This speech addresses the problem of higher education's response to the forces of change and argues for a reinventing of higher education rather than repeatedly amending core teaching and research activities to fit new social and economic situations. Three higher education organizational dynamics (recruitment, budgeting, and handling outside criticism) are used to illustrate responding to change through continual institutional self-assessment and adaptation via systems thinking. The effectiveness of higher education's response to public changes depends largely on the ability and willingness of either side to mutually regard, trust, and communicate with the other. An escalation model is used to illustrate the dynamics of this communication interrelationship between public requirements and higher education's response; the focus being on understanding the public's needs and fully investing in addressing these needs. Also briefly discussed are the current reform measures (rewarding teaching, assessing outcomes, raising productivity) in higher education and their appropriateness for reinventing higher education so it properly responds to the public's changing needs. Finally, it is proposed that what is needed is a reform movement to make higher education favor and support knowledge to improve society, for improved knowledge of society's needs, and for the courage of learning organizations to engage in continuous change. (Contains 12 references.) (GLR)
Astronaut Russell Schweickart reflects on what happens when you go around and around the earth:

When you go around [it] in an hour and a half you begin to recognize that your identity is with the whole thing. And that makes a change.

You look down there and you can’t imagine how many borders and boundaries you crossed again and again and again. And you don’t even see ‘em. [In] the Mideast you know there are hundreds of people killing each other over some imaginary line that you can’t see. From where you see it, the thing is a whole, and it’s so beautiful. And you wish you could take one from each side in hand and say, "Look at it from this perspective. Look at that. What’s important?"

... [The earth] becomes so small and fragile, and such a precious little spot in the universe, that you can block it out with your thumb, and you realize that on that small spot, that little blue and white thing is everything that means anything to you.

Taking Schweickart’s perspective allows us to consider a new view of what is meaningful in the world and how it fits. The Rio Grande IS not the border between the United States and Mexico--it is a river. Changes in the former USSR in the past two years
are not visible from space. People have a tremendous proclivity to plot it out, mark it off, and own it. The application to land and governments is obvious.

The application to higher education is less obvious but useful to consider. For example, we know the attrition rate for students. But the attrition rate is not the same as not dropping out--dropping out is a personal decision that often carries a sense of failure. We do not measure personal trauma. Reducing personal trauma is not our prime motive for lowering attrition rates. What we plot out, mark off, and own is what we attend to--enrollment, finances, buildings, diversity, outcomes assessment, faculty supply and demand. We need latitudes and longitudes--we need guidelines--but we need to rethink what they should be, and we need to start with a clear view of the world on which they lie.

Why should we step back, take a new view, and "reinvent" ourselves, as a recent cover story in Time magazine\(^2\) claims we are doing? Virtually every keynote speech at virtually every higher education conference for the last several years has listed the reasons, including budget problems, more budget problems, and public dissatisfaction. Frank Newman, president of the Education Commission of the States, summarized it in an essay where he identified "a shift away from long-standing traditions to the demand for a revolution," and a movement "from the assumption of success to the creation of a system and of institutions that must be self-assessing and constantly changing."\(^3\) Donald Langenberg, University of Maryland System chancellor, speaking to the Council of Graduate Schools put it this way. He said he was "convinced that the familiar academic world in which most of us have spent our careers is turning upside down. It's a slow but inexorable process, rather like an ocean liner capsizing.... Behind today's budget crises run much more powerful and longer-lasting currents of change, to which I think we must not fail to respond."\(^4\)

My thesis today is based on the conviction that Langenberg is precisely, but only partially, right--the forces of change are fundamental and long-lasting--but that he understates the situation when he says that we must respond. We are responding, making many improvements in an already exemplary enterprise. "Respond" sounds too much like something Stanley M. Katz wrote recently, that "universities have devoted themselves to defending our palaces and responding in an ad hoc manner to successive assaults."\(^5\) This passive and reactive stance is not enough. The ocean liner may start to sink slowly, but at a certain point it goes "glub" and disappears. We have not yet applied to ourselves the empirical power that distinguishes our enterprise. Nor have we yet warmly embraced the possibility of fundamental change in higher education. I hope today to challenge us all to go home and begin really reinventing higher education rather than responding to change.
I want to begin with some thoughts about higher education, both academics and administration, and move outward. Ultimately, I hope you will see that a basic symptom of our problem is the separation of the two arenas, higher education and the world beyond us. First, the academic side.

Each campus individually has core teaching and research activities. They vary from one campus to another, but they tend to have a lot in common. For example, most share the disciplines that comprise general education, and virtually all would name teaching as a core activity. Core patterns also include academic calendars, credit hours, curriculum requirements, and many other basic operational assumptions. Taking some set of core patterns like this, we can add an array of changes we have made during the last couple of decades.

We needed more students about twenty years ago and were fortunate to discover some new markets like older-than-average people who could use our services. We decided we needed to deal with such issues as remedial education, diversity, and internationalism, so we developed programs to do that. People outside the academy began to ask us to be more involved in their concerns, and public service is becoming more prevalent. The call for academic accountability has become insistent enough to require outcomes assessment programs. To acquaint the public with our activities, we are also stepping up various kinds of public relations initiatives.
In some cases, our changes have been programs attached to the core; in others, they are cross-cutting themes, as in "across-the-curriculum" initiatives like those to infuse writing skills, critical thinking, and ethical judgment. It would be entirely unfair and untrue to criticize higher education for being unresponsive in the academic domain. But I wonder whether we are AMENDING ourselves, not reinventing ourselves. And I wonder how much longer we can go on this way. How many amendments can the core support? How many themes can cut across without eroding it?

What about the administrative side?

This slide portrays three major organizational threats that have surfaced in the last twenty years or so and have stimulated significant change. We found that we needed more students, with the end of the draft and the end of the baby boom, as well as other pressures. Our major responses have included the entire recruitment function (in case you're too young to remember, we used to "let" students come to us), and we developed a vast array of new academic, vocational, and professional programs. We got more students, but the numbers issue continues on most campuses--some of us still need more students, while others must
reduce enrollment to match budget constraints. Second, with the familiar and widespread
money problems, we have raised tuition rates generally faster than inflation or discretionary
income and we have made substantial budget cuts. To the extent that these measures have
generated resources, new demands have more than depleted them. Finally, with the
increasing volume of criticisms, we have made more serious efforts to answer and inform,
with the aim of converting critics to fans of higher education. Our premise in these efforts is
that if they know us, they will love us.

Now these are by no means the only problems we have faced, nor the only responses
we have made. What I want to do with these examples is to illustrate how linear mental
models like these, based on simple causation theories, can blind us to the complex web of
reality in which we operate. As Oscar Wilde has said, "The pure and simple truth is rarely
pure and never simple." But before I show you a different way to view these organizational
dynamics, I need to set the stage.

Much has been written lately about the "learning organization"--the organization that
continuously improves by learning about itself and its constituencies, making changes that
reflect what it learns, and then learning more and changing more. To repeat Frank Newman's
phrase, we "must be self-assessing and continually changing." A popular book on the subject
is The Fifth Discipline: The Art and Practice of the Learning Organization, by Peter M.
Senge. I'll leave you to discover the first four disciplines on your own. The fifth discipline
is one that cuts across the other four: systems thinking. Systems thinking is a way of
embracing and capitalizing upon the enormous complexities that we all know characterize our
worlds. The Western tendency has been to label, sort, prioritize, and in other ways rationalize
complex reality in order to deal with it. Systems thinking does some of these things, but it
allows for a more dynamic representation.
Systems thinking is "a discipline for seeing the 'structures' that underlie complex situations, and for discerning high from low leverage change," according to Senge. It has tools to illustrate different kinds of systems, as I will show in a few minutes. But the heart of systems thinking is recognizing fundamental phenomena within complex, dynamic situations. For example, here are some of the laws of the fifth discipline:

* Today's problems come from yesterday's "solutions."
* The harder you push, the harder the system pushes back.
* The easy way out usually leads back in.
* Cause and effect are not closely related in time.
* There is no blame.

In discussing the concept of blame, Senge asserts that we cannot blame someone else because they, and we, and the causes of our problems are all part of a single system. The cure lies in the we-they relationship. Among the suggestions in systems thinking are to learn to see underlying structures rather than events and to think in terms of processes of change rather than snapshots.

Senge outlines several archetypal systems dynamics. He calls this one, "Fixes that Fail." We see a problem, and we take action to fix it. The problem may, in fact, go away—but the fix itself has side-effects that we did not take into account, and the side-effects may create new problems or allow the old one to return after awhile.
Here is a systems model of what may have happened when we realized we were getting fewer students. We recruited harder and we found different kinds of students, and sure enough—enrollments did not follow the doom and gloom predictions. But one of the side-effects was cost increase. We needed day care centers, and students could not afford the full cost. We added all those young, energetic road warriors to the admissions staff. Many campuses also admitted students who did not quite fit their mission, and that created some strain on both the mission and the student. To the extent that we were not funded, equipped, or willing to meet the education needs of new kinds of students, some of these students may have gone away, disillusioned. Attempting to better meet the needs of the new students sometimes came at the expense of attention to meeting the needs of the others. To the extent that students were unhappy with the results, we eventually found ourselves again with enrollment problems.

Or take the problem of declining funds relative to costs, which we attempted to fix through such measures as raising tuition and cutting budgets. Those measures did alleviate the financial strain in the short term. But eventually, students expect more quality when they
pay a higher price. We were using the added tuition to maintain quality, not increase it, and cutting budgets meant fewer services, so students began to feel they were getting less value for the dollar.

Finally, because of these side-effects and for many other complicated reasons, we found we had a rising tide of criticism to deal with. In the early years, our reply tended to be "Trust us. We are good." In recent times, our attention to and sophistication in public relations activities has risen.

Derek Bok, at last month's American Association of Higher Education meeting, noted the paradox that higher education is in many ways better than ever, yet public criticism is high. Let me propose two theories about that paradox. First, as shown on the slide, perhaps the public sees our explanations as defense mechanisms, as unwillingness to listen and to change, which increases their frustration. John Kenneth Galbraith put it well: "Faced with the choice between changing one's mind and proving that there is no need to do so, almost everybody gets busy on the proof."

The second theory is this: maybe the critics are right. We could admit to that without also admitting that we are wrong. Rather, we and our critics may be applying different kinds of standards—not higher versus lower, but different kinds of standards. This paradox of excellence in the higher education enterprise, accompanied by mounting criticism, deserves closer scrutiny.
ESCALATION

This is another of Senge’s archetypes, called the escalation model. We have two interdependent actors, A and B. A acts and achieves results that affect what B does, while B’s results also modify what A can or will do. Senge characterizes the escalation dynamic primarily in terms of competition, for example the arms race. Each nation competes for military superiority, which has the effect not only of expanding international military might, but also of potentially increasing the likelihood of combat, whether by accident or on purpose. Escalation of military strength also drains the economies of the participating nations with respect to non-military activity.

If the actions of A and B are competitive in the sense of trying to undercut one another, the model escalates conflict and the ultimate extinction of one or both. But this can also be a model of continuous improvement for both A and B. If the actions of A and B reinforce one another, the model escalates cooperation and expansion. For example, let A and B represent a producer and a consumer. If the producer continually makes what the consumer wants and needs at a good price, the consumer buys it--maybe a lot of it, and maybe while suggesting to friends that they buy it, too. The more the circles turn, the happier it makes both the producer and the consumer.

So, what determines whether escalation is in the competitive, arms-race mode or the cooperative, producer-consumer mode? I think it is this: the effectiveness of each party’s efforts to understand the needs of the other party. Such effectiveness is a direct function of their mutual regard, their mutual trust, and their mutual communication. Can a mutually destructive system become a mutually beneficial one? Only if one or both of the parties begins to make a serious effort to understand, trust, and communicate with the other. W. Edwards Deming may have had this kind of dynamic in mind when he said recently that there
is no such thing as a win-lose situation—not in the long term. In the long term, there is only win-win or lose-lose.

Here is an escalation model that might be true for higher education. Starting at the lower left, higher education engages in its functions and produces graduates and knowledge which yield public benefits. The public, meanwhile, engages in activities that are largely determined by its condition—that is, public activities are more or less productive, more or less peaceful, and so on. The public benefits that we produce help determine the public condition. These public activities, including the perception of public and personal benefits from higher education, determine whether people have the will and the wherewithal to enroll in higher education and pay adequate taxes to support it. That little "tail" labeled "other" is in fact a major, difficult part of the model. A complete model of these dynamics would be enormously complex, primarily because of the other factors that determine public condition. These factors would include, for example, political and economic stability.

The value of this or any other model lies in its ability to generate insights that may be useful. Three are immediately obvious to me. The first is that we are part of a system whose core is public benefit. Who defines "public benefit"? We do. Posterity does. But most of all, and most neglected of all, the public does. Robert Pirsig has written two philosophical novels, Zen and the Art of Motorcycle Maintenance and Lila. This quote from Lila expands on my point: ""The fundamental purpose of knowledge is to Dynamically improve and preserve society.' . . . And when things get lost and go adrift it is useful to remember that point of departure." The arousal of public benefit is at the core of the system we operate. If it were not for the expectation that what we do in higher education benefits the public at large and
benefits individual participants, why would we exist? Why wouldn't all of us and our faculties go do something else? I dwell on this point because I want both to give us credit and to challenge us further, as my next observation elaborates.

My second thought about this model is that "public condition," including the other, non-higher-education dynamics that determine it, is an essential and underappreciated element of the model. This element strikes me as the key component that has the potential to accelerate the escalation process, to improve not only the public condition, but also higher education. One of Senge's laws of the fifth discipline is that "Small changes can produce big results—but the areas of highest leverage are often least obvious." This area of public condition and the various other factors that affect it may hold the highest leverage for us. In one sense they are not obvious—they are not part of our circle in the system. In another sense, they are perfectly clear—they are the only part of the escalation model in which we are not yet fully invested. When I said earlier that perhaps we and our critics have different kinds of standards, I was referring to this dynamic. Perhaps we judge ourselves "excellent" by academic standards, and the public might even agree with that judgment. But the public may judge us "deficient" overall because another standard is more important to the public, the standard of public benefit as they define it. Which is the more compelling standard? Franz Kafka answered that for me when he said, "In a fight between you and the world, bet on the world."

My third observation is that this could be either a competition model, like the arms race, or a cooperation model, like the producer-consumer. We seem to tend toward the competitive mode. Paraphrasing what Senge says is an early warning of the escalation model, we have been known to say, "If the public would only get off our backs, then we could stop this battle and get some other things done." Although a great deal of two-way communication is going on between us and the public, it is not sufficiently based in mutual trust and regard, nor rooted in a serious bilateral attempt to understand what each party believes to be its needs.

I found an example of this communication gap in a Chronicle of Higher Education story on land-grant universities a couple of weeks ago. Although this example focuses on only one segment of our enterprise, I find it apt for all of us.

At a conference in California this spring, and several others in recent years, the theme was the need for land-grant universities to "move beyond their agricultural past and broaden their research agenda." Karl Stauber, a foundation executive, pointed out that the proportion of Americans engaged in agriculture has dropped from 75 percent to 2 percent since the
Morrill Act. He added, "The United States the land-grant universities were created to aid and assist no longer exists." People at the conference pointed out a number of creative innovations in certain land-grants that respond to this change, and they proposed other exciting ideas, including interdisciplinary research on real-world problems. They also cited formidable barriers, like the extra time interdisciplinary research requires, the lack of organizational rewards for such research, and the outright hostility some faculty display toward other disciplines.

How does it happen that a hundred-year trend from 75 to 2 percent in agriculture has become a stimulus for change only in the last decade? Why should the public pay for work to improve a United States that no longer exists? Why do we tolerate organizational practices and cultures that interfere with our capacity to fulfill an appropriate mission for today and tomorrow? We have drifted apart from the world, and not only in agriculture.

To explain the need for greater involvement in the public condition, let me simplify the escalation system. If "we" are higher education and "you" are the public, this system suggests that the public comes to us for what they need and we give it to them. On the other hand, if things get lost and go adrift, the public does not come to us because we do not have what they need. The key to making this a positive cycle is ensuring that we do what the public needs.

Now, we have long since shattered the Ivory Tower. We do a LOT of things that the public needs, and many of them are relatively recent innovations. We should keep those things, and improve upon them. Still, the public’s resources are increasingly limited, and their priority for higher education is being severely tested by economic pressures and by increasing demands from human services agencies, the justice system, deferred maintenance of national infrastructures, and other important public services. These pressures are important examples of what I labeled "other" factors affecting the public condition. They are so
weighty that the armchair psychologist in me cannot help but propose yet another theory about the paradox of higher education's excellence and the public's criticism. Perhaps some of the criticism is the public's attempt to rationalize the fact that it has no choice but to cut its investment in higher education no matter how excellent we are. They cannot give us what we need, so they try to feel better about that by claiming that we do not deserve it.

To the extent that that theory has merit, please note that NO amount of persuasion or public relations or compelling visions of what higher education is trying to do will solve the problem. Nor is answering the insistent call for "accountability." We are in the accountability business because the public said, "What are you doing?" We answered, "We are doing good," and the public replied, "Prove it!" Our goal must be to change their reply to, "You sure are!" To reach the goal, we are focusing on measuring things. Imagine a future day when we say to the public, "See the pretty numbers!" I predict that the public will reply, "So what!" The public spokespeople I deal with are unimpressed with data when it does not match the personal experience of themselves or their nieces, or their constituents.

There's an analogy here to the patient who goes to the doctor complaining of being tired all the time. The doctor may run vast batteries of tests and conclude that nothing is wrong. The tired patient is not impressed by the numbers.

We need to tell our story, we must be accountable, and heaven knows we need to share a sense of where we are going--but those who believe these measures will solve the fundamental problems of higher education or society are absolutely deluded.

So I return to the question, "What does the public need, and are we fully invested in that?"

SOME NEEDS

ABUSE ENVIRONMENT
HUNGER GOVERNMENT
ECONOMY HEALTH

Derek Bok suggested last month to the American Association for Higher Education conference that we need to contribute to national goals, as we were seen to do at the end of
World War II and early in the space program. That is another way to say that we must meet the needs of the public more aggressively.

These are a few critical public needs: reversing environmental degradation; building effective and responsive government; ensuring adequate, affordable health care for all; creating a global economic system that works; eliminating hunger and homelessness; and removing the causes of interpersonal abuse and substance abuse. Indeed, perhaps we find it hard to get credit for contributing to national goals because each nation now thinks in global terms, so our domain of interest is vastly larger than it was, and because we face not one overriding agenda, but many that threaten human life and the fabric of society.

Now, of course, higher education contributes toward resolving all the problems on this slide. The basic knowledge, the applied research and reform initiatives, and the educated people to lead the reforms are almost entirely products of our enterprise. But two questions arise as I look at these examples.

First, is it any wonder that the public’s priority on higher education is slipping when it comes to allocating public funds? All of these problems are massive, urgent, and expensive, and most of them seem to be more compelling claims on scarce finances than is advanced education. To put us very high on the list would take a far longer-term view than the public is inclined to adopt.

Second, how aggressively are we working on these problems? We are working on them, while clearly affirming that our mission is to discover, preserve, and convey knowledge, not to solve the world’s problems. We must not change that mission; but we must challenge it. What knowledge are we to discover and convey, to and for whom?

Two commonly-told stories from industry provide a helpful analogy for this question. American railroad companies spent all of the 19th century and much of the 20th believing and acting as if they were in the railroad business. That seemed logical to them. Swiss watch-makers spent centuries believing and acting as if they were in the Swiss watch business--another apparently sensible view. Each industry saw severe turmoil and near-extinction during this century, one as automobiles, trucks, and airplanes took over, and the other with the advent of digital watches. Strategists who observed this have suggested that each could have defined for itself a more promising and productive mission. The railroads could have acted as if they were in the transportation industry, while the Swiss could have focused on time-keeping. That’s not to say that railroads should have established airline companies. I simply suggest that thinking about their mission in different ways might have produced creative strategies for embracing change to the benefit of all.
We say that our mission is education or knowledge. Sometimes I wonder. Are we overly concerned about preserving disciplinary traditions and departments, at the expense of adequate attention to what learners and society at large need to know and how we can best help them learn? Are some of us teaching something we love, whether students need to know it or not? Are some of us doing research for our peers, when the world might desperately need those same talents in connection with some other issue? For example, I looked at a recent Chronicle of Higher Education job section. The index to the display ads listed one job available under "environment"--the same number of jobs as in classics or linguistics--and that one environment job was in New Zealand. Is this significant?

We treat many of the needs like those on this slide as appendages to the core and as cross-cutting themes. In some proportion of cases, when special funding goes away, so does the instructional or research activity. Why are issues like these left to chance? Why do we depend so heavily on external funding to turn our attention to these areas? These are the kinds of issues that can drive a critically important process of reinventing the core of our enterprise.

**SOME REFORMS**

- Reward teaching
- Assess outcomes
- Raise productivity

Turning from the world's needs to our own reform efforts, some of the most widespread proposals today are:

1. Increase the rewards for teaching (implicitly, at the expense of research).
2. Assess the results, the outcomes, of higher education.
3. Increase faculty productivity by requiring more teaching.

To their credit, these proposals recognize the truth in the saying that "The only person you can change is yourself." Not one of them, however--not one, nor even all of these and many others put together--qualifies us as being in the process of "reinventing" higher education. We are pushing and pulling on the status quo.
Both we and our critics propose all kinds of changes that seem major to us and probably are good ideas. But they have net effects like fragmenting our energies and organizations in the absence of a clear understanding of and commitment to what the public really needs. For all we know, many of our reforms, wrenching as they may be to us, would bring very little benefit that the public would value. And I make this claim knowing that the public itself is calling for these reforms. But for all we or they know, making ALL the proposed changes, and doing so speedily and well, would make only the smallest dent in improving the public condition or its attitudes toward us.

These are major changes, especially to those of us who may carry them out, but they simply are not fundamental changes. Fundamental changes would call all of our assumptions and patterns into question. The issue is not how to do more with less. The issue is not making faculty spend more time in the classroom. If that is a method of increasing faculty productivity, and I seriously doubt it, it is an archaic one, a sign of frustration rather than a promising reform. The issue is what to do and how to do it in the 21st century.

I am talking about starting a "movement," as Parker Palmer put it in the latest Change magazine. Palmer contrasts movements with the organizational approach to reform. He characterizes the organizational approach as:

premised on the notion that bureaucracies ... define the limits of social reality within which change must happen. Organizations are essentially arrangements of power, so this approach to change asks: "How can the power contained within the boxes of this organization be rearranged or redirected to achieve the desired goal?"

By contrast, Palmer says, "The genius of movements is paradoxical: They abandon the logic of organizations in order to gather the power necessary to rewrite the logic of organizations." The first stage in a movement, according to Palmer, is "choosing integrity."

Palmer’s proposal for a movement approach crystallizes the nature and magnitude of the changes we need to make, and the zeal with which we need to make them. His focus is on the need to elevate teaching, and that is apt. But my message goes farther. It is time to choose integrity. The question is not teaching versus research, basic research versus applied research. The question is, what are we for?
The movement we need now is to make higher education for knowledge to improve society. This focus generates a long list of issues and priorities, one of which must be the importance of teaching. But the idea of societal improvement is both deeper and broader. It is deeper with respect to teaching, for example, in that it encompasses both why teaching is so important and how it needs to change. Teaching is important because it is the engine that empowers vast numbers of highly competent, values-rich people to enter or re-enter society with the wisdom, the skills, and the will to improve their corner of it. Teaching needs to change to ensure that these learners know what they need to know, that they can do what they need to do, to make the world a better place. The mission of higher education may not be to solve the world’s problems, but surely we are obliged to educate the people who can, the people who will.

The idea of societal improvement is also broader in suggesting that we could develop a long list of needed changes in higher education. What belongs on the list? To paraphrase Mark Twain, I am gratified to be able to answer promptly—I don’t know. But some possibilities occur to me. We might have more purposeful attention in the curriculum to values, human relations skills, diverse problem-solving skills, consensus-seeking, and decision-making; we might have greater coherence in national or international research agendas; we might have greater quantities of and more targeted investments in applied research; or we might give rewards for campus personnel who provide direct public service.
LATITUDES

Knowledge of Needs

We need a much clearer, more focused understanding of what society needs, and we will get it if we search out new latitudes. We get new latitudes by listening to the public and interpreting what they tell us on the basis of our own knowledge.

Let me tell you a story. And don't get too comfortable thinking that it is not a story about you. My home city has 50,000 people and five campuses—one state two-year college, one tribal vocational college, one private upper-division nursing college, one parochial university, and one proprietary business school. Their tuitions vary by a factor of three, yet all attract sufficient students to be viable. Only one has a substantial number of students from out of state. You may think it odd to have one institution for every 10,000 people—not students, mind you, but citizens. You may think it odd that the more expensive institutions can survive. And you may be right, but here is the really odd part: the chamber of commerce has been lobbying hard for years to gain a public research university, and will, I predict, eventually succeed—in a state of 600,000 people that already has two public research universities.

What is going on here?? My theory is that the chamber recognizes the economic development value of a public research university, and the city needs economic development. But we have tended not to confront that. We have been fighting them with logic about duplication, cost, and critical mass. We have been explaining that economic development is not our mission—they should go talk to the economic development agencies. We have tried to buy them off with the idea of a higher education center that would bring in programs from the research universities as needed.

In other words, our responses have been typical. If you think your situation is different, invite me over and I'll show you the same kind of dynamic at your place—responses focused almost entirely on your own needs, not those of the city or the state. The conversation usually goes like this: the public says, "We need X." We say, "We're not in the X business," "We're already giving you X," or "Then give us the money to do X." Our replies terminate the conversation, but the issue remains. We should be saying things like, "What do you mean by X? What could we do that would help? How does that rank with Y and Z, which you also need from us? Are you willing to give A in order to get X? What among our current activities is a lower priority with you that we might reduce or eliminate?" And so on. We need to extend and deepen the conversation, not end it.
Knowing the needs is pointless unless we are willing to become learning organizations that are engaged in constant change. To quote Robert Pirsig again, "That which does not change cannot live." Rather than resist change, why not rush out to meet it?

Here's an example of that kind of change. There are businesses, very successful ones, that employ teams whose sole function is to create three new products that are better than each existing product. In other words, parts of these businesses are paid to put other parts out of business. They do this in the name of continuous improvement--getting new products to a market that didn't even know it needed them until the products arrived. That's an illustration of another idea from Pirsig, who wrote this about the city of New York:

People, like everything else, work better in parallel than they do in series, and that is what happens in this free enterprise city. When things are organized societally in a bureaucratic series, any increase in complexity increases the probability of failure. But when they're organized in a free-enterprise parallel, an increase in complexity becomes an increase in diversity ... and thus an increase of the probability of success. It's this diversity and parallelism that make this city work.

This quote reinforces for me the need to think of our task as a movement, in Parker Palmer's terms. Are we too attached to our bureaucratic series, our organizational structures? Why do we need a campus? What if some "institutions" were instructional and research satellites collocated with businesses and social service agencies? Why do we organize education into semesters and credit hours? Could we measure instruction and learning by something other than hours in class? What if we had modules of varying lengths designed for learners with varying needs and those at different stages of life? Why do we have academic departments by discipline? What if we had departments of basic science, environment, and food? What if
we had departments of all who happen to share the same building or floor, and what if we occasionally encourages some of these people to move around?

Data and information could help break the logjam. How much student time is wasted covering things they’ve already mastered? How much student time is spent learning things they will have forgotten by the time they need them? Can students solve simulations of real-world problems? How many student drop-outs could have been prevented with more flexible or more responsive structures and content? How many adults would like to take college courses, and why don’t they?

In addition to improving every product or service, businesses are becoming preoccupied with what’s called "cycle time." My colleague, Russell Poulin, suggests that higher education needs to think about cycle time. How could we reconfigure the learning experience to ensure that people learn what they will need to know, in the least amount of time, and have fun doing it? When will we stop resorting to packing the curriculum tighter and tighter, and get serious about figuring out what’s really worth knowing, when, and what’s the most efficient way to impart it?

If we took the challenge to meet the public’s needs very seriously, letting it guide our deliberations as if we were creating an entirely new enterprise, we might do a great many things, and answer a great many questions, differently than we do now.

So we need a movement to improve higher education by improving its contributions to public benefit. We need to know what the public needs, and we need to change. Two common and true sayings about change are, "People don’t resist change--they resist being changed," and "People don’t mind change; what they mind is having the promise of change with no follow-through." The first suggests to me that we will never define, much less come to grips with, the public’s needs in the absence of massive faculty and staff participation. The second suggests that we dare not risk such an inquiry without commitment from both higher education and public leaders.

We can change the dynamic of our relationship with the public from negative to positive. We must. According to Senge’s fifth discipline, the secret is in the we-they relationship. All it takes is for one party to offer trust, regard, and listening-based communication to the other. Let’s do it. And then let’s embrace the changes we must make to share the knowledge that will improve society. These are the latitudes and longitudes of a better world for all of us.

Thank you for your attention and for the privilege of serving this association.
Acknowledgements

I wish to thank Terry Meyer, Nancy Blom, and Jennifer Presley for their assistance in preparing this presentation, and my parents for attending it.
ENDNOTES


7. Ibid., page 69.

8. Ibid., chapter 4.


15. Ibid., page 10.
16. Ibid., page 12.
17. Pirsig, op. cit., page 121.
18. Pirsig, op. cit., page 221.