THE LEARNING SOCIETY IN 2001

K. Patricia Cross
Harvard Graduate School of Education

The year 2001 is only seventeen years away. If the next seventeen years show as much change as the past seventeen years, we are in for some unanticipated surprises. To illustrate the point, let us look back seventeen years to 1967.

The 1960s were boom years in higher education. New campuses were being built--at the rate of one per week for community colleges--student enrollments were growing; faculty jobs were plentiful; research grants were abundant, and morale and spirits were generally high. The major worry--and it broke more than a few presidents--was what was euphemistically called "student unrest." Students were anti-establishment; they were more concerned about the ethical and moral issues of civil rights and Viet Nam than about jobs and grades. The routine of most campuses was disrupted, at least temporarily, and in some instances violence flared and pictures of Kent State, Peoples' Park, and students in combat with state troopers dominated the nightly news. The contrast between the climates of the campuses of 1967 and 1984 could scarcely be more dramatic.

Prepared for the Annual Fall Conference of the Eastern College Personnel Officers Association, Bretton Woods, New Hampshire, October 1, 1984

The flip side of the comparison is the remarkable stability of higher education. Professors still meet their classes three times a week in fifty-minute periods; they lecture and conduct discussions. Students select majors, take tests, and write term papers. Eventually, they get married and take jobs. It is harder for faculty to publish in 1984 and easier for them to perish, but the academic rituals persist, departments prevail, and the curriculum and academic calendars change slowly and only after interminable discussion.

The seventeen years between 1984 and 2001 will probably show more change than the seventeen years between 1967 and 1984 because the pace of change continues to escalate. Each generation copes with a faster rate of change than the previous generation: that fact has futurists like Alvin Toffler (1970) worried about "future shock." When will we reach the point where people can no longer adapt to the pace of social and technological change?

No one can predict what life will be like when we enter the 21st Century, but we think we are getting better at considering the multiple factors that bring about change. Peter Drucker (1971) with good hindsight, maintains that we should have been able to predict the campus unrest of the 1960s had anyone thought to analyze the probable impact that the largest cohort of seventeen-year-olds in history would have on American society. So now we look at demographics. Seventeen years ago, in 1967, people were taking up lifestyles that did not accord high priority to children and family life. Today the "baby bust" is having an impact on everything from college enrollments to job opportunities to marketing.

I want to talk about trends today, factors that are visible on the horizon now that are quite likely to influence education and jobs in 2001. I have cast these trends in the form of three propositions.

Proposition 1 states that the demand for education is growing. That may seem a strange and even out-of-touch observation when educators are talking about declining enrollments, retrenchment, and school and college closings. But as a society, we are moving into a world in which knowledge is power--for individuals, for business, and for society as a whole. Rosabeth Kanter (1983) labels the ideas that people introduce into business "the most potent economic stimulus of all," and the thesis of her best-selling book The Change Masters is that the renaissance in corporate America consists of a new reliance on people. Alvin Toffler (1980) addressed the same theme under the title of The Third Wave. In the First Wave, according to Toffler, land was the capital asset of an agricultural society. With the rise of the Second Wave and the Industrial Revolution, machinery replaced land as the route to economic advantage. The Third Wave is the technological society, dominated by computers and the production and processing of information.

In this wave, the knowledge and the ideas of people represent economic power. Productivity in the information age depends directly on the competence of human beings in creating, selecting, and utilizing the torrent of information unleashed by computers and information processing.

In 1950, only 17 percent of the jobs in America involved the processing of information; today more than 60 percent of all workers are creating, processing, or distributing information (Naisbitt, 1982). Of the 19 million new jobs created in the 1970s, almost 90 percent were information, knowledge, or service jobs; only 11 percent were in the goods-producing sector. That doesn't mean we aren't producing goods; it just means that knowledge has become more important to production than either labor or capital (Sowell, 1980). And so business is dependent on knowledge, as are the individuals who wish to work for business. Older employees are as much captives of the knowledge explosion as younger workers. Indeed, in some rapidly developing professions, such as medicine and engineering, older workers have only two choices: Keep up or be replaced. The half-life of medical knowledge is thought to be about five years, meaning that five years out of medical school, half of all a physician's information is obsolete. And engineers who don't keep up are, according to an article in Time Magazine (October 18, 1982, p.100), "washed up by the time they are 35 or 40...."

Engineering schools are getting very serious about lifelong education. It is more than a catch phrase; it has become a call for action. The MIT Centennial Study Report of the Department of Electrical Engineering and Computer Science (1982) observes that the demand for up-to-date engineers is so great right now that it

> cannot be met by replacing 'obsolescent' engineers with new graduates (and the human costs of such a replacement policy would be unacceptable even if if were feasible). The only apparent alternative is better utilization of the presently available engineering workforce through continuing education at the workplace (p.6).

If the recommendations of The Centennial Study Committee are followed, there will be new partnerships forged among engineering schools, industry, and professional societies, and totally new patterns of education will emerge. Traditional front-loaded education cannot meet the demands of the Third Wave, but still one of the first obligations of colleges is to prepare young people for their futures as lifelong learners. People who have skills to continue to learn throughout their lifetimes are our greatest resource, hence the increasing appearance of the terms "human capital" and its inevitable companion, "human resource development."

The unfortunate corollary of the growing importance of a well-educated and frequently updated workforce is that people who do not possess the basic skills and knowledge to contribute to the information society are a burden on it, and more tragically, are destined to lead nonproductive and unhappy lives. Thus education for all becomes as essential as education for leadership, and demand for education is greatly increased--for more people and for more years of their lives.

Dramatic as it is, however, changing technology is not the only reason for the increasing demand for education. Sociologists are observing the rise of what has been called "rights consciousness" or the "psychology of entitlement." Women, minorities, the elderly, and others are now entering the mainstream of American life through access to education and to good jobs. Over the past decade, the four most rapidly growing populations in college enrollments consisted of adults over the age of twenty-five, women, part-time students, and ethnic minorities, in that order (Grant and Eiden, 1982, p.93). As we shall see in a moment, the influx of new learners into colleges is only the tip of the iceberg in the growing demand for education and new learning opportunities.

Still another factor that is fueling the growing demand for education has been given considerable attention recently in the research and writing on adult education and lifelong learning. One of the things that researchers know for sure about the motivation of lifelong learners is that the more education people have, the more they want. A college graduate is seven times as likely to be participating in some form of organized adult education as a high school dropout, and the explosive growth of adult education over the past decade can be attributed largely to the participation of people who are already relatively well-educated.

Since education stimulates the desire for more education, the rising educational attainment of the populace is creating its own demands for education. In 1950, only half of the young people were staying in school through the twelfth grade. By 1965, the proportion had grown to two-thirds, and by 1970 three-fourths were graduating from high school. There is a similar pattern at the college level. Colleges extended the proportion of high school graduates served from one-fourth in 1950 to one-third by 1965 to half by 1970. This wave of relatively well-educated people has already had a visible impact on educational services offered by a wide variety of providers. In California, with its high level of educational attainment, 42 percent of the adult population were engaged in some form of organized instruction in 1981 (Rose and Graesser, 1981). It is a near certainty that the demand for education will continue to grow as the educational attainment of the populace rises.

I leave until last the demographic argument that the aging baby boom is the explanation for the current influx of adult learners. That explanation is used most often by colleges distressed by the demographic shift away from their traditional market of 18-24 year olds. It is natural, I suppose, to seek the cure in the same demographic trends that are causing the distress. While fluctuations in the birth rate certainly affect the higher education market, I doubt that the current adult learning movement is dependent on either the baby boom or the baby bust. The Learning Society is growing because that's the kind of society we are. The Third Wave, or whatever you wish to call the shift to knowledge-based economy, is dependent on human resources; and the development of human resources is in turn dependent upon education. Hence, Proposition 1 is that the demand for education is growing and will continue to grow.

The implications of that proposition for educators can be made painfully clear by recalling the decline of the railroads in an era when the demand for transportation was actually growing. In that period of growth and change in the transportation industry, the railroad operators concentrated on running their railroads. Their tunnel vision prevented them from seeing the sweeping changes in transportation that were required in a society that was becoming dependent on the movement of natural resources and manufactured products. Our society is becoming dependent on education, and sweeping changes are taking place in the education industry, including new constituencies, new providers, and new delivery systems. Yet the tunnel vision of some college administrators, concerned about running their colleges and balancing the budget, prevents them from seeing how rapidly the role of education in our society is changing.

It is sobering to observe that the Number one priority of many educators today is the more efficient running of their institution. Yet there is some evidence from recent research that internally oriented management may not be the best way to approach the current problems (Cameron, 1982). In a fascinating study carried out with forty colleges in the Northeast, researchers divided colleges into those that had grown between 1970 and 1976, those that has remained stable, and those that had declined in enrollment. The most significant differences between growing and declining colleges were found in the priorities of top administrators. "In declining institutions, administrators emphasized finances and budgeting and fund-raising. Very little emphasis was given to interaction with external constituencies through public relations or public service. Administrators in growing institutions emphasized just the opposite--high emphasis on public relations and services, low emphasis on finances and budgeting" (Cameron, 1982, p.54).

My conclusion from Proposition 1 is that in times of growing and changing demands for education, educators at every level of the organization need to be looking <u>outside</u> the organization, rethinking their role, observing the broad-based needs of society for their services, and retooling their methods. Placement officers are in especially critical positions to observe the changing needs of the workplace. Because you are externally oriented by profession, and because you are working directly with the changing needs of society, you have both the opportunity and the obligation to look beyond the running of your office to help your college and the students you are trying to serve find their place in the Learning Society.

Some of the questions to which you might address yourselves in preparing for the year 2001 are these: How can you help your institutions rethink their role in the changing educational needs of society? How can those of you who represent industry help colleges and universities develop the human resources that are so essential to the growth of the Third Wave economy? How can you counsel and advise students in making and changing career choices throughout their lives?

Proposition 1 leads directly to Proposition 2, which is that new suppliers of education services are rising to meet the growing demand. Colleges and universities today provide a little over a third of the organized learning opportunities for adults; the remaining two-thirds is provided by a vast array of secondary schools and non-collegiate providers, including employers, labor unions, community agencies, professional associations, museums, libraries, the military, and an increasing number of individual entrepreneurs whose livelihood depends directly on their responsiveness to the education market.

The education carried on by business and industry has been called the shadow educational system, but it is emerging from the shadows now and becoming highly visible. It is estimated that business spends as much on education and training of employees as all fifty states combined spend on the education of college students. In recent years the education budget of some major companies has been increasing at a rate of 35 percent per year. Such growth is reminiscent of the expansion years of higher education in the 1960s. Does that mean that as we move into the Third Wave, with its need for continuous education and retraining, the educational function will shift from society's traditional providers in schools and colleges to other kinds of providers? Probably not, because while education is the sole business of a college, and higher education gloried in its years of expansion, industry for the most part, is a reluctant educator. Many employers view their growing education and training budgets with dismay and sometimes with alarm. It is clear that if they are to increase productivity or even to stay abreast of new developments, they will need a workforce that is better educated than ever before, but they would far rather cooperate with colleges than compete with them. The same is true for many other groups that have moved in to meet the new demands for education.

Because it is mutually beneficial, cooperative ventures between the new educators and colleges are springing up like mushrooms after a spring rain, especially in community colleges. A 1981 national survey of community colleges reported that 40 percent of all community colleges had working agreements with industry (Young, 1981). I am certain that a survey conducted today would reveal the great majority of community colleges doing contract work for industry or conducting some kind of joint training program. A project launched at Henry Ford Community College in Michigan links the United Auto Workers, Ford Motor Company, and community colleges located near Ford's sixty-five plants, in development and training programs to upgrade the skills of Ford workers and to retrain workers whose jobs are lost due to the introduction of robots and new technologies. Another community college project links 186 community colleges to the district offices of the United States Small Business Administration in forty-seven states to organize and deliver short term problem-solving workshops to owners of small businesses at the local levels. (For more details on these ventures as well as other examples, see the December/January 1982/83 issue of Community and Junior College Journal).

Four year colleges have been somewhat slower to develop joint educational ventures, presumably because it is easier to develop training programs than to develop educational experiences in cooperation with industry. But the need for the continuing education of workers is at least as great as the need for recurrent training--so great that industry has had to move into what most people would call education. The programs of many corporations contain as much emphasis on theory, research, and personal development as those of any college. Listen to this description of IBM's Systems Research Institute:

> The Institute's educational philosophy is in many ways that of a university. It stresses fundamental and conceptual education and allows students to choose those courses that will best nurture their own development. The intent is to stimulate and challenge, to teach the theoretical and the practical, to discuss and argue differing viewpoints, to broaden the individual, focusing on his or her special skills (IBM Systems Research Institute, 1981, p.6).

In some situations the business world has found it necessary or desirable to offer college degrees. For example, the need for Masters degrees in software engineering became so great a few years ago among Boston's high tech industries that Wang, a manufacturer of computers, set up a degree program that could be attended by part-time students, an option that was not available at that time to full-time workers in an area which boasts more than a hundred colleges. Higher education could not or did not retool fast enough to meet the growing demands for part-time students, and new providers stepped in to fill the void. Close cooperation between colleges and industry is neither new, nor faddish, nor fraught with vague threats to academic freedom. Harvard's highly prestigious Advanced Management Program is a three month-long non-credit program established by the Harvard Business School for top-level corporate executives from around the world. It has been providing education for its enthusiastic students for forty years now.

Perhaps the newest move toward cooperation between education and industry is illustrated by the growing number of states that are creating new machinery to operate this learning society. The education of citizens is a primary responsibility of state government, but many financially distressed states are looking for new partners to help in the virtually endless task of lifelong education. Three years ago, Ohio sought ways to revitalize the economy of the state through recognition that cooperative educational efforts between public institutions and industry would improve productivity and at the same time reduce wasteful duplication of effort (Ohio Board of Regents, 1982). Today they have a number of activities going that are designed to reduce the gap between workers without jobs and jobs without workers. Several years ago, the governor's office of North Carolina got the jump on a program that many other governors wish they had thought of. New industries were attracted to North Carolina by a promise that the state's colleges would provide a workforce with the skills required by the industry or business that chose to relocate in North Carolina.

The implications of Proposition 2 seem clear. The new providers of the Learning Society are not trying to beat education at its own game. They are rising to meet new needs which might best be met through cooperation with existing educational institutions. Placement officers and recruiters are the oldest connecting links between business and education. Through professional associations like this one, you interact on a personal basis. One study showed that the greatest deterrent to cooperation between higher education and industry on educational programs was simply lack of knowing which offices to approach. Differences in speed of decisions and action is another stumbling block. A business may decide that they need a course next month and react with dismay to the ponderous faculty decision-making machinery that grinds on for years. Knowing one another's cultures is going to be increasingly important among the multiple providers of the Learning Society.

To date, placement officers and recruiters have concentrated mostly on understanding the transitions from school to work. I say transition<u>s</u> because the learner of the future will move in and out of education and work many times during a lifetime. This observation leads directly to Proposition 3.

Proposition 3 states that the timing of education is changing. Graduation from college used to provide a clear demarcation from youth to adulthood. But, many of today's college students have already embarked upon adult responsibilities. One-third of all college students are over the age of twenty-five, and for the past decade students over the age of thirty-five have been the fastest growing student population in higher education. Accompanying this rise in age is a drop in credit hours, since most older learners are studying part-time. Part-time students are well on the way now to outnumbering full-time students. On community college campuses, part-timers are already the clear majority, making up more than two-thirds of the national community college student body. But the part-time student is a rising phenomenon at most colleges now, and the part-time preference extends beyond older students returning to the campus to include younger students who either want to work or, because of reduced financial aid, have to work. In the past decade, the proportion of part-time students enrolled for college credit has gone from roughly 30 percent in 1970 to 40 percent by 1980, and the National Center for Education Statistics predicts that part-timers will be the new majority of the national college student population by the fall of 1985.

The rise of part-time students is not an isolated peculiarity of the educational system. Rather, it is part of a broader social trend that I have called the blended life plan (Cross, 1981). Unlike the linear life plan, which divides all life into three sequences consisting of education for the young, work for the middle-aged, and leisure for the elderly, the blended life plan combines education, work, and leisure throughout the lifespan. There is nothing very unusual anymore about the worker who goes to school or the student who has a job. The only thing that seems to get squeezed out in these schedules is leisure. But that may be because neither the educational system nor the workplace has fully understood nor adapted to the blended life plan. When part-time work and part-time study become built into our economy and our organizations, leisure will take its rightful place in the balance of the blended lifeplan.

I doubt if there are many people in this room who have failed to note the implications of the blended life plan for college placement officers and recruiters. Your jobs, as traditionally defined, have had their essence in the transition of young people from college to job. How do you rethink and retool when that transition becomes blurred or barely discernible? Many graduates are continuing with the full-time jobs they have held while going to school. Others, especially re-entry women, want placement in relevant work experience when they start college, and almost everyone needs more lead time to plan careers and test interests in the reality of the work situation. As the demarcation between study and work becomes indistinguishable as a point in time, perhaps recruitment and placement functions will become continuous as people move in and out of education and change careers many times during a lifetime.

Another ramification of the blended life plan is that company personnel may take a turn at placement functions, while college personnel play the role of recruiters. In what we might call "reverse placement," an employer may "place" an employee with colleges interested in "recruiting" students. These functions are not, as a matter of fact, mere speculation. They already exist. Many, if not most, colleges have strengthened their recruiting programs and are looking to the adult market as one with realistic potential for growth. Many companies, especially small ones, without extensive training and development programs, are seeking to place employees in appropriate learning situations or to develop those programs in cooperation with colleges. Thus new partnerships may involve a consideration of new roles for company and college representatives, as well as new methods of cooperation.

And now we have come full circle. The demand for education is rising in response to the Third Wave and various social and political forces in our society. To meet the demand, new providers are coming into prominence. Education no longer takes place just within designated institutions, but is a pervasive influence throughout the society and throughout the lifetimes of individuals.

All three of the propositions that I have set forth today call for closer working relationships between education and employers. It is no longer a matter of passing the student from the hands of the colleges into the hands of the employer, but of joining together to support worker students and student workers throughout their lives. Working partnerships between colleges and employers is high on the agenda for the future, and will, I predict, involve far more people from both sectors than it has in the past. As placement officers and recruiters, you used to be the primary or sole connecting link, but you will now be joined all along that frontier by colleagues with various interests in strengthening the partnership.

In these remarks, calculated to serve as a launching pad for discussions throughout the conference, I have tried to paint a picture of a world far larger than your offices or campuses or corporate headquarters. I believe that the Third Wave, and the Fourth and the Fifth, which seem to come at ever shorter intervals, will engulf us unless we can see them coming and ride on their crests.

The year 2001 will almost certainly call for broader based education on every dimension--a greater variety of providers of educational services, more options for different life stages, greater flexibility in procedures. The world of education and the corporate world are engaged in the common enterprise of the development of human resources. The most significant prediction I can make about the year 2001, is that finally concerns about people, productivity, and profits will flow in a common channel to be nurtured by educators, business people, and government leaders. Nowhere is that message more clearly spelled out than in the Peters and Waterman (1982) best seller, <u>In Search of Excellence</u>. After studying the characteristics of the most successful companies in America, Peters and Waterman concluded that, "There was hardly a more pervasive theme in the excellent companies than respect for the individual" (p.238). They offered this bit of advice to business leaders, "If you want productivity and the financial reward that goes with it, you must trust your workers as your most important asset" (p.238). Institutions of higher education are learning that lesson too. For the remaining years of this century, it will be a buyers' market in higher education.

I guess it should be apparent by now that I see an extremely bright future for a profession concerned about lifelong career guidance, placement, and continuous reassessment. Those are critical components of human resource development, and human resource development is going to be high on the agenda of society in 2001.

REFERENCES

Cameron, Kim S. "Alternate Perspectives on Fiscal Stress," in Wilson, Robert A. (Ed.) Responses to Fiscal Stress in Higher Education. Tucson, AZ: University of Arizona, 1982.

Cross, K. Patricia. Adults as Learners. San Francisco: Jossey-Bass, 1981.

Drucker, Peter. "The Surprising Seventies." Harper's Magazine, July, 1971, pp. 35-39.

Grant, W. Vance and Eiden, Leo J. Digest of Education Statistics, 1982. Washington, D.C.: National Center for Education Statistics, 1982.

IBM Systems Research Institute Bulletin. New York: IBM Systems Research Institute, 1981.

Kanter, Rosabeth Moss. The Change Masters. Simon and Schuster, 1983.

MIT Centennial Study Committee. Lifelong Cooperative Education. Cambridge, MA: Massachusetts Institute of Technology, Department of Electrical Engineering and Computer Science, October 2, 1982.

Naisbitt, John. Megatrends. New York: Warner Books, 1982.

Ohio Board of Regents. "Ohio Resource Network: Mobilizing Colleges and Universities to Benefit Business and Industry." Columbus, Ohio: Ohio Board of Regents.

Peters, Thomas J. and Waterman, Robert H. Jr. In Search of Excellence. New York: Harper and Row, 1982.

Rose, Clare and Graesser, Cheryl C. Adult Participation in Lifelong Learning Activities in California. Sacramento: California Postsecondary Education Commission, October, 1981.

Sowell, Thomas. Knowledge and Decisions. New York: Basic Books, 1980.

Toffler, Alvin. Future Shock. New York: Random House, 1970.

______________. The Third Wave. New York: William Morrow, 1980.

Young, Robert B. "The Evolution of Community Education in Community and Junior Colleges." In Jellison, Holly M. (Ed.) A Look to Future Years: Prospects Regarding the Scope and Process of Community Education. Washington, D.C.: Center for Community Education and American Association of Community and Junior Colleges, June, 1981.