

## The College Classroom of the Year 2010

Seminar for Presidents of Community and Junior Colleges  
from Japan and the United States  
East-West Center  
June 8, 1993

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It is a great pleasure for me to speak with you today. As you know, I spent six of the happiest, and certainly most influential, years of my life in Tokyo in the 1960s as an Assistant Professor of Political Science in the College of Law and Politics of Rikkyo University in Ikebukuro. My home was on the campus of the University. Three of my children (one of whom was born in Tokyo) attended Japanese kindergarten (Heiwa Yochien in Mejiro). My oldest daughter was for three years a student at Homei Shogakko of Japan Women's College, also located in Mejiro. My youngest son, now eight years old, daily attends Japanese Language School here in Honolulu at the Moiliili Community Center just a few blocks from where we are today.

I frequently go back to Japan, visit my old friends there, and try to keep up with the incredible developments in that magnificent country. In fact, my wife, youngest son, and I will be in Japan this August--hardly the best time to visit, I must admit--spending a few days in Tokyo before we go to a futures conference in Awaji-jima, near Kobe.

So you are looking at a person who deeply loves, respects, and is eager to continue to learn from Japan. Indeed, my interest in the future, and my participation in the invention of futures studies, was a direct consequence of certain experiences I had in Japan. If I had not lived in Japan, I would never have become a futurist, which, though that would have made no difference to the world, made all the difference in the world to me.

Before I begin addressing the subject of this conference, I need to say one more thing about myself. I have spent almost all of my life on a university campus. My mother and stepfather were university professors at a small liberal arts college in Florida. My mother taught in the Humanities Department, my stepfather in Geography. He was also the baseball coach. Our home was also on the campus of that university. Earlier, one of my great uncles had been a professor in the Science Department of the same university. I am more at home on a college campus than anywhere else on earth--so, I am at home wherever I am on earth when I am on a college campus. Academic discussions, and especially the discussion of academic politics, are my lifeblood. Relating with generation after generation of new students and old professors is my normal way of life. I love it. I want it to last forever.

But I know it will not last forever. Certainly not for myself, because I will not last forever. But, alas, the kind of college life and lifestyles I have known throughout all my life, and which my mother and step father knew before me,

and which my great uncle knew before that--this wonderful way of life will not last much longer for anyone, including you.

That is what I want us to think about today. I want us for the next few minutes to consider these questions:

- What will the classroom of the Year 2010 look like?
- Who will be in it?
- What will be done in it?
- Who will control what is done in it?

But before considering the future, let's consider briefly the present and the past.

First of all, why does the classroom of **1993** look like it does? I believe the answer to that (and thus also to the future of the classroom) is especially closely related to two things. One is the social purpose of Higher Education--the reason that societies establish educational institutions at all. The other reason the classroom of today looks like it does is because of the kind of technology which is available--or not available--for delivering higher education.

Now, of course, there are other reasons, but for today, I would like us to focus on those two points: what is the social purpose, the social function, of education, especially higher education, and what kinds of technology were, are, or might be available to facilitate such education?

Of course, I have not had the chance to visit your college campus, so I do not know what your campus, and its classrooms look like. But I do know that in the United States, generally speaking, the classroom of 1993 looks very much like the classroom of 1933. Indeed, it looks very much like the classroom of one hundred years ago--1893.

The classroom of 1993 looks somewhat like the classroom of 1833, but not as much. And it looks something like a few classrooms in, say, 1493, but not like most, and looks like an even fewer classrooms of, say, 493 BC, in which Plato might have been teaching.

Why these differences and similarities between the present and various pasts? Because, while the social purpose of education has changed considerably over the years, the technology available for delivering education has hardly changed at all from Plato's time to the recent past.

Actually that 's not true: purpose of education is unchanging: the purpose of education is always to help a person function effectively in the society in which she will live. What has changed is what is expected of people, and what is possible for people to do and to be. Society has changed. Society has changed greatly since Plato's time in 493 BC, since Columbus' time in 1493, and since Horace Mann invented the US public school system in the early 19th Century. Society--and especially the technology available for education--has also changed very greatly since 1933, when I was born, but education in the United States, in both purpose and delivery, has changed very, very little.

About ten years ago, a famous scholar of American education, John Goodlad, surveyed a wide sampling of American schools in every part of the United States, and in every kind of community--rich, poor, or middle class. He looked at the mission statements which boards of education promulgated. He read curriculum guides which departments of education mandated. He analyzed course curricula which individual teachers prepared. He, and his staff, visited thousands of classrooms and watched teachers actually teach. He observed what students actually did in school each day. He noted the physical conditions of the classroom, of the school building, and of the campus. He talked with teachers, students, and parents. And he came to one overwhelming conclusion.

Inspite of periodic public outcry about the sorry condition of American education, and countless commissions over the years which issued countless calls for curriculum change and innovation--and inspite the attempt by countless teachers to offer innovative courses--the classroom of the present, what is taught in the classroom, and how it is taught, has not changed significantly for over one hundred years. Goodlad said that anyone's grandmother would be completely familiar with what goes on, and how it goes, in almost any classroom anywhere in the US today. Inspite of a concern about a drift away from the educational "basics," Goodlad said, "'Back to Basics' is where we've always been."

John Goodlad's grandmother would be as content with the purpose and substance of education today as she would with the dingy architecture of the classroom, the musky smell of the books, and the raucous screech of chalk on blackboards. American schools (at all levels, and whether public or private) still function for the most part as though Americans were still living in Horace Mann's 19th Century world.

The publicly-funded school system, from K through graduate school, and not only in the US but also throughout the world, came into existence for one reason only--NOT to enable the solitary scholar to pursue truth; NOT to offer individuals a liberal (that is to say, a liberating) education, but ONLY to turn agricultural peasants into industrial workers or managers who could then invent and produce the goods and weapons needed to transform backward agricultural nations into powerful modern industrial nation-states.

Now that statement will not surprise any one of you who is from Japan. You do not suffer from the delusion of many American professors who do still imagine that they are pursuing truth and/or that they are helping their students develop free and independent minds. Except for a few years following the Meiji Restoration, when attempts were made first to follow French and then American models of education, from 1880 onward--even after the reforms following the Second World War--education at all levels in Japan has been strictly so that the recipients of such education could become good and obedient servants of the masters of the industrial state. And boy! Have you been good at it! So good are you in the primary and secondary levels that by the time a person gets to tertiary education she can take it easy--and usually does. Students of higher education (especially university students) for the first time since they were infants are given the freedom to be themselves and to blow off some steam before they bend their backs once again as workaholics forever laboring in the service of society.

Now of course, in Japan as in the US, there have been constant calls for reform, and certainly--at least compared during the same time--there have been more real changes in the form and content of Japanese education than there have been in American. But at the same time, I am more impressed with how little educational form and substance has changed in either your country or mine over the last one hundred years or so.

Even the recent push towards "internationalization" in Japanese society and education is merely a perpetually reoccurring theme, as is the predictable reaction and resistance to it in the name of preserving the essential spirit and traditions of Japan.

One of the Japanese poems I have always liked as an expression of what is enduring in Japanese society and education was quoted by Sugiura Jugo in 1887. Although the words may sound a bit old-fashioned today, the sentiment, I believe, remains:

Shikishima no  
                   Yamato gokoro o  
                           tane to shite  
 Yomeya hitobito  
                   kotokuni no fumi

Which might be translated as

With the spirit  
                   of old Japan  
                           as the seed  
 Read, people,  
                   words written in  
                           foreign countries.

Now, I said above and I will say again that the publicly-funded school system, from K through graduate school, not only in the US, but throughout the world, came into existence for one reason only--NOT to enable the solitary scholar to pursue truth; NOT to offer people a liberal (that is to say, liberating) education, but ONLY to turn agricultural peasants into industrial workers or managers who could then invent and produce the goods and weapons needed to transform a backward agricultural nation into a powerful modern industrial nation-state.

That transformation was completed, in the US generally, by the early 1960s, but unfortunately the purpose of education was not changed. There was a brief flirtation with appropriate educational reform in the late 60s and early 70s, but all those reforms were overwhelmed by the fundamentalism of the late 1970s and all of the 1980s which tried to return the US, in every aspect, back to the basics--in economics, politics, religion, the family--and to see that education did not change at all.

That wave of fundamentalism, especially the economic fundamentalism on the one hand and the educational fundamentalism on the other, greatly contributed to the multiple crises of the present some of which Pres. Clinton is pretending to address. I believe that Pres. Clinton may understand the severity

of the crisis upon us. I know that Vice President Albert Gore does understand--Gore has for many years been an active member of the World Future Society, and has talked frequently about the challenges of the future. But I find no convincing evidence that he, or any other American politician at any level, knows what to do about the crises in a politically successful way. Americans are simply intellectually and institutionally unprepared to do what needs to be done, in my judgment. And so the national crisis continues to mount.

Similarly, every administrator, and some faculty, are aware that a serious crisis is presently creeping through the American university system, including the University of Hawaii, and that it is likely to get much, much more acute as the powers that be seem content--even eager--to destroy what was once a rather decent, if traditional, system of higher education before a new and better system is in its place. But you can't really blame them. They are only going with the flow, and the flow is basically down the drain.

Conditions are serious for higher education almost everywhere in the US. In California, for example, once considered to be the most advanced portion of the most advanced nation on earth, more than one thousand faculty, many of them tenured, have been fired; twice as many part-time teachers have not been rehired; and 4000 classes have been cut from the curriculum. Eight of the twenty campuses in the California State University system did not admit any new students last year. 50,000 aspiring community college students were turned away.

I was recently interviewed for the Los Angeles Times by a reporter who wanted to know what I, as a futurist, had to say about California's economic doldrums. Didn't that mean that California was no longer on the cutting edge of American society, he asked?

Not at all, I said. California is still ahead of the rest of the US. We will all fairly soon experience what California is enjoying now--and more acutely. What is happening to higher education in California, elsewhere in the US, and now, belatedly and futuristically in Hawaii has also happened in other parts of the world, such as the un-United Kingdom and New Zealand, and elsewhere, perhaps even (or eventually) in Japan.

So now is a great time to look at the future of higher education in Japan, in Hawaii, throughout the US--indeed, everywhere in the world--and to ask what the classroom of 2010 might be like. Rather, I urge you all to use the present and emerging crisis as an opportunity, not a threat; a chance to say not what WILL the classroom of 2010 look like but:

What do we WANT the classroom of 2010 to look like?  
 Who do we WANT to be in it?  
 What SHOULD be done in it?  
 Who SHOULD control what is done in it?

This is the approach which I believe characterizes good futures research. It is NOT possible to "Predict the Future." "THE Future" canNOT be predicted. But it is possible to "Anticipate Alternative Futures," and then to "Envision" and try to "Invent Preferred Futures."

Over the past twenty years that I have researched, spoken and written about the future of education, including higher education, I have identified four or five major alternative futures which have had some generic sustainability in terms of their utility. Recently, a California futures consulting firm, called the Global Business Network (GBN), was asked by the National Education Association to prepare a report on the future of higher education in California.

The resulting three scenarios are very similar to those that I have been using over the past decade and half--almost startlingly so. Either we have independently come to the same conclusion about the future of education, or they have been reading my stuff without acknowledging it! Either way, I am reinforced in briefly sharing with you and commenting on their three alternative futures which are by no means restricted to California in their appropriateness.

The first scenario they call "**Software Landing**" which I take to be a twist on the "soft landing" which some people hope they will experience at the end of the downward swoop of California's economy.

I consider their "software landing" scenario to be the most likely of all possible futures for education at all levels. It is based on what advances in electronic communication technologies are doing to everything, everywhere in the world, and what they will continue to do to utterly subversive effect to all present institutions, barring a total, prolonged, and global economic and/or environmental collapse.

Several years ago, someone said that "The University of the Future will be a Network and not a Place." It is absolutely clear to me that this is almost certainly so. That is the best phrase I know of to express what I believe to be the most likely future of higher education everywhere in the world.

Indeed, for many people, this future is already here. Let me tell you something of my past and present experiences with the transforming power of the new communication technologies:

I was one of the first people in the United States to experience the liberating and connective power of electronic mail and electronic conferencing when I was asked to join the early experiments conducted by Murray Turoff over the EIES system in the mid 1970s. The computer which handled the conference was in New Jersey. Most, if not all, of the other persons on the conference were scattered around the mainland United States and Canada. I was surely the most remote geographically from everyone else. And I learned, truly for the first time, that geography, and time zones, no longer need be a handicap to acquiring and sharing knowledge. When the federal grant which funded the EIES experiment ran out, I tried to get support from the University here so I could stay on the computer conference. But no one understood what I wanted. They said that if I wanted to go to a conference, that I should apply for a travel grant, but that if I wanted something to do with computers that I should go to the University's Computing Center!

When I finally lost my account on EIES I felt the severe withdrawal pains that must be those of a deprived heroin addict. I needed my electronic fix badly!

Now, of course, I am able to have it, thanks to the Bitnet system. Among other things, Bitnet makes it possible for me to conduct my business as President of the World Futures Studies Federation here in Hawaii with no problems, even though the Secretary General of the Federation is located in Turku, Finland, and the members of the Executive Council are spread in 25 different countries--including Japan. I communicate daily with the Finnish Secretariat, and frequently with many of the other Council members, via Bitnet.

Once on Bitnet, I automatically have access to all other networks as well as to a rapidly growing number of journals which are published only in electronic form. Recently something called "Usenet University" has been formed where anyone can teach anything to whoever wants to learn, free of all costs. Some people have said that this should be called "Virtual University" in reference to the concept--and experience--of "Virtual Reality" which is becoming more and more widespread.

Several months ago, all of the electronic networks and users everywhere in the world were alerted to the fact that President Clinton had set up an email address in the White House, and that everyone in the world was encouraged to send him their ideas and concerns. Can you imagine what might happen if all the world's economic as well as political decision makers made themselves equally accessible? What would like to tell President Clinton? What would you like to be able to tell the President of General Motors? Why should you not be able to speak your mind, via email, to both of them, as well as to all others who hold the keys to the future so tightly in their hands?

Presently, through the University of Hawaii's CARL system, I can access the catalogues of the University of Hawaii Library, and of many other libraries in Hawaii and throughout North America. For many articles, and more and more books, I can read, and download if I want to, the information in them without having to "go" any place and "borrow" any particular book or journal. Indeed, now thousands of us can read the same book at the same time, and we never have to check it out thus depriving others of the chance to read it. More and more people will soon have the information now stored in the world's libraries available to them freely, or at least cheaply, wherever they want to retrieve it: at home, in their office, in their car, on the beach.

Similarly, I have taught classes over the PEACESAT network which links many of the Pacific Island and Pacific Rim communities together via satellite on audio, fax, and slow scan television. I remember that several years ago I taught a class over PEACESAT for law enforcement officers who were located on the far-flung Micronesian islands of Yap, Chuuk, Pohnpei, Saipan, Kosrae, and the Marshalls while I was here in Hawaii. At one point during the course, I had to go to Anchorage, Alaska, and then to Orlando, Florida. No problem! I could continue to teach the course via phone from my hotel rooms in Anchorage and Orlando while each of my students were in their individual ground stations separated from each other and from me by many thousands of miles.

In the 1970s I produced a lot of educational TV and radio shows here, as well as in Canada and the United Kingdom. But well-conceived and well-produced videos, along with good support material and/or persons (which certainly are a great improvement over the usual classroom situation) are nothing compared to what is now possible with hypertext, multi-media, and virtual reality, techniques which I am also endeavoring to master.

These new technologies offer not only sight and sound instead of, or in addition to, text, but they are interactive--the user can "talk back" to the "teacher" anytime she wants to. Indeed, it is possible for many people to participate in writing the text of a novel, or anything else. Most importantly, these technologies are exploratory (allowing the learner to follow any intellectual path she wants to follow) and thus non-linear. As a consequence, education is potentially becoming totally under control of the learner, and not of the teacher.

Clearly, the Classroom of 2010 will be everywhere and nowhere.

In 1967, reflecting on the impact of TV on formal education then (and before the days of ubiquitous educational child care and Pre K and K education), Marshall McLuhan said that the education of a first grade student was set back seven years when she began her first day of school.

How much more so will this be true in an interactive multimedia world--given the communication technologies of the present, the immediate future, and year 2010 and beyond!

The GBN report says this about the Software Landing scenario: "The role of teacher will change: from repository of expertise to guide to resources. Rather than playing the role of expert or know-it-all, the teacher will be a mediator between the student and resources that far exceed what any individual, even the most skilled or brilliant scholar, could know. Librarians are better models for this role than are research scientists." (p. 15).

I agree entirely with their point about librarians vs. teachers. I have been saying this also for years. We teachers for the most part are dead ducks. Librarians might well be broody hens. Of course not all teachers are alike. I think most community and junior college teachers are better in this respect than are most university teachers, and that vocational teachers are generally the best of all.

Still, I think the GBN statement is too conservative. My classes now, with each student on email and computer conferencing, are already almost completely out of my control. The students are teaching themselves and each other, and certainly they are teaching me. Moreover, they are doing so morning, noon, and night, every day of the week. The only reason they come to the classroom at all on the assigned times is because the University expects this of them--and, more importantly, the University expects it of me.

With multi-media, there is no need for any human mediator or gatekeeper at all. Education can finally be random access according to each learner's whim. "Random access" is another phrase I have been using for years. Finally the technology has caught up with my forecast. And the transformation of education is not far away.

No more introductory courses! No more sequences of courses! No more standardized tests of sequentially-acquired data! No more standardized evaluations! Rather, everyone moves at her own pace down pathways of her own choosing, through never-ending sequences of ever-opening doors...forever. How do you graduate--how can you be certified--who evaluates

whom--when there is so much more to explore? This is truly "continuing education" for eternity.

It is obvious that distance need no longer be a restraining factor in education. If you will let it, knowledge can and will now pour in to you from all over the world, wherever in the world you happen to be. You may not, in fact, know where anything comes from, and **you** certainly won't know it as **I** know it--and **you** probably won't know anything as **anybody else** knows it.

Questions about the lack of human touch (always raised by people who first hear of this scenario) are totally beside the point. Try using email and computer conferencing for a while--you will be more humanly in touch with more people than you ever have before! Surely it is more humane than the average mass classroom lecture experience--and definitely more humane than this boring lecture you are enduring from me today!!

Of course, it certainly is the case that this same technology can be used to regulate, control, and indeed surveil, and that people will try to use it that way. Moreover, the people who have easier access to the technology now have a great advantage over the poor--and the anti-technology snobs--who do not have access to it. Guaranteeing equal opportunity of access to the technology and software, and equal opportunity to add to and comment on the information in the network, should be items Number One and Two in the **Virtual University Bill of Rights**, I believe.

So far, I have been talking about the Software Scenario as though it were driven only by new technology. But even this scenario is made more likely by the present (and permanent) poverty of the United States, and of each of the 50 states. President Clinton has shown he is as eager as Reagan and Bush to save costs by firing people and replacing them with hardware/software learning kits. Schools, higher and lower, are among the greatest expenses of all states and nations. Why not get rid of the teachers and administrators, and give everyone the computers, software, modems, and printers they need in order to teach themselves?

I believe these same lessons are being learned in Japan for precisely the same reasons. I am familiar with the work being done at the National Institute for Multimedia Education in Chiba, under the direction of my old friend and fellow futurist Kato Hidetoshi. He of course is far from alone. All of Japanese high tech industry is moving in this same direction. At the same time, I believe that Japan will not necessarily recover from its economic problems quite as quickly as many people think, or hope, it will. Many Japanese have already returned to the virtues of thrift and efficiency with which, in my opinion, they are more comfortable. The brief, and none-too-glorious, days of conspicuous over-consumption in Japan are over, especially for education. Thus, both the economy and the technology converge in leading Japan, the US, and most of the rest of the world out of the Classroom of 1993 and into the virtual, networked, and no-place "classroom" of 2010.

Or at least that is one possibility. We are dealing with "alternative futures" here, and Software Landing is only one of several I want to suggest. The Global Business Network also put forward a second alternative future which it calls "Education Inc."

In "**Education Inc.**," all education (except maybe for the poorest, dumbest and most incorrigible persons), is taken over by big businesses.

In the US, there is already McDonald's University, Motorola University, and IBM University. In Japan, which does not hesitate to link private with public purpose, many of you already are heading colleges whose curriculum is basically determined by the labor, technical and marketing needs of one or a few corporations. For you, in this respect, the future is now, and you are merely once again harbingers of more sweeping changes yet to come for everyone everywhere.

The "Education Inc." scenario is also driven by the recent manifest triumph of economics over politics, as seen most clearly in the collapse of Communism. In addition, in the US especially, there is an incessant demand from all businesses for "better prepared" students. This scenario also seems quite likely given the great amount of training and retraining businesses already do simply because colleges and universities can't keep up with the dramatically and perpetually changing needs of businesses.

In the premier edition of a new magazine, WIRED, a futurist for many years associated with the Hudson Institute wrote:

"Education is the last great bastion of socialist economics. Public education is a redundant term: more than 90% of the services provided by educational institutions in the US are owned, operated, subsidized and/or regulated by government. Schools and colleges are as productive and innovative as were Soviet collective farms." (p. 71)

Elsewhere, Perelman says, "As the growing unemployment of our most schooled workers demonstrates, academic success is at best irrelevant and may even be harmful to working productively in the real world." "Think about it," he says. "In what other domain of work or social life is a premium placed on your ability to sit in rows of desks in a room, be talked at for fifty minutes, and then, when a bell rings, to walk down a hall to another room to repeat the same experience again and again during the day?" (p. 72)

What we need instead, says Perelman, is "hyperlearning" which can be achieved if we "form a coalition that demands the commercial privatization of the entire education sector." (104) "School's Out," he says. Let's sweep it into the rubbish can of history.

Given the fact that in Japan so many Junior Colleges are already privately owned, and so few are under the thumb of the nation, province, or municipality, perhaps you are in an especially good position to begin a worldwide movement towards "the commercial privatization of the entire education sector" which Perelman wants.

For me, I'm not so sure you should. As I said, I once considered "Education Inc." to be a very plausible scenario. But I must admit that it is not as likely now in the US as I once thought it was. Here's why.

Reaganomics not only destroyed the governing ability of the state, which it intended to do. Reaganomics also destroyed the corporation as a long-lived

entity, and, more importantly, with it killed any lingering sense and reality of loyalty and responsibility between the capitalist and the worker in the US.

Newspapers in Japan as well as the US daily rail against the irresponsible lazy American laborer. OK. But why do you suppose American workers, white and blue collar workers alike, are so irresponsible, if indeed they are? The sorry state of US education is often blamed. So are the allegedly debilitating consequences of ethnic and cultural diversity in the US.

These two may contribute something, but I think not much, to the alleged irresponsibility of American workers. I what about the even bigger contribution of the irresponsible and greedy capitalists?

I am here reminded of another important difference between Japan and the United States: namely, that the gap between the highest paid and the lowest paid individual in Japan is far, far less than it is in the US. Captains of most of the most spectacularly sinking ships of industry in the US managed to pay themselves obscenely grotesque salaries and commissions before they jumped into their golden lifeboats and made their way across the blackening ocean only to board the surviving industrial ships to loot and scuttle them as well. In Japan in 1991, the top executives of the major corporations were paid seventeen times more than the average worker in their firm. I think that gap is far too much. But in the US, the average top executive received 53 times more than the average worker. Tell me: who is being irresponsible to whom?

Consider also the millions of people who have been laid off from what they thought were lifetime jobs (recently even in Japan, as well as in the US) after ten, fifteen, twenty, thirty years, and given NOTHING--no pension, no retraining. Not even a handshake and thank you. Ask the people at Sears and IBM and GM and the sugar and pine workers in Hawaii what they think. Why should any worker do good work when the company--and the nation--you work for doesn't give a damn about you? If, as soon as the economy goes down, you are fired from your job, and if, as is from now on increasingly the case, there are no new secure jobs to rehire you, why bother to be diligent and hardworking? Diligence and hardwork earns you nothing. So eat, drink and be lazy, for tomorrow you may be fired.

This is clearly the wave of the future--no job security and no pension security for anyone, at any level, in any occupation anymore.

Now, if this is so, and I think it is, why should any corporation take on the job of educating anyone? That is making a long-range commitment that no one is now prepared to keep. No corporation will exist long enough to reap the benefits of educational expenditures, and so fewer and fewer of them are willing to make those expenditures. Private investment in education is declining just as (in the US) private investment in research, and private donations to philanthropy, have also almost vanished. In the US, and increasingly in Japan, businesses simply don't exist long enough to care about anything any more long range than the immediate profits of their stockholders and the perks and parachutes of their CEOs.

This is one among many reasons why I strongly urge Japanese decision makers to resist American political and business leaders who demand that the

Japanese economy come to mirror the US economy. Should you really abandon the soaring Spaceship Yamato and board the sunken Arizona?

Which leads me then to

**SCENARIO THREE which the GBN calls "The New Educational Order."**

This is GBN's version of the preferred future I have been flogging for many years as well. The election of Clinton, and especially of Gore, helped feed my enthusiasm for it as a **slight** possibility, although recent political realities in the US, and Japan, have almost extinguished my flickering flame of optimism.

Nonetheless, there is some mild reason to hope that the era of the glorification of individual greed is over (at least for a while), and that an era of growing social responsibility is emerging.

But beyond that, the growing awareness of the seriousness of environmental sustainability--and the fact that this was caused by foolish economic/industrial practices of the past and present--coupled with the recognition that regardless of who caused what or benefited from what in the past, we will all be stewing in the same Greenhouse juices in the future--this awareness is dawning in more and more consciousnesses everywhere.

I have lots of pictures and statements plastered on the door of my office at the University of Hawaii. Some one recently put on my door this statement:

"One hundred years from now? All new people."

I take that to be an expression of optimism. The good news is that the people who have brought us to the present since the second world war are rapidly shuffling off this mortal coil, leaving the blighted planet to other people who worry about very different things and who dream very different dreams from those of most of us here today. Survey research indicates that many of these "all new people" are desperately concerned about their future, and especially aware of and concerned about the real possibility of environmental collapse.

I believe that the focus of education in the future--and it had better be sooner rather than later--will be less on training workers for national economic growth, and much more on addressing the looming possibility of global environmental collapse.

I believe that Japan should become the world's leader in raising global environmental awareness. That should become Japan's new future vision--not continued economic growth; not renewed military conquest; but raising global environmental awareness. Indeed, I challenge each of you to do everything you can to see that your own institution assumes leadership in global environmental awareness, and that you do not allow your college, or your nation, to continue to contribute to the suffocation of life on our earth.

But I also hope that this awareness will be that humans are now and for the foreseeable future responsible for **governing evolution**. We need to realize that nature is dead and dying, and that it is we humans who killed her, largely through our recent agricultural and industrial practices. We also need to realize that there is no point in trying to raise Mother Nature from the dead. It

can't be done. What can and must be done--and what should be the main focus of education, especially higher education everywhere--is to envision, invent, experiment with and implement viable, sustainable, but wholly artificial worlds. And for this we need a New World Educational Order.

So, there you have three possible alternative futures for higher education. Needless to say, **other alternatives are possible**, and I am sure you have several on your minds which we might discuss later. For me, there are at least two other futures seriously worthy of your consideration. One might be called, "**Economic and/or Environmental Collapse**," which would basically see the end of any kind of higher education. It might come about as a consequence of a sustained and deepening global economic depression, along with our inability--or refusal--to address our looming environmental challenges appropriately or quickly enough.

Because of the very close coupling between our institutions of higher learning and the causes of possible economic and/or environmental collapse, it is highly likely that the outraged and traumatized survivors of a Greenhouse world will castigate and reject the ideas and institutions of industrialism which brought about the death of nature and the end of history. In such a world we college educators, our classrooms and our curricula, are the villains, and certainly not the heroes.

In complete contrast with this bleak future for higher education, let me end with the one which is probably the favorite of almost everyone in this room. I call it "**Inertia Forever!**" Another way to title it might be, "Don't worry. Be happy." Or "Just Keep on Trucking."

Let me give you some local examples of what I mean.

Anyone of you who has tried to walk around the University of Hawaii campus today can tell that we are experiencing the most massive and intensive building splurge we have ever had. Well, even more construction is under way or on the drawing boards. In addition, the longtime mayor of the City and County of Honolulu, the Honorable Frank Fasi, seems obsessively determined to build a railroad that will lumber between the Manoa campus and Leeward Community College. And if he builds it, they must come.

Former University of Hawaii President Fujio Matsuda's long-dreamt dream of A Hawaii State College system seems about to happen. If and when the State Legislature separates the Hilo Campus from Manoa, can the separation of the West Oahu campus be far behind? Maybe Hurricane Iniki was nature's way of telling Kauai Community College to go four year. And clearly Maui needs a bit of the rock also. You might call this "Higher Education as Urban Sprawl" and it has everything going for it except common sense.

But look, you might say: college enrollments are up. More and more Writing Intensive (and other Back to Basics) courses are added every year. Layer upon layer of bureaucracy, compliance, and control is being laid on daily.

This is also all happening worldwide. I am certain you are all experiencing something like it on your campuses.

So how reasonable is it for me to try to tell you to expect that any of this is likely to go away? Moreover, if the classroom of 1993 looks so much like the classroom of 1893, why should anyone expect the classroom of 2093--much less 2010--to look any different, you might ask.

OK. I'll tell you what I propose. Let's ask Chancellor Tsunoda to arrange for all of us to come back here seventeen years from now. We can then see who is right. Will the future be Software Landing, Education, Inc., A New World Education Order, Economic/Environmental Collapse, or Inertia Forever!? Or will it be something totally different--far beyond our present dreams or fears?

Let's synchronize our watches. I'll see you here--wherever here might be--on June 8, 2010.

In the meantime, have a nice future! Thank you.