

Michigan Add-ins 2.0

International

Peter Goldmark Talk

We stand at a time of discontinuities and disconnections. Rather than “managing the environment”, what really needs managing is us--people.

We have advanced at a dizzying, careening pace in our ability to manipulate matter; we have leapt forward in our ability to generate information; we have multiplied explosively our ability to exploit nature; but not our ability to manage ourselves.

And this is where we stand in time--at the point where we must learn to manage ourselves.

Two-thirds of the world's population and 85% of its consumption occur in 12 “geocenters”

US, USSR, Europe, Japan

China, India, Pakistan, Indonesia, Bangladesh,

Nigeria, Brazil, Mexico

Four Northern geocenters (US, USSR, Europe, Japan) want to go on growing, but they want increasingly also to save the environment--by having the South stop burning its forests, stop its population growth, and managed its industrial revolution in a way that does not produce the same damage as industrialization did and does in the North.

Reality is that the North has been taking far more from the South than vice versa--for debt repayment and the purchase of critical imports. There is a net flow of over \$40 B per year from the poor countries to the rich countries.

The world's population can level off in only one of two ways: through an increased standard of living for the poor, or through famine, disease, and war.

Nothing will or should stop the quest of the developing nations for economic strength and independence, and therefore the question is how, not whether, they do it.

The North is the greatest present threat to the biosphere, and has the greatest technological and financial resources to help the transition to global balanced development.

The greatest future threat to the environment is poverty.

We all stand on common ground. We are all in danger.

We must all change. We all share the same planet.

The biofilm has to work for all of us, or it won't work for any of us.

We must come to understand that we cannot disentangle the question of stabilizing the Amazonian forest from the question of how the mother in Nigeria cooks her meals, or how much greenhouse gas you and I are emitting today because the cars we drive are fuel inefficient.

We cannot consider the need for developing countries to strengthen their agricultural sectors, apart from the destructive effect of the \$100 B of internal agricultural subsidies in the US, Europe, and Japan--subsidies which result in closed markets for the South.

To convert to economic arrangements that close the gap between rich and poor but which do not destroy the biosphere, and to do it on a global scale--that is the task our generation must undertake.

It is necessary for us to look at things as citizens of one planet. In the past 10,000 years--an instant in

man's evolution--we have moved through the scales of small farming groups to villages, to larger cities and kingdoms, now to immense urban areas and nation-states. We have exploded into enormous dimensions where technology allowed it, trade supported it, or danger required it.

Costs

Typical Questions

How many more years will tuition have to increase faster than inflation?

Why can't we achieve savings?

What special privilege allows colleges to abandon good business practices?

Troubled friends and persistent critics

Disappointed trustees

Frustrated parents, frightened that the promise of a college education is being priced beyond their reach

A generation of students openly skeptical about whether the degrees they seek are worth the state price

Public officials who are learning that saying no to tuition hikes makes for eminently good politics.

Why are costs going up?

Declining value of federal financial aid

New health and safety requirements

Addition of new, sometimes vocationally relevant curricula

Cost of computing and library collections

Need to remain competitive in salaries

Need to make repairs to physical plant postponed in 1970s and 1980s.

Myth and reality

Higher ed is perceived as an industry put through the ringer in the 1970s, recovered in the 1980s, and then growing rich and greedy.

But while many institutions grew in real terms during the 1980s, public institutions lagged, both in terms of general revenue growth and increases in faculties.

Hence, there was quite a bit of variation in the experience of different institutions

The focus on tuition increases creates an impression of prosperity, even greed, that simply does not fit the facts.

Americans continue to enjoy the most envied, most copied system of higher education in the world.

It is not wrong to note with pride that higher education reflects much of what makes this country great:

i) commitment to intellectual liberty and scholarly freedom

ii) willingness to invest in its young

iii) importance it attaches to merit rather than social class

iv) commitment to reach out to the underserved and the disadvantaged

Productivity

Current university practices run counter to

the rest of America...

- i) still cost-plus pricing
- ii) unwilling to reduce employment in order to make themselves more competitive and productive.

Many universities have become multi-purpose institutions, no longer simple academies of higher learning, but expansive and expensive bureaus providing a host of services ranging from psychological counseling to child care.

It is right to ask "What business are you in?"...

...and to expect colleges to be more business-like...more efficient, more resourceful, more focused in their investments.

Changing higher eds cost function requires that colleges confront that habit of mind that so easily rewards productivity either by expanding the csope of the enterprise of encouraging the scholarly pursuits of individual faculty members.

Our institutions need to understand what it is that they do best and then to invest in being the best at what they do.

This also applies to faculty who should have more differentiated roles.

Important to have shared fiscal responsibility-- view resources as belonging more to institution and less to individual units or individuals.

What can be done?

Important to move away from defensiveness.

Danger is that public agencies and officials will use legislative and regulatory powers to squeeze higher education by limiting the industry's ability to increase revenues.

1. Must keep the facts straight
 - ...Must put aside caricature of higher ed as grubbing for cash.
 - ...Must understanding that the handful of true research universities are, by every measure, among this nation's most valuable asset, responsible for much of the nation's productivity, for defining the canons of most learned professions, and for this country's ties to the international scholarly community.
2. Set revenues first
 - Move away from cost-plus pricing by fixing tuitions and appropriations at the beginning...and then establishing multiyear financing plans
 - (Note it is important for students to know accurately how much an education will cost them.)
3. Learn to grow by substitution
 - Need a systematic and public examination of financial consequences of current academic practices, including teaching loads, organizations, incentives.
4. Close marginal campuses
 - Must ensure that public funds invested in higher education are used to support educational

purposes and not to sustain employment

5. Exert trustee leadership.

Langfitt

Concern that institutions grow by accretion-- the simple addition of goods and services-- rather than a determination to improve the overall quality of the enterprise.

Urges instead growth by substitution, which means increasing the overall quality of the enterprise by replace outmoded goods and services with new and more useful ones.

Used analogy with health care industry.

Need a strategic plan for managing unpredictable revenues. When revenues decline, expenses are reduced by eliminating parts of the corporation that are less profitable than others or that do not fit the strategic plan.

Key element here is a strategic plan that differentiates the importance of various parts of the company, a governance mechanism that empowers the CEO to make even the most difficult decision, and limited job security for all employees, including senior management.

He believes that particularly the large, complex reserach universities must restructure their governance and their tenure policies if they hope to thrive during a prolonged period of limited resources and therefore limited growth in size.

Levin

Two theories of higher costs:

- i) education is an industry that is necessarily labor-intensive and cannot take advantage of labor-saving technologies that enable other sectors of the economy to reduce costs and improve productivity.
- ii) Degree of independence given to faculty and units to pursue their own interests using the institutions resources amounts to de facto control of the property of the institution. problems in spending arise because reducing costs does not necssarily serve the interests of these parties. Problem is the absence of proper incentives.

If the second theory is correct, must develop strong localized incentives.

Wagener

Believes there is still a strong commitment in reseach universities to teaching, albeit of a different type that in small liberal arts colleges.

Teachers at universities see themselves as guides to the apprehension and discovery of knowledge in their discipline; in colleges, emphasis is on helping students to learn how to think.

Smith

Need a separate budgeting procedure that provides separate pools for teaching, reserach, and service and authorize an administrator to negotiate with facul members for their particular mix of functions.

Need to “unbundle”.

Kennedy

Higher education is becoming more expensive that people would like because a good university education requires modern, high tech facilities and the services of creative, highly-skilled professional people.

At Stanford, “inflation rate” of costs runs two or three points ahead of CPI.

A couple of serious mismatches between perception and reality...

- i) Few people are ever aware of the real cost of education because it has always been offered at subsidized prices. Hence there is a deep confusion between price and cost.
- ii) Public usually heats about university money in terms of capital assets and balances rather than annual expenditure requirements.

Zemsky

While public thinks of faculty as lazy, in truth they are a scholarly profession often obsessed with their work.

Most research scholars believe that their universities have a general responsibility to invest directly in the research enterprise.

Unfortunately, the costs of doing research are rising faster than the revenues to cover those expenses; second, the traditions of the research universities strongly discourage investing in the research of some faculty and not others.

Ironic that while the faculty can be very hardnosed about tenure and promotion, they cannot do the same in allocating roles or resources to their colleagues.

Few strategic planning efforts ever produces lists of winner and losers--those programs deemed worth of new investment versus those judged to be candidates for reduction or closure.

proposal: Let each department decide how to allocate its research budget according to internal peer review. That is, provide support more directly linked to research productivity of individual faculty.

Technology in Education

If education has progressed like computers, we could receive 16 years in 10 minutes for 5 cents.

Yet, the real productivity of American education has clearly declined (as has its quality, apparently)

Prime reason is that education invests a smaller portion of its resources in labor-saving technology than any other major industry.

(Estimated at 0.025% compared to 2.5% for US average)

Of course, over 90% of cost of education is in labor.

Yet, even because education is so labor intensive, the potential for

improving productivity is enormous.

Of course, the most sophisticated learning experiences--seminars or Socratic dialog-- cannot be automated. But most learning, especially at K-12 level, is far more routine and could be enhanced by use of computers.

This is already being seen in military, proprietary trade, and technology schools. Indeed, estimated that industry spends \$15 B per year on computer-based instructional systems.