Although lifelong learning was a term created to mean cradle-to-grave learning, it has come to mean specifically adult learning and education. The adult learning force in the U.S. is huge and growing in size as well as interest. Since eighty-five percent of the active adult learners are high school graduates, they are eligible for postsecondary education. Many enroll in the formal programs offered by colleges and universities, but an even larger number spend time on self-directed, informal learning projects. Four social forces are contributing to this increase in adult education: (1) national pressure for expanded educational opportunities, which has resulted in learning no longer being tied to a physical location; (2) a combination of decreased emphasis on the credentials of the educational provider and increased emphasis on the credentials of the learner, permitting academic credit for experiential learning; (3) recognition of the necessity for, and pleasure derived from, lifelong learning; and (4) the societal shift from a linear life plan to a blended life plan, which has been produced, in part, by the job shortage. Educational providers for lifelong learning are a diverse group including libraries, museums, and television as well as schools. As they develop their unique educational strengths, they will continue to provide education with a diversity of options. (ELG)
I am delighted to meet with this group of educators from Northern California to discuss the phenomenon of lifelong learning. One of the things that makes this group especially exciting to me is its diversity. There are people here tonight from schools and colleges as well as from museums, libraries, community agencies and the military. I hope that this kind of group will spring up and thrive everywhere since the variety of learning options is one of the most significant characteristics of the Learning Society. It is going to be increasingly important that those of us from different sectors of the educational enterprise meet and talk and coordinate our efforts.
I hope that my role tonight will be more to stimulate your conversations with one another than to replace them. But to start things off, let me share with you some things I have been thinking about. I hope you will then add your perspectives and observations about the future of the Learning Society.

The term lifelong learning is really meant to embrace cradle to the grave learning, but in practice most people talking about lifelong learning are primarily concerned with adult learning because adults present the new wrinkle in education. America has long provided well for the education of its young, but the formal educational system has given little heed to the very real human need to continue learning throughout life. Gail Sheehy's best-selling book, Passages, traces the stages of adult life that call for new adjustments and constant personal growth. The interest generated by the book is only a symptom of the escalating interest in lifelong learning.

The adult learning force is potentially huge, and it is growing in size as well as interest. The explosive growth in the number of adult learners during this decade is the result of changing demographics as well as changing lifestyles, and it will affect all providers of learning resources.

Demographically, the World War II baby bulge is moving into the adult years. Those born in 1957 at the peak of the birth rate are now 21, and those born at the beginning of the birth explosion are almost 30. The high birth rate of the 1950s combined with the abnormally low birth rate of the 1960s produce statistics for the 1970s in which the number of 18-24 year olds will grow a modest 8 percent while 25-34 year olds will increase a whopping 44 percent. By the year 2000, says the National Center...
for Education Statistics, "the United States population will be dominated by persons in their middle years" (Golladay, 1976, p. 12). Adults then, just in terms of sheer numbers, constitute far and away the largest market for educational services.

The increase in the number of adults seeking new learning experiences is growing even faster than their numbers in the population. During the first half of this decade, the number of adults participating in some form of "organized instruction" in adult schools, employer-sponsored training programs, churches, community organizations and the like increased three times as fast as their numbers in the population, and that growth is expected to continue, although at a somewhat diminished rate of growth.

Research on adult learning interests indicates that over three-fourths of the adults who are no longer full-time students in school say they are interested in further learning, and an amazing one-third of the adult population actively participate each year in some form of organized instruction (Carp, Peterson, and Roelfs, 1974). Adult enrollments in classes, workshops, discussion groups and the like already exceed by a large margin the total number of regular students enrolled in all institutions of postsecondary education, and part-time adult learners make up the new majority on college campuses. The average age of the community college student these days is 28 and rising. Thus adult education is becoming big business for the educational establishment.

Although all providers of educational services are interested in adult learners today, much of the enthusiasm has been generated by colleges and
universities, both because the traditional 18 year old college student is a diminishing commodity and because the greatest demand for further educational opportunity comes primarily from adults with at least a high school education—85% of today's active adult learners are high school graduates, and as such, are eligible for postsecondary education. Despite that fact, colleges and universities provide only a little more than one-third of the organized instruction for adults. Industry enrolls one out of eight employees in various classes and courses of instruction, spending about two billion dollars a year on education (Lusterman, 1977). Community organizations including libraries, museums, churches, senior citizens organizations, etc., provided instruction for nearly two million adults in 1975. The military services operate the largest educational system in the world.

But as almost any adult will freely testify, some of our richest learning experiences occur, not in school or even in organized classes but in self-directed learning which may range from informal and unstructured to rather carefully organized and well structured programs of learning. Recent discussions about lifelong learning make a distinction between adult education as "organized instruction" and adult learning as self-directed "deliberate efforts to learn." Research indicates that over 80% of the adults in this country are self-directed learners, meaning that they carry out at least one learning project per year. A learning project is defined by the researchers as a series of related episodes adding up to at least seven hours in which the intent is to gain new knowledge or skills (Tough, 1971). Actually the average self-directed learner spends about 100 hours
per learning project and takes on about five projects per year (Tough, 1978). That adds up to a very impressive 500 hours per year of self-directed learning for the average man or woman on the street.

The distinction between adult education and adult learning can be illustrated by the impact of the television program "Roots" on the learners of this nation. That television program stimulated increased enrollments in classes in anthropology, to be sure, but it also resulted in a veritable rash of requests to libraries and records bureaus for help with self-directed learning projects.

One of the characteristics of the Learning Society is that learning from one source is quite likely to have a ripple effect in its demands on a wide variety of other learning resources. The more people know about almost any subject, the more they want to know. The movie "Turning Point," for example, had a dramatic impact on interest in ballet; travel almost inevitably stimulates interest in other cultures just as learning about other cultures stimulates interest in travel, and so it goes. The interest in lifelong learning will escalate because learning is addictive; the more education people have, the more they want.

Although research on adult learning clearly demonstrates an upsurge of interest in lifelong learning, it doesn't really take studies and statistics to convince sensitive observers of social trends that the Learning Society is either already here or on the way. Whether one looks at the "greying of the campus" caused by the heavy influx of adults into college classes or whether one talks about the much larger learning force utilizing an ever-
widening variety of learning resources, the conclusion is the same:
Lifelong learning is a social phenomenon of great significance for museums and
libraries, schools and colleges, television and radio, newspapers and
magazines, employers and labor unions, government and community agencies.

For just a little while tonight, I would like to look at lifelong
learning from the broader social context in which most of you will do your
work. Along the way, I shall point to some of the challenges that I see
in the Learning Society of the 1980s.

Let us look first at some of the social forces that are fueling—or
maybe even fanning to white heat—the growth of the Learning Society.
First on my list of causal factors is the ever-present drive for
educational opportunity. Although some may associate educational
opportunity with recent social movements such as civil rights, women's
liberation, and attention to the needs of the elderly, expanded educational
opportunity has been a national goal ever since this country was founded.
The unceasing pressures for expanded learning opportunities can be vividly
and simply illustrated through the symbolism of the physical boundaries of
the college campus. The first campuses in this country were small collegial
communities in which students and faculty lived on or around the campus,
their physical isolation a symbol of their removal from the worldly concerns
of the masses. In the 19th century the landgrant institutions came into
being, expanding the classical curriculum to include applied subjects,
serving a much larger audience of learners and creating huge, albeit still
largely residential campuses. A century later, the community colleges
began to change the concept of campus. In deliberate contrast to their
Predecessors, community colleges were usually located in the very centers of population, designed for commuting faculty and students whose lives were rooted as much in the community as on the campus. The community college movement introduced the concept of using the entire community as campus.

Finally, the 21st century, with its sophisticated technology and mass media, is destined to move beyond community as campus toward colleges-without-walls which regard the world as their campus. Indeed there are already in existence over 200 fully-accredited colleges-without-walls which enroll some 54,000 adults in associate and bachelor's degree programs, frequently without requiring the physical presence of the learner on a campus (Sosdian, 1978). One has only to note the increasing educational uses of satellites in space to picture moving beyond the constraints of world as campus to embrace the universe as the learning environment.

Clearly, education for adults 18 and over has burst explosively from its physical boundaries and learning is now acknowledged to reside in the individual rather than in the buildings and professors of the ivied halls.

The notion that learning is not tied to a physical location is spreading to younger learners too. Millions of children have watched Sesame Street and the Electric Company on television. Millions more are participating in both formal and informal learning experiences planned by museums, libraries, and other community agencies. My personal observation is that the Bay Area is rather heavily saturated with a great range of learning resources. Indeed a recent report to the California State Legislature (Peterson et al., 1979) concluded that the supply of educational services in California was quite
adequate. What is missing is an adequate information/counseling network to
link learners with the appropriate learning resources (see Cross, *The Missing
Link*, 1978).

A second characteristic of lifelong learning is that it is becoming
increasingly free of the credentials of the provider. Once learning is
perceived as a characteristic of the learner rather than an offering of the
provider, it shifts attention from teaching to learning. That shift in
emphasis has been strongly articulated even within the bastions of
credentialism--the educational establishment. "Experiential learning" is
the term that has come into being to reflect widespread agreement that when
or where or from whom one learns is not nearly as important as what one
learns. A majority of colleges in the country today grant academic credit
if students can demonstrate on examinations that they have learned as much,
through a method of their own choosing, as those attending class on campus.
As most of you know, on many campuses it is not even necessary to take a
written examination; students are permitted to submit evidence of past
learning in a variety of forms--from portfolios of accomplishments to
letters from supervisors of volunteer and work experience related to their
field of study.

Ironically, the decreased emphasis on the credentials of the provider
seems to have led to an increased emphasis on the credentials of the
learners. Those of you working in museums, libraries and other historically
non-credit educational programs should not be surprised when people begin
to ask where they can get credit for the kind of learning done under your
auspices. Similarly, don't be surprised at requests for study guides or
for special learning experiences that fit into the learner's study plan. A number of colleges catering to the maturity and experience of adults no longer start with a list of courses to be taken by the student, but rather with helping the student work out an individualized "learning contract" which spells out the goals of the learner, the learning activities designed to accomplish the goals, and methods to be used in the evaluation. Faculty in such institutions are more likely to play the role of learning facilitator than provider of information, as adults assume more active roles in designing their own programs of lifelong learning.

A third factor contributing to the emergence of the Learning Society is the recognition by citizens that lifelong learning is an essential and measurable aspect of life. Our knowledge of the world is changing so rapidly now that lifelong learning is a coping skill necessary to survival. Every 40 minutes enough new information is generated to fill a 24-volume encyclopedia. Many of us can empathize with the medical student's distinction between a generalist and a specialist. "A general practitioner learns less and less about more and more until he eventually knows nothing about everything, while the specialist learns more and more about less and less until he eventually knows everything about nothing." Where all this will end, I can't possibly foresee, but the fact is that knowledge is more essential than ever before, and fortunately, more easily obtainable.

Increasingly adults are taking advantage of new learning opportunities—especially adults who are already well educated. One thing we know for sure from the recent research on adult learners is that the more formal education an adult has, the more likely he or she is to seek further opportunities for
learning (Cross, 1978). A college graduate, for example, is about eight
times as likely as a high school dropout to participate in adult education,
and each year of additional education seems to add to the desire for further
learning. And, of course, the level of educational attainment for the
populace is rising with each passing decade. The average adult in the United
States now has more than 12 years of formal schooling.

The learning market is also being stimulated right now by a subtle but
perceptable shift from what has been called a linear life plan to a blended
lifeplan. By and large, advanced societies promote a linear lifeplan in
which youth is spent in education, middle-age in work, and old age in
enforced leisure. The increasingly pronounced separations between education,
work, and leisure are due in part to the job shortage which is neither a
recent nor temporary phenomenon. For the past 50 years society has been
unable to provide jobs during peacetime for everyone willing and able to
work. A policy paper recently issued in Washington maintains that those in
mid-life who are at their peak of political power and influence have
reacted to the chronic job shortage by "pushing young persons back into
schools and older persons into ever-earlier retirement" (Best and Stern, 1976,
p. 6).

There seems to be growing dissatisfaction, however, on the part of
almost everyone, with this solution to the problem. Sociologists are
observing the rise of what has been called "rights consciousness" or the
"psychology of entitlement." Almost everyone today feels entitled to a job.
At the same time, almost everyone feels entitled to education and to full
enjoyment of their leisure hours. Older people have insisted upon their right to work if they want to, and Congress has endorsed that right through a roll-back of mandatory retirement. Young people are showing increasing dissatisfaction with long years of uninterrupted schooling, especially when there is no guarantee of the well-paid and meaningful job to which they feel entitled, at the other end of the educational pipeline. There has been a steady increase in the number of students exercising their right to a job. The labor force participation rate for students 14 to 24 years of age has climbed from 21 in 1948 to 35 today—all of which brings about the phenomenon of the part-time student, part-time worker, part-time vacationer. There is nothing very exceptional anymore about the student who attends college, holds a job, and takes off for what would once have been considered extravagant leisure weekends of skiing or surfing.

It is not only young people who feel entitled to the good-life as a blend of work, education, and leisure. Women, dissatisfied with unidimensional lives, are flooding into the labor market—and into education—in unprecedented numbers. Blue collar workers feel entitled, as never before, to a life beyond the factory. Labor unions are negotiating education and vacations into contracts. There is a rising desire on the part of the rank-and-file for benefits beyond mere wages—benefits that enhance the quality of life.

The point is that after a long human history of moving steadily toward a linear life plan which divides all life into three full-time phases with education for the young, work for the middle-aged, and enforced leisure for
the elderly, people from all walks of life seem to be opting for a blended life plan which permits leisure to go on concurrently with other activities among the three basic areas of life; it is increasingly common, for example, to fill leisure hours with learning activities, and many people, especially professionals, find pleasure in pursuing learning related to their work.

At the same time that there is a blending of life activities for individuals, there is a blending of function among the organizations of society. Employers are increasingly into the education business, conducting on-the-job training, workshops for professionals, and think-tanks for executives. Travel agencies are adding educational components to packaged tours at the same time that alumni offices and university extension services are adding packaged tours to credit-bearing courses. Most community agencies have long blended learning and leisure for adults, but all providers of educational services are going to have to be oriented to the new demands of the Learning Society. Adult learners are becoming more sophisticated in their use of community resources in some ways and just different from past users in other ways.

Life in America used to be experience-rich and information-poor. It was hard in pioneer days to get information about how to grow better crops, but easy to get more farming experience than many pioneer children wanted. Today our society is just the other way around--information-rich and experience-poor. We can get surfeited on information on just about anything we want to know; getting experience is sometimes very difficult. Our high
schools and colleges are full of young people rich with information, but we must sometimes go to fantastic lengths to provide experience through internships, role-playing, simulations, and other attempts to create quasi-real situations to supplement and extend their information.

Perhaps this relative deprivation explains in part why learners in our society are so eager for involvement in experiential learning. It is fine for an urban child to read about horses; it adds reality to see horses on TV; but to touch and smell a horse is a rare experience for dwellers of the concrete jungle. Those of us working in formal educational settings need to be reminded that learning that utilizes all the senses is a richer experience than learning that depends solely on the two major senses of sight and sound. And a greater use of multidimensional modes of learning is probably as important for adults as it is for children.

Some fascinating new research on the functions of the right and left hemispheres of the brain indicate that the left hemisphere handles learning that is linear, verbal, and rational whereas right brain function concentrates on learning that is simultaneous, visual, and affective. Schools and libraries exercise the left hemisphere of the brain with their emphasis on verbal symbolism and rational, sequential, logical thought. Television and museums, on the other hand, call on right hemisphere function with more simultaneous affective involvement in the learning experience.

One of the really fascinating characteristics of the Learning Society is the diversity that is possible with multiple providers of learning resources. Museums are like television when considered along a dimension
of right hemisphere affective involvement versus left hemisphere rational analysis, but museums are more like libraries when viewed along a different dimension which might be labeled "linear sequence" versus "random access." Television presents in linear sequence, as do most classrooms. If I want to learn about the weather, for example, I must first sit through the sportscast. Newspapers, in contrast, offer random access; I can skip sports and turn directly to weather at my convenience. One of the great advantages of libraries and museums over television and classrooms is that the learner has much more control over sequence and pacing. Museums, like libraries, offer random access learning, permitting people to spend hours on Venitian glass, skipping totem poles altogether if they wish. Furthermore, museums offer learners maximum flexibility in scheduling. They need not miss learning about Venitian glass because they are unable to set aside the hours from 8-10 in the morning for class or 8-10 in the evening for the television special.

The point of these comparisons and contrasts of the various resources of the Learning Society is that with multiple resources, no provider need do everything well. Educators, whether in schools and colleges, museums and libraries, television or radio studios, can concentrate on developing the strengths of their unique contributions to the Learning Society.

The exciting potential of the Learning Society lies in its capacity to surround us with learning options--credit or non-credit, cognitive or affective, linear sequence or random access, on campus or off, taught by the kindly Mr. Chips, schoolmaster of yesteryear, or R2D2, technological
tutor of tomorrow. The challenge to all of us as educators will be to develop the unique contribution of our particular medium to its highest form of excellence.
REFERENCES


