum
must include courses that focus on other aspects of elderly life. Only
then can education for the elderly be both individually and socially
constructive. The issues this essay have examined deserve to be taken
seriously. Global aging presents a new challenge to both educators and
politicians in all countries in this new century of human history and
evolution.

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