

HIGHER EDUCATION TODAY AND TOMORROW

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Several years ago, Arthur Levine (1981) wrote a book for the Carnegie Council on Policy Studies in Higher Education describing this generation of college students. He titled it When Dreams and Heroes Died, and observed that today's students are cynical, distrustful, acquisitive, and primarily concerned about "looking out for Number One" -- a cluster of attitudes that Levine labels "meism." As I reread Levine's unflattering description of today's students recently, I could not help thinking that what students see around them in our colleges and universities is widespread meism in institutional forms. Our institutions today are without dreams, without heroes, distrustful of everything and everyone, from state legislatures and Reaganomics to tenured faculty members who are blocking the rise of younger colleagues and departments that are hanging on, using funds coveted by others. Meism, says Levine, separates people. "In the extreme, it robs them of their ability to see common problems and to work together for common solutions. The problems grow worse, and people feel victimized, coming to view their problems as a form of personal harassment. The feeling of impotence rises, and apathy increases" (p. xviii).

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Many people in higher education do feel victimized and helpless. Unarguably, institutions today are looking out for Number One. Competitiveness is on the increase -- institution against institution, department against department, and colleague against colleague. There is too little concern about common educational problems and too much concern for mere institutional survival. I say mere survival, not to suggest that survival is trivial, but to suggest that too many are not thinking beyond survival for survival's sake.

We don't hear much about leadership in education these days. Instead colleges are headed by managers and strategic planners. Perhaps I have not been persuaded by the new definitions purporting to make management something more glamorous than maintaining prudent control over institutions whose directions are predetermined. Today's educational managers attend conferences on the management of decline at which they are helped to develop all the skills of the sea captain trying to maintain a calm and orderly evacuation of his sinking ship. Strategic planners go managers one better in that they analyze why the ship is sinking and take into account both the storms of the external world and the leakiness of their vessels. While it is clear to me that strategic planning, with its emphasis on events in the external world, is a far superior recipe for survival over the isolation of the ivory tower, it is not clear to me that strategic planners see beyond the next battle. The military

metaphor is not lost on today's strategic planners. An article in this fall's AAHE Bulletin (Baldridge and Okimi, 1982, p. 16) describes strategic planning in these words:

The military unit going into battle has its master plan. But its real success will rest on adequate response to changing conditions, on flexibility in meeting new demands, and on internal strength that allows rapid redeployment. As every good military commander knows, no matter how carefully the plans have been made, the actual battle will take a different turn

So a strong battle commander builds a response capacity. Troops are deployed with heavy elements of redundancy so extra strength is available for every move. Complex efforts are undertaken to scan the environment: intelligence ferrets out enemy movements, reconnaissance seeks to know where plans have gone astray and by how much. Communications are structured so the commander can monitor situations and deploy forces for new moves that were not in the old plan. Contingency plans provide alternatives when the original master plan fouls up.

The battlefield, in short, requires a different mind set and a new set of behaviors (p. 16).

The problem I see in the mindset of the battlefield commander is that each battle is all consuming. Beyond the current battle looms the next one, and the demand for the quick maneuver leaves no time for contemplation about the purpose of the war.

Where have all the leaders gone? Who has dreams of education worth fighting for? Is Martin Luther King's dream dead? Has the dream of educational equality with its call for trust and faith given way to the grim battle for excellence with its emphasis on pruning out weak programs and weak people?

Let me be clear that excellence in higher education is well worth fighting for, but it is the mindset of today's battlefield commanders that I am questioning. Excellence requires above all else high morale, commitment, and a clear vision of the goal. Although the rhetoric of strategic planning calls for attention to institutional destiny, it is hard to maintain a vision of the goal when the technique of strategic planning focuses on developing "response capacity" and capitalizing on opportunity.

There is, I believe, a fundamental difference in the stance of an institution that is open admissions by commitment and one that is open admissions for the sake of survival. Faculty committed to the ideology of open admissions derive their professional satisfaction from doing something that they think is important beyond themselves and their institution. They see meaning and challenge in teaching people who are hard to teach. For faculty who accept open admissions for survival's sake, however, there is little commitment, a lot of frustration, and not much satisfaction in teaching open admissions students.

There is, I think, a fundamental difference between an institution committed to serving the lifelong learning needs of the adults in their community and one scanning the external environment for marketing opportunities. The vision (see Gleazer, 1980) of a college in intimate relationship with its community is a total concept of what a college might be. It is a vision that has coherence

and integrity and that shapes college identity, instructional programs, advisory boards, and hiring practices.

There is, I submit, a basic difference between an independent college committed to providing a liberal arts education and one committed to protecting the jobs of faculty members through whatever missions seem popular at the time.

What we need in education today is some happy blend of the visionary and the realist -- leaders who know both what they want and how to get it done, not just for themselves or their institutions, but for education and the world. What is the vision for tomorrow's higher education? There seem to be two scenarios. At the moment, the pessimistic railroad scenario of decline predominates, but there is also a bright and promising scenario that lies in the contribution of education to the emerging information society. I want to talk about both of these options today -- the railroad scenario because we need to be aware of the critical problems facing education, and the information society scenario because we need to be aware of the exciting opportunities that lie ahead.

We have all heard it said that the railroads failed, not because there was no longer a need for their services -- indeed, the need for transportation was growing at the time -- but because the railroad operators concentrated on running the railroads instead of exploring the new frontier of the transportation industry. It is alarming to observe that the new breed of managers in colleges to-

day are in danger of giving more attention to running their colleges than to exploring the new frontier of the education industry. The parallels between education today and the railroads of yesterday are sobering but instructive. Levinson's classic analysis of organizational decline can be applied to the decline of the railroads and some interesting observations made about higher education and its response to these stressful times. For higher education as a whole, I find Levinson's "first-order activities" most frightening because they parallel what is happening in higher education today.

First order activities are those that occur in the early stages of decline. Frequently, they are hard to distinguish from normal adaptive activities because they are exaggerations which tend to be less functional, more anxiety-producing, and focused more on short term than long term consequences. You will, I think, recognize many of them: more complex and more frequent reports, increased inspections, overtesting and increasing complexity of controls, refusal to recognize threat, unrealistic pessimism, abortive cost cutting or sales efforts, and undermining of organizational caring (Levinson, p. 541-2). "Undermining of organizational caring," for example, can be illustrated by the indifference of the railroad operators to the needs of the traveling public (Cohen, 1983). Railroad management was notorious for its "public be damned" attitude, and "passenger traffic was associated with dirty cars, indifferent

train service, surly ticket agents, and the discontinuance of money-saving roundtrip tickets" (Stover, 1970, p. 232).

Higher education would probably get mixed reviews on how well it has responded to the educational needs of the public. For reasons which I shall detail later, the needs of the public have changed, from full-time study for youth before they embark upon adult responsibilities, to lifelong education which runs throughout the lifespan. Most colleges have gone out of their way to assure potential full-time students of their interest in them, and most colleges have responded to the growing market of part-time learners by developing special programs to meet their needs for flexible scheduling, convenient locations, and new methods of delivery and instruction. On the other hand, higher education as a whole is perceived as treating adult part-time learners as second class citizens. A few examples will drive home the point. On some campuses, part-time students are still not welcome, and on most, faculty have done little to adjust classes and teaching styles to the needs of adult learners. The quality of some off-campus programs has become a national scandal, but instead of improving the education and maintaining the convenience, higher education is pulling back to traditional delivery systems in the name of "quality control." Policies for financial aid, starting at the federal level and appearing with consistency through state and institutional levels favor full-time over part-time students. Frequently they demand physical

presence in the classroom and demonstrations of "normal" rates of progress that are often impossible for part-timers to meet. While it can be honestly said that most colleges today are eager to attract students who make no demands upon them for change, students who require or desire nontraditional forms of education are about as welcome as a railroad passenger in the 1950s.

Another problem that plagued the railroads was the refusal of managers to recognize threat or competition to their transportation monopoly. The railroad operators simply did not believe that the automobile was anything more than a passing fad. With no system of highways, gas stations, or motels, how could these self-propelled contraptions ever threaten the mighty monopoly of the railroads with their vast nation-wide system of tracks, depots, and timetables?

The denial of threat is a common phenomenon in higher education today. Despite all of the publicity given to the demographic fact that the number of 18 year olds in the population will decline 25 percent by the 1990s, only 16 percent of college presidents responding to a national poll expected their institutions to lose enrollments; 42 percent actually expected their enrollments to increase (Breneman, 1983). Other potential threats to colleges -- although not to the education industry -- are telecommunications, which could take instruction off the campuses and corporate education, which could take students off the campuses. Common forms of denial to deal with these threats are the frequently heard observations that since

television did not make much impact on the educational system in the 1940s, telecommunications won't make much difference in the 1980s. Then there is the comforting misperception that the new communications technologies are impersonal and that students need to be surrounded by the physical presence of other people -- despite the fact that there is no interaction with them during the traditional classroom lecture.

As for corporate education, it is argued that it serves an adult group that is of secondary interest to higher education, and corporations are more interested in "training" than in "education." The fact that corporations are offering courses for college credit, as well as fully recognized Bachelors, Masters, and Doctors degrees, is perceived as an oddity rather than a serious effort by industry to meet educational needs not met by traditional education. I will return to these issues later, but for the moment, I simply wish to make the point that higher education is engaged in the denial of threat, which is one of Levinson's symptoms of decline.

Levinson's second order responses for declining organizations consist of "repetitive, unimplemented discussions and planning." The railroad leadership, for example, was unable to resolve the following problems: a) a rigid and externally determined rate structure, b) a high cost labor contract, including rules unchanged since 1919, c) a public perception of poor service and, d) operating inefficiencies such as redundancies in terminals, trackage, and purchasing and repair

procedures (Cohen, 1983). The comparisons with higher education today are painful, but we cannot lightly brush aside the increasing external regulation of education, the high labor costs and lack of flexibility imposed by tenure, tradition, and faculty unions, the public perception of poor educational quality, and the inefficiencies of redundancies in educational services. Although the railroads did ultimately make some major advances in the development of diesel locomotion, better freight handling, "piggy-back service," and streamlined passenger trains, it was a question of too little too late.

Higher education as a whole has a very uneven record on finding resolutions for some of its long-standing problems. There are encouraging examples of solutions in the form of consortia to share resources, in early retirement programs to promote flexibility in work rules, in constructive attacks on the quality issue, and in careful pruning of redundant and unnecessary programs. On the other hand, there are disincentives for efficiency built into traditional education. Instructional budgets are not capital budgets; they are designed to cover the annual expenses of traditional classroom instruction. It is easy to hire a faculty member for five years at \$30,000 per year, but difficult to allocate \$150,000 for the development of a telecourse, and even more difficult to cut the costs by sharing the course with fifteen other universities. Corporations, in contrast, are happy to substitute capital for labor if it works. They have

strong incentives to teach a course in ten hours instead of twenty, and to use distance delivery systems in preference to bringing workers to a central site for classroom instruction.

There is no need for higher education to go into decline, but new research suggests that excessive concern with the internal management of colleges, i.e. "running the college" is more characteristic of declining than of growing colleges. Growing colleges tend to look outward to new services and external relationships while colleges that are losing students tend to concentrate on improving efficiencies (Cameron, 1983).

Now let us turn to the brighter scenario. We are facing a major revolution in society, a revolution in which education plays a vital role. It has been called The Third Wave, the information society, and the technological revolution. But whatever its nomenclature, it seems clear that the shift is from labor and capital as national resources to the constantly renewable resource of human capital. Human resource development means increasing emphasis on education. John Naisbitt, author of Megatrends (1982), believes that we have already changed from the industrial society to an economy 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. 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. Such massive change in the workplace cannot be accomplished without equally massive change in education. Forseeing such change, the United States Congress commissioned a special report from the Office of Technology Assessment. The report was entitled Informational Technology and its Impact on American Education. It arrived at two major conclusions:

1. 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.

2. Information technology can potentially improve and enrich the educational services that traditional educational institutions provide, distribute education and training into new environments such as the home and office, reach new clients such as handicapped or home-bound persons, and teach job-related skills in the use of technology.

(Office of Technology Assessment, 1982, p. iii)

Let us pick up part of the challenge of the OTA report and look at the changes demanded of higher education, especially those concerning learners and providers. Higher education is at its insular worst in its narrow perception of the adult learning "market." Many

view adult learners as a convenient and fortuitous replacement for the potential college students that were not born eighteen years ago. There is a widespread feeling that if we can just get enough adults together to make up enough FTE's to survive the baby bust, higher education can revert to its traditional mission of preparing rising generations in two or four years of front-loaded education. Educators closest to the information revolution, however, spend very little time pondering demographic projections. Instead, their time goes to gearing up to meet the increasingly urgent needs of adults for retraining and continuous lifelong education. The department of Electrical Engineering and Computer Science at M.I.T., for example, 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. They note that in engineering it is more than a question of keeping up with new developments. Recent technological developments have not even been based on the same scientific and mathematical knowledge that provided the foundation for earlier models. Thus engineers who have been out of school for more than a few years face the probability that the very foundations of their knowledge are obsolete. Professor Louis Smullin of M.I.T. was quoted in a recent issue of Time Magazine (October 18, 1982, p. 100) saying that engineers "are

washed-up by the time they are thirty-five or forty, and new ones are recruited from the universities." But as the M.I.T. report observes, the demand of the 1980s cannot be met by replacing "obsolescent" engineers with new graduates, even if that were a humanly acceptable plan. Thus they conclude that, "The only apparent alternative is better utilization of the presently available engineering workforce through continuing education in the workplace, with the active encouragement and support of employers" (M.I.T., 1982, p.6). To the Centennial Study Committee, lifelong cooperative education is essential 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 one 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, p. 6-7)

Although these recommendations for radical change in education come from an educationally conservative engineering school, they are a precursor of things to come across the wide variety of educational institutions. Community colleges, with a tradition of working closely

with employers, are at the forefront of the new cooperative efforts between education and industry. In 1981, more than 40 percent of the community colleges in the nation had formal cooperative agreements with employers -- up from 20 percent just five years earlier (Young, 1981).

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 the linear lifeplan is changing to a blended lifeplan in which education, work, and leisure are concurrent throughout life. 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 in the middle years, and more opportunities for partial retirement.

The blended lifeplan has already had a significant impact on education. Just ten years ago, only about a third of all college students were studying part-time. Today 42 percent of all credit enrollments are part-time. Looking only at the patterns of students enrolled in colleges, however, is but a piece of the educational

action today. A statewide telephone survey completed last year in California showed that 42 percent of the adult population had participated in at least one course, class, or other organized learning activity in 1981. The largest proportion (27 percent) had taken courses in the community colleges, but higher education as a whole provided only about half of the education for adults. Other providers, in order of numbers of students served, were specialty schools, employers, associations, community organizations, secondary school districts, and government (Rose and Graesser, 1981, p. 20).

The blended lifeplan is part of the general sociological shift that Alvin Toffler (1982) sees as a trend toward greater diversity and individual choice. The shift is away from the uniformity and mass production that was demanded for the factories of the Second Wave, toward the increased variety and personal choice that is possible with the technological revolution. "The direction of change in family structure, from one type of family to many," says Toffler, "exactly parallels what's happening in the energy system, where we are going from fossil fuel . . . toward a multiplicity of energy forms. It also parallels what's happening in production, where we are going from mass production to customized production; and in communications where we are going from a few central video and publishing networks to cable, cassette, and ad hoc satellite systems" (Toffler, 1981). The Third Wave is completely different from the

two that preceded it. It is not bringing about a new way of doing things, it is bringing about many new ways of doing things.

Toffler calls this multiplicity of choices "demassification," which implies significant changes for mass education. Toffler thinks that "the reason schools are in deep trouble today is that they no longer simulate the future, they simulate the past." 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 6000 and 7000 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 the 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.

In conclusion, I see three major implications for higher education. These are really predictions. As we all know, almost anything can and does deflect predictions, but I take refuge in the words of the follower of Trotsky who said of his hero, the proof of Trotsky's farsightedness is that none of his predictions have come true yet.

The implications for higher education in the near or distant tomorrows are these: first, students are different. They are increasingly older, part-time, and their education must assist them through a lifetime of learning. Some of the implications are obvious and already underway. Since part-time study will become the norm rather than the exception, colleges and universities no longer serve a captive audience whose life for four years is wrapped up in the social and intellectual demands of college. Students have jobs, families, and community obligations, and colleges can no longer do what suits institutional convenience and hope that students can or will go along with it. Institutions cannot make unilateral decisions with respect to student life, and most institutions have already

dealt with that form of change. It will now be more of the same.

Classroom teaching, however, has not faced up to the coming changes forced by either the information society or the technological society. What is delivered and how have remained unchanged for centuries. The formula is simple. Professors have told students what they know. For many reasons that format is no longer adequate. In the first place, professors cannot keep up with the information explosion themselves. One estimate contends that a compulsive engineering psychologist would have to read 30 or 40 articles and books each day just to keep abreast of current literature. Professors as well as students will have to become experts in the selection and retrieval of information, rather than its acquisition and storage in the human brain. Moreover, we already know that telling students something is a very low power learning device when far more powerful interactive methods are coming into existence via technology, but also via teaching techniques. Finally, teaching and learning will have to be geared to the reality that students will be lifelong learners. Alumni will be looking at the university differently, not backward to the nostalgia of student days, but forward to a continuing relationship, in which the university is prepared to meet their changing learning needs.

The second major implication of tomorrow's education for today's colleges is that the role of colleges in the society is changing. Higher education has lost its monopoly on education. It now provides less than half of all organized instruction for lifelong learners. It is not the only credentialing authority; corporations are offering courses for college credit as well as associate, bachelors, and

graduate degrees. College campuses are no longer unique havens of scholarship; industry is building residential campuses and also research parks with the most advanced equipment available. Higher education will have some decisions to make about where to cooperate with the multiple providers of the Learning Society, where to compete, and where to look for autonomous niches.

This leads to the third implication which is that the internal organization of colleges will probably have to change. There will probably always be a place for residential campuses, but they will constitute a decreasing part of the college experience. New technologies plus the rise of the part-time student make the full-time campus retreat less likely in the future.

The rise of the part-time professor may, however, be a rising phenomenon in higher education. At the moment, the part-time instructor seems to be in modest retreat because retrenchment hits part-timers first. But that, I think, is a temporary situation. It is already extremely difficult to find teachers of computer science and certain types of engineering at any salary. I don't know whether academe can make teaching jobs in some fields competitive with industry in terms of salary, research opportunities, colleagues, or travel and equipment budgets. A first rate scientist may have the best of both worlds by accepting an appointment shared by industry and academe.

These are things to think about and, fortunately, many of the changes I have talked about are far enough in the future that we have time to think and plan, but not a lot of time. Everything I have

talked about is already on the scene. We will want to embrace those changes that enhance education and learning and deflect those that do not. Above all, educational leadership will be required to help higher education find its new role in The Learning Society. We hope that is what the alumna of IEM are providing.

REFERENCES

- Baldrige, J. Victor and Okimi, Patricia H. "Strategic Planning in Higher Education: New Tool -- or New Gimmick?" AAHE Bulletin, Vol. 35, No. 2, October 1982.
- Breneman, David W. "The Coming Enrollment Crisis." Change, March, 1983, p. 14-19.
- Cameron, Kim. "Strategic Responses to Conditions of Decline: Higher Education and the Private Sector," Journal of Higher Education, July/August, 1983, 54, 4, 359-380.
- Chapanis, A. "Prelude to 2001: Exploration in Communications." American Psychologist, 1971, 26, 949-961.
- Cohen, B.G. Decline: A Case Study of the Railroads and its Implications for Higher Education. A paper presented at the 1983 Conference of the Association for the Study of Higher Education.
- Gleazer, Edmund J. Jr. The Community College: Values, Vision, and Vitality. Washington, D.C.: American Association of Community and Junior Colleges, 1980.
- Levine, Arthur. When Dreams and Heroes Died. A report for the Carnegie Council on Policy Studies in Higher Education. San Francisco: Jossey-Bass, 1981.
- Levinson, H. Organizational Diagnosis. Cambridge: Harvard University Press, 1972.
- M.I.T. 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.
- Office of Technology Assessment (OTA). Informational Technology and its Impact on American Education. Washington, D.C.: Congress of the United States, 1982.
- Rose, Clare and Graesser, Cheryl C. Adult Participation in Lifelong Learning Activities in California. Sacramento: California Postsecondary Education Commission, October, 1981.
- Stover, J.F. The Life and Decline of the American Railroad. New York: Oxford University Press, 1970.
- Toffler, Alvin. The Third Wave. New York: Bantam Books, 1981.
- 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.