PERSPECTIVES ON A CHANGING AGENDA FOR THE 1980S

by

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Since your overall theme for the seminars this year is "Quality and Management," I am going to start our discussion with a quote from George Keller, the guru of strategic management in higher education. Keller (1983, page 145) contends that, "keeping the institution in step with the changing environment... is strategic planning's single most important contribution to organizational decision-making." Thus, I assume that if you are to have quality management at the Maricopa community colleges, you are first going to have to keep your colleges in step with the changing environment.

You know a lot more than I do about the changes that will be important to Arizona in the next ten years. I am aware, however, that in many respects Arizona is unique among the fifty states in demographic trends. Between 1970 and 1980, you were the second fastest growing state in the nation, and population

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Prepared for presentation at Maricopa Community Colleges, Phoenix, Arizona, January 25, 1984.

growth is expected to continue, albeit at a somewhat slower rate (Conrad and Talbott, 1983). Over half of the population of Arizona resides in Maricopa County, and that heavy concentration is expected to continue into the next century (Conrad and Talbott, 1983, page 4). The variation in age is considerably greater than in the average state, with heavy concentrations of both young people and older people. Strangely, your rapidly growing minorities are the most traditional students. They are younger and somewhat more likely to be studying full time than majority students in Arizona.

By this time, everyone in higher education is terribly aware of the statistics of the demographics. Indeed, I think too much attention has probably been given to the statistics. Because they are hard data, planners like to play with them in various models and to monitor every trend just in case it might be significant. The birth rate is important, of course, because theoretically it places a ceiling on college enrollments, but we are so far from universal attendance at the college level that other factors may be more important in planning. Keller (1983, page 145) claims that "perhaps three-fourths of all change at most institutions of higher education is now triggered by outside factors such as directives from the state board of higher education, an economic recession, migration patterns, a change in the supply of gasoline, the wider use of records and cassettes, a

governor's change of politics, a new law from Washington, a sweeping court decision about a major affirmative action case, and the shifts in the job markets." Keller goes on to say that, "because the external environment is in constant flux, strategic planning must be continuous, pervasive, and indigenous, not a blueprint or the work of a planning officer or a one-time experiment at some mountain retreat." (page 145)

My most useful function here today is not to analyze the state or regional situation peculiar to Arizona, nor to present the latest trend data which may or may not have a long-term impact on Maricopa Community Colleges. Rather, I would like to spend my time talking about soft data that are changing the world in which higher education operates. I believe that the role of colleges and universities in the society is changing dramatically and permanently under the impact of the learning society, ~~and~~ It is that very broad and amorphous world beyond the college campus that is most likely to have profound implications for higher education in the concluding years of this century.

Change in the role of education in our society is sufficient now to call for a new lens through which to view ourselves in relation to the external world. That new lens might be likened to a wide-angle lens which includes a great variety of educational providers and an unprecendented diversity of learners of all ages.

For the next half hour or so, I would like to look at the growing education industry through the wide-angle lens of the learning society. To do that, let me set forth six propositions.

Proposition One. Proposition One is that higher education no longer enjoys a monopoly on the provision of educational services. In yesteryear when college students were late adolescents whose primary occupation was going to school, if they were engaged in education at all, it was typically full-time at a college. Colleges sometimes competed with one another for students, but students didn't have a lot of other learning options.

Today, adults who enroll in college classes, whether for credit or not, voluntarily choose that option from a large number of possible alternatives, including courses offered by employers, labor unions, professional associations, community organizations, television, and a host of other providers. Higher education today provides a little over a third of the organized learning opportunities for adults; the remaining two-thirds is provided by vast array of schools and non-collegiate providers, many of whom offer everything colleges do and more. They may offer credit, degrees, education leading to promotion, licensure, personal fulfillment, intellectual stimulation, practical skills. You name it and you may be sure someone offers it. Industry, for

example, spends not mere millions but billions of dollars annually on the education and training of employees. Business currently allocates more money for education and training than all fifty states combined allocate for higher education (Lynton, 1982). Aetna, Xerox, IBM, and other corporate giants have built campuses with classrooms and residence halls that surpass anything offered in our most exclusive and expensive colleges. Professional associations, too, are becoming the builders of vast educational networks. The American Management Association conducts 3,200 programs annually, and enrolls 100,000 learners, but even they have no corner on the market for business education. It is estimated that 3,000 different providers, many of them private entrepreneurs, conduct some 40,000 public business seminars each year. Thus Proposition One states that higher education faces unaccustomed competition from other providers of education in the society.

Proposition Two is related to Proposition One. It states that the roles of educational providers, once reasonably distinct, are increasingly blurred. It is no longer clear what courses merit credit, who may offer it, or who needs it. Academic purists like to make a distinction between the education offered by colleges and the training offered by industry, but such distinctions are difficult to maintain. Non-collegiate organizations have moved into education almost as fast as colleges, especially community colleges, have moved into training, and the distinction is now blurred beyond usefulness --

at least when applied to providers. Colleges are heavily involved in training as well as in education, and the programs of many corporations contain as much emphasis on theory, research, and personal development as those of any college. Listen, for example, 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, 1981, p. 6)

Contrast that broad educational philosophy with this course description taken from a college catalogue. The course is called Airline Reservations and carries three academic credits. The description reads as follows:

> Prepares students for airline employment opportunities through a familiarization of the procedures involved in airline reservations, the use of official airline guides, and airline route structures.

If one were given a blind sample of course descriptions today, it would be hard to tell whether they came from industry, colleges, museums, labor unions, or professional associations.

A related blurring of educational functions occurs in the distinction between credit and non-credit learning. Within higher education we have certainly muddied the waters by some shifting of non-credit, non-funded courses to the credit, funded

side of the ledger. Outside of higher education, non-colleges are beginning to offer not only fully legitimate credit courses, but full-scale degree programs. In the Boston area alone there are four new degree-granting programs founded by non-colleges -- a hospital, a bank, a consulting firm, and a computer manufacturer. While the image of Bachelor's and Master's degrees offered by these non-colleges is still mildly sensational, the movement of collegiate institutions into the realm of non-credit instruction is now commonplace. Between 1968 and 1978 more than a thousand colleges introduced non-credit programs on -- or more likely off -- their campuses. Today it is the norm rather than the exception for degree-granting colleges to be involved in non-degree instruction.

But whether a course was originally taken for credit is not especially important today. It is increasingly easy to convert non-credit learning into college degrees. Just a decade ago only about a third of American colleges granted credit if students could demonstrate on standardized examinations that they knew the material; today 84 percent of all colleges grant credit by examination. Ten years ago, only 14 percent of the colleges would consider granting credit for experiential learning; today 41 percent do (Stadtman, 1980).

Historically, colleges have been reasonably generous in accepting credit from other colleges; today they are increasingly likely to endorse learning regardless of its source. The

American Council on Education's Office of Education Credit lists over 2,000 courses offered by more than 180 corporations, that appear worthy of college credit to faculty members conducting on-site visits.

Illustrations of the blurring of once distinctive functions for higher education could be extended, but my point is that the education frontier is very large, and higher education is not alone out there. Thus Proposition Two states that the roles of the various educational providers in the learning society are far from clear, and that blurring of functions rather than distinctiveness seems to be the trend.

Proposition Three states that higher education no longer has the full-time commitment of students -- or for that matter of faculty. In the past decade, the proportion of part-time students enrolled for college credit has gone from 32 percent to 42 percent, and 52 percent seems likely before the end of the decade.

While faculty of an earlier era may have complained that students were not giving undivided attention to their studies, traditional students were at least in the college environment twenty-four hours a day. They lived in an unreal "city of youth," and their full-time occupation was with the social and intellectual demands of college. Formal education is now changing from a full-time commitment for four years of a

student's life to a part-time commitment for forty years. The first priority of the adult learner of today is not college, but job, family, and an array of other adult responsibilities that serve as enhancers, detractors, and sometimes inhibitors of education. Thus Proposition Three states that higher education faces unaccustomed competition for the time and attention of students. Education cannot do whatever suits institutional convenience and assume that students can or will go along with it.

Proposition Four states that learning has become a lifelong necessity for almost everyone. There are very few jobs left in this world that are immune from the necessity for retraining and constant upgrading of skills and knowledge. The development of human capital is now recognized as a fundamental and necessary component of progress in this era of technological change and international competition. In today's climate, the widening gap between the skills available in the work force and the skills needed for economic productivity is nothing short of alarming. While the want ads burgeon with appeals for technically competent personnel, thousands of unemployed provide tragic testimony to the gap between supply and demand for educated workers.

Lifelong education for jobs is the most visible symptom of social change. But in that change, from full-time education for a few years to part-time education for a lifetime, lie changes for curriculum, instruction, delivery systems, and lifestyles.

So far in the history of industrialized nations, there has been a pronounced tendency to increase the separation between education, work, and leisure. The result has been termed the "linear lifeplan" in which education is for the young, work for the middle-aged, and leisure for the elderly. But a study of the progression and influence of the linear lifeplan in the United States warns that "There can be little doubt that many of our most serious and persistent problems stem from the ways in which education, work, and leisure are distributed throughout lifetimes" (Best and Stern, 1976, p. 24). The major social problem is unemployment. Although that problem is especially critical right now, it is not new. For the past fifty years, society has been unable to provide jobs during peacetime for everyone willing and able to work. A blended lifeplan (Cross, 1981) in which education, work, and leisure are concurrent throughout the lifespan can address not only the urgent demands for lifelong education for the workforce, but it can also address personal and societal problems that are arising for youth, the elderly, two-career families, and mid-career executives. There are increasing demands from a variety of people for greater balance in their lives -- more job-sharing, more part-time educational arrangements, more leisure.

Proposition Five is almost proposition 4 1/2, but the distinction between lifelong learning and adult education deserves its own space. We in the United States tend to equate lifelong learning with adult education. In Europe, and

especially in the publications of UNESCO, they make quite clear that lifelong learning begins at birth and ends at death. The official UNESCO definition is that,

> The term 'lifelong education and learning' denotes an overall scheme aimed both at restructuring the existing education system and at developing the entire educational potential outside the education system; in such a scheme men and women are the agents of their own education.

That definition contains among other things, a basic challenge to schools and colleges to help students become lifelong learners; it calls for "restructuring the existing education system." Most traditional education is still geared to the notion of teachers as experts and students as empty vessels to be filled. Alvin Toffler, futurist author of The Third Wave, claims that "the reasons schools are in deep trouble today is that they no longer simulate the future, they simulate the past" (Toffler, 1981). Schools devised for the factory world emphasized virtues such as obedience, punctuality, and the willingness to do rote work because those were the demands of the Second Wave workforce. Despite the arrival of the Third Wave, schools still simulate the standardized work patterns of the factory. Everyone arrives for class and departs at a common time; students move on to the next lesson en masse, whether they have learned the material or not, and there is still an emphasis on absorbing information, despite the futility of that mode of education in the era of the knowledge explosion.

The knowledge explosion is just that. There is no way to keep up with the explosion of new knowledge. It is created faster than it can be learned or taught. Between 6,000 and 7,000 scientific articles are written each day, and information doubles every 5.5 years. The problem for the future is not the supply of information, but the selection. People need to know how to select appropriate information from an overwhelming array available, and they need to know how to use it in conceptual thinking. We're talking about something far more basic to education than technical and scientific training. We're talking about the need for broadly educated people with the skills that will serve as the foundation for a lifetime of learning. That calls for fewer information-laden lectures and more active analysis, synthesis, and application of knowledge on the part of students. Teachers who see their role as providers of information can and will be replaced by machines. Teachers who nurture, inspire, and assist in cognitive growth and intellectual development cannot be replaced by machines. They are our greatest resource in the development of human capital.

Proposition Six comes full circle. It concludes that education will play new roles in the society of the future. There is widespread agreement now that we are facing a major revolution in society. It has been called The Third Wave, the Information Society, and the Technological Revolution. Whatever its nomenclature, the direction seems clear. Jobs, the economy, and lifestyles will be based on the creation and distribution of

information. 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. Taking note of such changes, the Office of Technology Assessment of the United States Congress concluded that "The so-called information revolution, driven by rapid advances in communications and computer technology, is profoundly affecting American education. It is changing the nature of what needs to be learned, who needs to learn it, who will provide it, and how it will be provided and paid for" (OTA, 1982, p. iii).

The colleges and universities that are at the forefront of these changes tend to be those that by the nature of their curriculum or mission are closest to technological change. The department of electrical engineering and computer science at M.I.T., on the occasion of their hundredth anniversary, issued a report called "Lifelong Cooperative Education" (M.I.T., 1982). The title is significant; it suggests that the future of engineering education should be continuous throughout the working life of the engineer and that it will be provided by industry and education working in partnership. The report rejects the notion that a few years of formal education can provide an adequate foundation for half a century of professional work.

The report recommends that M.I.T. enter into cooperative relationships with industry for three reasons:

1. Universities acting alone have neither the human nor

the financial resources to carry out a lifelong educational program on the scale required.

2. Engineering faculties cannot by themselves keep up with the knowledge explosion. Close collaboration between engineering faculties and their industrial colleagues is essential if new knowledge is to be distilled from the literature and widely disseminated at the rate at which it is being generated.

3. Engineers in industry and their university colleagues need a supportive environment in which they can teach and learn from another. A concerted effort will be required to bridge the many gaps -- organizational, social, and temporal -- that now separate "work" and "study" (M.I.T., 1982, pages 6-7).

Although these these recommendations for radical change come from an educationally conservative professional engineering school, they are not unlike the problems faced by community colleges concerned about keeping abreast of technological change. Community colleges have become the major educational institutions in the nation for retraining technologically obsolete workers. In 1981, more than 40 percent of all community colleges in the nation had formal cooperative agreements with employers -- up from 20 percent just five years earlier (Young, 1981). Today, I suspect that the majority of community colleges have training contracts with local employers.

Another sign of the times is the phenomenon of the "reverse transfer." Nation-wide, there are more students transferring into community colleges from four-year institutions than vice versa. Many of these adults already have bachelors and sometimes masters degrees; they are seeking the skills that will make them employable. There is considerable debate, of course, among

educators about what skills will make a person employable. Are they the so-called academic and cognitive skills or are they job skills? I suspect that the either/or argument is futile, that the answer lies in optimal combinations of the general and the specific, and that these vary for different individuals and at different times in their lives. Presumably, adults who are reverse transfers possess the basic academic skills and are returning to college to keep abreast of the changing job market. At the same time, it is clear that it is going to be increasingly difficult to teach young people or adults new job skills if they lack the academic foundations for life-long learning.

Thus Proposition Six asserts that the pace of technological change is having an impact on participants, providers, and cooperative arrangements among providers in the learning society.

These six propositions taken together will, I believe, affect community colleges profoundly. You will be better than I at drawing the implications for Maricopa Community Colleges. My view is that the next twenty years are going to require administrators who provide both efficient management and effective leadership.

There is a difference between managing efficiently and leading effectively. Managers have mastered the techniques to manage existing resources in the most efficient manner, whereas leaders know where the college should be going. They have a

vision of how to lead education into the next century. The distinction can be summed up by defining efficiency as the ability to "do things right," whereas effectiveness consists of "doing the right things."

In my opinion, we in higher education have been concentrating on training -- yes, "training" -- managers at the expense of developing leaders. Let me be clear that I am not against efficient management. In this era of scarce resources, efficiency is imperative at certain levels of the institution. My criticism is that we have been too eager to see that potential academic leaders master the techniques of marketing, financial management, and legal implications and too reluctant to develop leaders with a vision of the future for higher education. Both vision and techniques are essential, and there must be an appropriate balance between the two. Techniques without vision is blind; vision without techniques is barren. Quality management for the future is going to require the ability to do the right things in the right way.

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