

LIVING IN THE LEARNING SOCIETY

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You have an exceptionally rich agenda before you for the next few days, much of it dealing with rather specific concerns about quality in off-campus programs. Because I believe that off-campus programs are on the cutting edge of changing roles for education, I'd like to kick off this conference by backing away a little bit from your day-to-day concerns to try to paint with a broad brush a picture of the Learning Society in which we live and work.

My general text for this evening is that our society has become exceedingly dependent on education and adult learning, not just as the route to future progress, but as a necessity for survival in the world in which we now live. Change occurs so rapidly that without continuous learning--in the rather formal sense of that word--we cannot even keep the machinery of the society going, let alone hope to improve the quality of our lives through education.

We usually think about the future as a long way off, but here we are right on the edge of 1984, and if it is not exactly Orwellian, the date still evokes images of a distant future.

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Satellites in space, wired cities, and computers conversing with computers are phenomena that we know exist, but most of us still find them futuristic and somewhat removed from our daily lives. But sidewalk bank tellers and supermarket computers that print out our grocery list in unbelievable detail are part of our lives, and they seem to have arrived so fast that it is hard to assimilate the notion that the future is here.

In education, the future has arrived almost as fast as in technology. While we are being warned to prepare for new kinds of students, statistics document their quiet arrival. Over 40 percent of this fall's entering students are part-time students (up from 30 percent just a decade ago), and a third are over the age of twenty-five. Similarly, while the literature exhorts us to consider changing our ways to accommodate the new learners, quite traditional colleges have instituted non-traditional practices at a very fast clip. Eighty-four percent of all colleges now grant credit for CLEP examinations, up from 35 percent in 1970, and 41 percent grant credit by assessment of experiential learning, up from 14 percent a decade earlier (Stadtman, 1980). While we debate the merits of the external degree some 54,000 students are enrolled in external degree programs offered by some 240, mostly traditional colleges (Sosdian, 1978). While the literature is still explaining why television never caught on in education, thousands of students are enrolled in televised courses, and PTV III opened this fall

directors. Teaching and learning take place on campus and off, in the home and on the subway, in union halls and professional offices. Teachers address millions of learners via television, and Mark Hopkins lives on in the one-to-one relationship between mentors and learners.

Educators who understand the escalating pace of change are not much worried about the demise of education. A far more realistic worry is whether education can keep up with the new demands. Were we to take a narrow view of education as consisting only of the formal system of schools and colleges for young people, there would be considerable question about whether education could possibly meet the demands of a society grown dependent on education in very fundamental ways. What would happen to a society that actually fulfilled the stereotype of people "completing" their education by age twenty-two? If you stop to think about it, the wheels of change and progress are fueled almost exclusively by adults learning new ways to accomplish society's work. Formal education for young people, if it is good, lays the groundwork for lifelong learning, and it is of course basic and essential. But in the society in which we live, organized adult learning has also become indispensable. Legislators and others concerned about social policy may well debate how, where, and by whom adult education should be offered; whether it should be broadly available and whether social and educational policy should

deal with it are now foregone conclusions.

At the moment, adult education is growing rapidly, but without direction as supply and demand stimulate each other to new bursts of growth. Adults are seeing advantages to education for themselves in almost every facet of life, including career, leisure, family life, and personal development. Each year approximately one in every three American adults is engaged in some form of "organized learning." That does not include the uncounted millions who are reading how-to-do-it books, watching educational programs on television, or engaged in a wide variety of self-directed learning projects (Tough, 1978). The primary reason for adult participation in organized educational activities is work related--to get a new job, a better job, a promotion, or to improve skills. In part because of the vastly improved job market for women, women constitute the most rapidly growing segment of the adult learning force, growing four times as fast as their numbers in the population. Perhaps the most spectacular indicator of what is going on in the Learning Society is the number of people, young and old, who are making education an important component of their lives along with jobs, family, and recreation. The formerly full-time worker is becoming a part-time college student almost as fast as the formerly full-time college student is becoming a part-time worker. As recently as 1970, one third of all college students were part-time students; today, 42 percent

are part-time, and by 1985, half of all college students enrolled for credit will be part-time learners, combining their formal learning with other adult responsibilities. Tilting the college population from a majority of young full-time students to a majority of part-time working adults is a change that affects far more than funding formulas. The Learning Society that we have been talking about has arrived, and it is a very different world from that in which most of us received our education.

Now since it is in vogue to talk about supply-side economics, let us take a look at what is happening on the supply side of education. Although 90 percent of the adults engaged in organized instruction today are high school graduates, and more than half have had some college work, colleges and universities provide less than 40 percent of the organized instruction for adults. The Big Five in the provision of educational services are schools, colleges and universities, community organizations, industry, and professional associations, in that order (Peterson, 1979).

Industry has been called the "shadow educational system," although in terms of sheer size, industry casts a mighty long shadow. It is estimated that employers spend as much on in-house training and education as the combined state appropriations for higher education in all fifty states (Lynton, 1981). At least 45,000 full-time corporate employees devote all or most of their time to educa-

tional duties (Lusterman, 1977). Those duties range all the way from skills training to education for cognitive and personal development. Their educational settings vary from the equivalent of the one-room schoolhouse to elaborate campuses to satellites bouncing educational programs into the offices and classrooms of vast multinational firms. One of the ironies of the Learning Society is that distinctions that used to prevail between collegiate education and corporate education are no longer clear. The biggest trend in traditional education is the provision of off-campus programs to serve working adults. But corporate education is beginning to build luxurious residential campuses. IBM's new five-building campus on 26 wooded acres 35 miles north of New York City boasts two residence halls with far more than the comforts of any university housing. Thus corporate managers are retreating to the seclusion of the IBM campus for a week or more of full-time study at the same time that traditional colleges are moving into the hustle and bustle of the city and offering commuting workers a chance for part-time study. But perhaps an even newer trend in corporate education is to build urban institutions that signal an interest in the community while providing corporate students with ease of travel and the conveniences of the city. Aetna Insurance Companies have a brand new

35 million dollar educational facility going up in downtown Hartford that will house and feed 400 residential students in addition to serving commuting students from the Hartford area. Whether urban or suburban, the residential campuses of IBM, Aetna, Xerox, AT&T, and other giants of industry are symbols of the Learning Society that invoke visions of a reversal of roles in which Junior settles Father into his dormitory room for a full-time executive training course and then returns to his own life as a part-time student commuting to the local campus.

Another phenomenon that illustrates the pervasive spread of education in its infinite variety of forms is the explosive entrance of hundreds of colleges into non-credit education, at the same time that corporations are launching degree-granting programs. Within the past decade, the number of colleges offering non-credit programs has more than doubled, rising from eleven hundred colleges in 1968, to almost twenty-four hundred in 1978; today it is the norm rather than the exception for degree-granting institutions to be involved in non-degree instruction. While it is not yet commonplace for corporations to be involved in degree-credit programs, the ACE's Office of Education Credit lists as worthy of academic credit, over 1000 courses offered by more than 100 corporations. In the ACE program, it is still the college or university that determines which courses actually receive credit, but increasingly, colleges are

losing their once-secure monopoly on academic degrees. Within commuting distance of my home in Boston are four new programs in which non-educational organizations are granting academic degrees for programs operated independently of any college or university. Arthur D. Little, a consulting firm, offers a Masters Degree of Science in Management. Wang Institute, a free-standing institution founded by Wang Computer Laboratories, offers a Masters Degree in Software Engineering. This past spring the American Institute of Banking accepted its first class of a hundred students into a brand new Associate Degree of Business Administration in Banking Studies program, and last fall, Massachusetts General Hospital accepted students into four Masters degree and two Baccalaureate degree programs in the health professions.

Professional associations don't offer degrees--yet. But they offer a type of credit that is even more important to professionals in states where continuing education is required in order to retain or renew licences to practice. The American Institute of Certified Public Accountants, for example, has a 7 million dollar educational budget for the development of self-instructional materials, seminars, and workshops to meet requirements certifying that CPA's are current in their knowledge of their profession.

One-fourth of the nation's museums are now engaged in rather formal educational work, offering classes, workshops, and seminars in addition to their exhibits. The painting class for parents and children offered by the New York Metropolitan Museum symbolizes as well as any program I know of the true concept of lifelong learning which is, after all, far more than adult education. It means involving people early in the experiences and attitudes that lead to a lifetime of learning. Literally hundreds of other examples of the explosive growth of the Learning Society could be described.

I cite all of this evidence of growing numbers of educational providers, not to evoke fear that traditional education is facing unaccustomed competition, but to demonstrate that education has moved from an isolated phenomenon,

confined to certain years of life and certain institutions of society, to a pervasive influence throughout the society. Organized instruction is rapidly becoming a part of every person's life, and it is also becoming a part of the activity of many of society's organizations. The Learning Society exists when society's people and society's organizations are widely involved in teaching and learning.

Having made my case, I hope, that the Learning Society has arrived, I want to turn now to a discussion of what difference that should make to educators. There is both good news and bad news in the research that describes adults as learners. Through the generosity of the Carnegie Corporation, I was able to spend two years collecting research studies, summarizing their findings, and then attempting to construct a synthesis of what we think we know about adults as learners (Cross, 1981). After reviewing about a thousand studies, I concluded that we know a great deal about some things--for example, what adults say they want to learn and who participates in adult education and who doesn't. We don't know very much about some other things--for example, how to teach adults effectively and what impact learning has on their lives. But we know enough to put some building blocks in place for a foundation upon which to build, and we are able to identify some problems that need immediate attention and some directions that look fruitful.

First the good news. Adult learning is very popular. We have always known that children are eager to learn, and unless their natural bent for learning is stifled or thwarted, learning is a natural and pleasurable part of life. The same is true for adults. Studies on the naturalness of learning over the life span show that almost all adults create learning projects for themselves. Alan Tough, the Canadian researcher known for his work on self-directed learning, concluded that the typical adult spends almost 500 hours each year in "sustained, highly deliberate efforts to learn knowledge or a skill." (Tough, 1978) The learning projects of self-directed learners range all the way from the fairly extensive background reading and discussion that most people engage in to plan where to go and what to see on a vacation trip, to extremely complex lessons that people teach themselves because they are on the cutting edge of knowledge where no one has ever been before. Most people, when asked why they teach themselves instead of taking a course, respond that they want to set their own pace, use their own style, or can't wait for a course to teach them what they need to know right away (Penland, 1979).

Even if the definition of learning is restricted to more formal organized instruction, the research shows that it is still highly regarded and widely practiced. Over a third of the American adult population is engaged in some form of organized learning, usually involving instruction from someone else, and nearly 80 percent of the respondents

to a nationwide survey said that they would like to participate in some learning activities within the next two years (Carp, Peterson, and Roelfs, 1974).

Most people, whether teaching themselves or participating in learning activities organized by others, are fairly pleased with the results, although there appears to be plenty of room for improvement. Sixty-five percent of the self-directed learners said that they were "very enthusiastic" about having the knowledge or skill learned through their projects, and 57 percent claimed they learned "a great deal" under their own direction (Penland, 1977). Those participating in adult education activities directed by others, while not quite as enthusiastic about the results as the self-taught learners, were nonetheless fairly well-satisfied. Forty-four percent said their courses were more helpful than they had expected, but still the most common reason for dropping a course was because it was "disappointing or too demanding" (Boaz, 1978). Almost a fourth of those dropping courses blamed the course, but only five percent of the adults who signed up for a course in 1975 admitted dropping out before completing it (Boaz, 1978).

So the good news is that the Learning Society is alive and well, and there is a lot of rather satisfying learning activity in the lives of most people. The bad news is that there is a clear and consistent difference in the amount of learning done by people from different socioeconomic

done but it is going to take the united efforts of everyone, from program planners to teachers to policy makers. First and most obviously, it is now more important than ever for everyone to possess the basic tools for learning.

The child who does not learn to read, and equally important, to enjoy reading, is going to be handicapped for life in a society in which all upward mobility depends on learning.

Second, educators--wherever we meet adult learners--need to help build the learning skills and attitudes that enhance learning. It is highly probable that formally organized learning will become increasingly important for adults. As important and desirable as self-directed learning is, career advancement is the major motivation for adult learning, and the increasing complexity of job knowledge will require the help of professional educators in the design and delivery of instruction. Unfortunately, formal education is a threat to many adults. Because we have managed to teach most children that school is competitive and that, by definition, half of them are below-average learners, we are going to have considerable difficulty re-exposing the lower half to formal education.

I suspect that adult learning activities can be ordered along a continuum of the amount of threat present in the learning experience. At the top of the scale would be competitive corporate programs in which the participants are well-aware that their future with the company and maybe

their entire career depends on their performance in the executive development program. Not so incidentally, traditional college classes are also highly competitive, with the common perception that one's career may depend heavily on the grades received. At the lower end of the threat continuum would be televised instruction with self-scoring tests and non-credit classes; in between would be competency-based skills programs. (See Cross, 1981, Ch.6 for further discussion).

Most adults are going to have to convince themselves that they are able to participate effectively in educational programs before they will become volunteers in the Learning Society. That means that we must provide a wide variety of programs that start people in low-threat situations to help them build the self-confidence and learning skills that will permit them to proceed into any programs that meet their needs. Research shows that once people have confidence in themselves as adult learners, they are eager for new learning opportunities.

Given the fierce battle over funding for social and educational programs at both state and national levels, choices will have to be made, but I suggest that it would make good sense to provide public support for programs that bring people into the Learning Society through providing the basic skills and attitudes necessary for lifelong learning. It may then be quite legitimate to encourage free market competition among providers serving the already well-educated. At that level, learners should be able to recog-

nize and demand quality. You, among most other educators today, are vitally concerned about quality in both traditional and non-traditional forms of education. While I strongly support all efforts to drive out the hucksters and to support a wide variety of quality programs, I doubt that quality in education can ever be attained through external regulation. A major function of compulsory education should be to prepare young people for their futures as lifelong learners. That means that they must be able to tell the difference between fraud and quality education, and they must be able to assess the value of the education for them. Asking students to evaluate their courses is a tiny step in the right direction, but evaluation is no simple task, and I believe that it is the solemn duty of educators to teach students how to assess their learning needs, how to develop goals, and how to judge the effectiveness of the education in light of their individualistic learning styles.

There is a lot of talk today about core general education and what every educated person should know. My answer to that perpetual question is that every high school graduate should know how to select and evaluate the educational experience that will meet their particular needs, and all college freshmen should be required to know something about themselves as learners and about the learning options that lie ahead of them. (See Trani, Sample, Cross, and Wiltse, 1976).

Another major piece of good news about adults as learners is that adults are capable of learning almost anything they want to learn. Experimental research on the relationship between aging and learning has been going on ever since psychologists came up with the concept of IQ, which assumed that intelligence reached its full capacity around age 16. As the methodology and sophistication of psychologists grew so did the evidence that aging does not have much effect on learning capacity until quite late in life--seventy-five and older. Even so, most of us know at least one 80 or 90 year-old who continues to inspire us with their capacity and interest in learning.

One of the most interesting theories about aging and learning has been proposed by psychologist Raymond Cattell (1963), who differentiates between the type of learning abilities possessed in the various decades of life. He found that younger learners score higher on tests of fluid intelligence, which means they are more adept at learning tasks calling for quickness, memory, spatial perception, and adaptation to novel situations. Older learners however, score higher on crystallized intelligence, which is utilized in tasks calling for judgement, vocabulary, general information and reasoning. There should be nothing very startling about

that conclusion to ancient cultures where, on the basis of experience, people learned to revere the wisdom and judgement of the elders and to call on younger people for quickness and adaptability in learning new skills. In our society too, we find that scientists working on the cutting edge of new and novel technology tend to be young people, whereas our judges and philosophers are typically older. The message, however, for teachers and program planners is that both the needs and the abilities of learners are different at various stages of life.

Malcolm Knowles (1978) has written extensively about the need to capitalize on the past experience of adults. While it is always desirable to relate new material to what the learner already knows, there is a much richer and more varied fabric with which to work in the case of adults. Yet we continue to model adult instruction on that designed for children in which it is assumed (wrongly even there, it turns out) that the teacher's task is to fill the blank slate of the learner.

If there is any bad news in the research on adult learning, it probably lies in the lack of imagination and confidence shown by most adults when they respond to questions about their futures as learners. Many adults would be satisfied with classroom lectures delivered by those whom they perceive to know the answers. They would, as the saying goes, be content to transcribe the information from the professor's lecture notes into their notebooks without it

ever going through the heads of either. If there is anything that we know for sure from all of the research on learning over the past several decades, it is that the learner must be actively engaged in the process. To "give" students the latest information in our fields may be necessary, but it is hardly a sufficient response to the demands of the Learning Society. If we can teach learners, whenever they are with us, that learning provides satisfaction, enjoyment, and yes, power and control over their own lives, then we will have initiated them into the Learning Society. Once initiated, there is every evidence that they will become lifelong members.

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