

A Study in Contrasts:
Postsecondary Education in Michigan and Ontario

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The Province of Ontario and the State of Michigan have long had a mutually beneficial relationship that extends far beyond our considerable economic interdependence. There is a remarkable similarity between the size of our populations, our economic base, important economic indicators such as personal income, and some aspects of our educational systems.

For example, both the size of our primary and secondary education systems and our level of public support per student are quite comparable. However, while our systems of postsecondary education are similar in both the size of enrollments and the number of institutions, Ontario and Michigan differ quite significantly in their policies and strategies for the governance and support of postsecondary education. For this reason, the Michigan experience may be of some relevance to the current deliberations concerning the future of postsecondary education in Ontario.

The Challenge of Our Times

Like the rest of the industrialized world, both Canada and the United States are undergoing a profound social transformation in which intellectual capital is replacing financial and physical capital as the key to prosperity, social well-being, and security. In a very real sense, we have entered a new age in which knowledge—educated people and their ideas—has become a key strategic commodity.

The signs of this social transformation are evident:

- The single most important factor in determining personal income has become the level of one's education.
- Ninety percent of new jobs in North America now require education at the college level.
- It is estimated that twenty percent of the time of the modern work force now must be spent in advanced education and training to remain relevant and competitive.
- Most new jobs are created by new knowledge which, in turn, is derived from the research conducted on our campuses and in our national and industrial research laboratories.
- Erich Bloch, former Director of the U.S. National Science Foundation, stated it well when he noted, "The solution of virtually all the problems with which government is concerned: health, education, environment, energy, urban development, international relationships, economic competitiveness, and defense and national security, all depend on creating new knowledge—and hence upon the health of our universities."

Michigan's Role in Higher Education

The State of Michigan has long been a leader in public higher education in the United States, both in the quality of our postsecondary institutions and the leadership they have provided in serving the changing needs of our society. Among its fifteen public universi-

ties, thirty-one community colleges, and fifty-four private colleges are our nation's leading research university (the University of Michigan), the nation's first land-grant university (Michigan State University), and one of our leading urban universities (Wayne State University). More specifically:

- The University of Michigan, created almost two centuries ago, before our territory became a state, is generally regarded as the first of the United States' truly public universities, responsible and responsive to the needs of the people who founded and supported it, even as it seeks to achieve quality equal to that of the most distinguished private institutions.
- Michigan State University was the model for the Morrill Act of 1862 that established the great land-grant universities, serving the agricultural and industrial needs of our nation.
- After World War II, as our federal government recognized the importance of campus-based research, Michigan again led the way in the evolution of the research university. Today, the University of Michigan ranks first among American universities in the level of its research activity, which amounted last year to over \$450 million in grants and contracts from government and industry.

To be sure, much of our state's innovation and leadership occurred during a period in which it benefited from one of the strongest economies in the world because of the prosperity of the automobile industry. Yet even today, when our average family income has dropped back to the national average, postsecondary education in Michigan has been able to maintain its reputation as one of the leading systems of higher education in the world. It also continues its role as innovator, as evidenced by two recent examples:

- The University of Michigan has become one of the first of our nation's "privately supported, public universities," now generating over ninety percent of its operating resources from a variety of sources including tuition (\$450 million/year), research (\$450 million/year), private gifts (\$250 million/year), and public services (\$1.4 billion/year)—compared to a state appropriation of \$300 million/year.
- Last year, Michigan launched the first of an array of "virtual" or "cyberspace" universities, providing educational services through information technology to Michigan industry and positioning our state for what we believe will be a major global export market.

Key Characteristics of Higher Education in Michigan

In my view, the key factors in Michigan's tradition of excellence, innovation, and leadership, sustained through good times and bad, are the following:

- The State of Michigan has always regarded higher education as a priority. Even conservative state governments committed to reducing tax burdens have protected investments in higher education. The efforts of our current Governor John Engler in clearly identifying education as the state's highest priority are only the most recent in a long

line of such commitments. In this regard, it is useful to observe that the University of Michigan currently enjoys a level of support per student (combining state appropriation, tuition, and other revenue sources) more than twice that of the University of Toronto.

- Michigan has long recognized the importance of strong differentiation of missions among its various colleges and universities. While all are encouraged to strive for excellence, each has the flexibility to develop a unique mission and role in serving the state.
- Our state has placed a high priority on access, today ranking among the national leaders in rates of participation in higher education. But it has achieved this through robust and effective financial aid programs (at the federal, state, and institutional level) rather than imposing artificial constraints on tuition and fees. Tuition levels are set at the institution level by governing boards, and these are determined both by the cost of particular academic programs and by market factors. To protect access, some institutions such as the University of Michigan have adopted policies that obligate them to provide sufficient financial aid to meet the demonstrated financial need of all Michigan students enrolling in their programs.
- We have developed over the years a joint commitment to a partnership involving state government, the private sector, students and parents, and our faculties in the support of high-quality higher education. Our faculties have accepted significant responsibility for generating the resources necessary for quality education through their entrepreneurial efforts in securing research grant support and private gifts.
- Most significantly, Michigan has had a long tradition of institutional autonomy, which has provided our colleges and universities with the flexibility to adapt to change—to approach their futures with distinct and creative strategies that serve the people of our state.

Implications for Postsecondary Education in Ontario

It is interesting to note that each of these characteristics was also recognized as critical to the future of postsecondary education in Ontario by the report of the Advisory Panel on Future Directions of Postsecondary Education (the Smith Report). I have read this report carefully, and I believe its general recommendations are not only on target, but also appropriate—perhaps even imperative—for rapid implementation.

Although the issue of greater institutional autonomy is controversial in Ontario, I also believe it is so important that several additional comments concerning the Michigan experience seem in order:

- The constitution of the State of Michigan provides our universities with autonomy in their control of academic programs, revenues (including tuition and fees), expenditures, and even mission and character.

- This constitutional autonomy is vested in the governing boards of each institution (selected either by gubernatorial appointment or popular election). This autonomy is comparable in power to that enjoyed by the executive, legislative, and judicial branches of state government.
- This model has been adopted by many other states, including the State of California.

The autonomy of our institutions has allowed us to adapt rather easily to the cyclic swings in the Michigan economy. It also allows our colleges and universities to adapt rapidly and effectively to other changes such as the opportunities afforded by emerging information technology (e. g., joining to form the Michigan Virtual University or linking primary and secondary schools and public libraries with the resources of our colleges and universities).

This autonomy creates a highly entrepreneurial culture on our campuses. When faculty feel responsible for their own destiny, they become far more active both in seeking the resources necessary for excellence and in managing those resources wisely.

The Challenge of Change

There is one final issue: We will face a challenge in providing our institutions with the capacity to change and adapt to the extraordinary restructuring of the higher education enterprise that is likely to occur over the next decade.

Universities have long enjoyed a monopoly over advanced education because of geographical location and their monopoly on certification through the awarding of degrees. Yet this carefully regulated and controlled enterprise could be blown apart by several factors. First, the great demand for advanced education and training simply cannot be met by such a carefully rationed and controlled paradigm. Second, the current cost structures for conducting and distributing higher education may not be able to adapt to the available resources of our times. Third, the expanding marketplace will attract new competitors, exploiting new learning paradigms and increasingly threatening traditional providers. Perhaps most important of all will be the impact of information technology, which will not only eliminate the constraints of space and time but will create open learning environments in which the learner has choice in the marketplace.

More specifically, tomorrow's student will have access to a vast array of learning opportunities, far beyond the faculty-centered institutions characterizing higher education today. Some will provide formal credentials, others will provide simply knowledge, still others will be available whenever the student—more precisely, the learner—needs the knowledge. The evolution toward such a learner-centered educational environment is both evident and irresistible.

As a result, higher education is likely to evolve from a loosely federated system of colleges and universities serving traditional students from local communities into, in effect, a knowledge and learning industry. Since nations throughout the world recognize the importance of advanced education, this industry will be global in extent. With the emergence of new competitive forces and the weakening influence of traditional regulations, higher

education is evolving like other “deregulated” industries, e.g., health care or communications or energy. In contrast to these other industries, which have been restructured as government regulation has disappeared, the global knowledge industry will be unleashed by emerging information technology that releases education from the constraints of space, time, and credentialing monopoly. As our society becomes ever more dependent upon new knowledge and educated people, upon knowledge workers, this global knowledge business must be viewed clearly as one of the most active growth industries of our times.

While many in the academy would undoubtedly view with derision or alarm the depiction of the higher education enterprise as an “industry” or “business,” operating in a highly competitive, increasingly deregulated, global marketplace, this is nevertheless an important perspective that will require a new paradigm for how we think about postsecondary education. It is clear that no one, no government, is in control of the higher-education industry. Instead it responds to forces of the marketplace.

Will this restructuring of the higher education enterprise really happen? If you doubt it, just consider the restructuring of the health care industry in the United States. While Washington debated federal programs to control health care costs and procrastinated taking action, the marketplace took over with new paradigms such as managed care and for-profit health centers. In less than a decade the health care industry was totally changed. Today, higher education in the U.S. is a \$180 billion per year enterprise. It will almost certainly be “corporatized” similarly to health care. By whom? By local or federal governments? Not likely. By traditional institutions such as colleges and universities working through state-wide systems or national alliances? Also unlikely. Or by the marketplace itself, as it did in health care, spawning new players such as virtual universities and for-profit educational organizations? Perhaps. Just note a brief passage from a recent venture capital prospectus analyzing possible investments in education:

“As a result, we believe education represents the most fertile new market for investors in many years. It has a combination of large size (approximately the same size as health care), disgruntled users, lower utilization of technology, and the highest strategic importance of any activity in which this country engages. . . . Finally, existing managements are sleepy after years of monopoly.”

Regardless of who or what drives change, the higher education enterprise is likely to be dramatically transformed over the next decade. It could happen from within, in an effort to respond to growing societal needs and limited resources. But it is more likely to be transformed by new markets, new technologies, and new competition. In this rapidly evolving knowledge business, the institutions most at risk will be not be of any particular type or size but rather those most constrained by tradition, culture, or governance.

It is my belief that the forces driving change in higher education, both from within and without, are far more powerful than most realize. It seems likely that both the pace and nature of change characterizing the higher education enterprise both in America and worldwide will be considerably beyond that which can be accommodated by business-as-usual evolution. As one of my colleagues put it, while there is certainly a good deal of exaggeration and hype about the changes in higher education for the short term—meaning

five years or less—it is difficult to stress too strongly the profound nature of the changes likely to occur in most of our institutions and in our enterprise over the longer term—a decade and beyond.

The Future

While some colleges and universities may be able to maintain their current form and market niche, others will change beyond recognition. Still others will disappear entirely. New types of institutions—perhaps even entirely new social learning structures—will evolve to meet educational needs. In contrast to the last several decades, when colleges and universities have attempted to become more similar, the years ahead will demand greater differentiation. There will be many different paths to the future. The great and ever-increasing diversity characterizing higher education makes it clear that there will be many forms, many types of institutions serving our society. But there are a number of themes which will almost certainly factor into at least some part of the higher education enterprise.

- Just as other social institutions, our universities must become more focused on those we serve. We must transform ourselves from faculty-centered to learner-centered institutions.
- Society will demand that we become far more affordable, providing educational opportunities within the resources of all citizens. Whether this occurs through greater public subsidy or dramatic restructuring of our institutions, it seems increasingly clear that our society—not to mention the world—will no longer tolerate the high-cost, low productivity paradigm that characterizes much of higher education in North America today.
- In an age of knowledge, the need for advanced education and skills will require both a willingness to continue to learn throughout people’s lives and a commitment on the part of our institutions to provide opportunities for lifelong learning. The concept of student and alumnus will merge.
- Our highly partitioned system of education will blend increasingly into a seamless web, in which primary and secondary education; undergraduate, graduate, and professional education; on-the-job training and continuing education; and lifelong enrichment become a continuum.
- Already we see new forms of pedagogy: asynchronous (anytime, anyplace) learning that utilizes emerging information technology to break the constraints of time and space, making learning opportunities more compatible with lifestyles and career needs; and interactive and collaborative learning appropriate for the digital age, the plug-and-play generation.
- Finally, the great diversity characterizing higher education will continue, as it must to serve an increasingly diverse population with diverse needs and goals.

Conclusion

Just as knowledge has become the key strategic commodity of the 21st Century, education has become its key social infrastructure. These facts of life are now recognized by all nations, industrialized and developing, throughout the world. We are already seeing the rapid emergence of an intensely competitive global knowledge/education marketplace.

The best people, the most resources, are attracted to the best education systems. They in turn produce the educated people and new knowledge necessary for economic growth.

Like it or not, today Ontario competes in this knowledge market not simply with Quebec or British Columbia, but with Michigan and California, not to mention Germany and Singapore.

In today's world, knowledge has become not only the coin of the realm, determining the wealth of nations, but as well the key to one's personal standard of living, the quality of one's life. We might well make the case that today it has become the responsibility of democratic societies to provide their citizens with the education and training they need throughout their lives, whenever, wherever, and however they desire it, at high quality, and at a cost they can afford. This has been one of the great themes of the contemporary university. Each evolutionary wave of higher education has aimed at educating a broader segment of society—public universities, land-grant universities, technical colleges, community colleges, and now new forms such as the virtual university. Yet even more evolution must occur to serve an even broader segment of society.

Last spring the noted futurist, Peter Drucker, in a long interview in *Forbes* magazine, speculated, "Thirty years from now the big university campuses will be relics. Universities won't survive. It is as large a change as when we first got the printed book."

While it is always dangerous to disagree with Drucker, in this case I do. There seems little doubt that the need for learning institutions such as the university will become increasingly important in a knowledge-driven future.

But it is also clear that our colleges and universities must change, and change dramatically, if they are to serve our changing world. The real question is no longer whether such change will occur but rather how and determined by whom.

An era of change can be threatening. It can create a sense of crisis. But if we provide our institutions with the resources necessary to achieve excellence, the flexibility to determine their own destinies, and the capacity to change, the decade ahead could well become a renaissance in higher education.

I commend your strong interest in Ontario's system of postsecondary education and your commitment to making it among the best in the world. Nothing less will adequately serve the people of your Province.

Best wishes for success in your endeavor.

