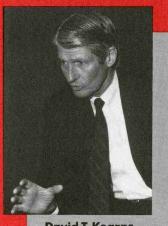
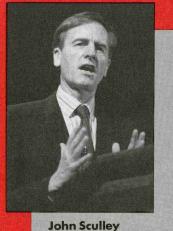
# Emerging Issues











**Education For A** Competitive Economy

North Carolina State University



At North Carolina State University we view the Emerging Issues Forum as a catalyst for change. It brings together the nation's most innovative thinkers with leaders in business, government, and education and focuses debate on crucial issues related to the economic health of our state and nation.

Education has been a recurring theme at every Forum since we first began in 1986. Business leaders, along with

others, have decried the failure of our schools to equip young people with the skills needed to meet the challenges of a global economy. Their message has been so insistent and the problems so monumental that we devoted the entire 1989 Forum to this one issue. We called it EDUCATION FOR A COMPETITIVE ECONOMY.

This Forum set the agenda and framed the debate for effective education reform, and I believe it shaped ideas and opinions so that action will be possible.

## **Bruce R. Poulton**Chancellor North Carolina State University

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## A Statement from the Chairman

Thomas Jefferson gave us the warning: "If a nation expects to be ignorant and free, it expects what never was and never will be."

And in February, seven outstanding individuals gave us the vision of a second American revolution, one that will save our schools and forge our nation's place in the new world economic order. Speaking at the 1989 Emerging Issues Forum on EDUCATION FOR A COMPETITIVE ECONOMY, they said we must radically restructure American education. Not fix. Not reform. Not adjust. But restructure, top to bottom, inside and out.

The call for revolution came not from wild-eyed radicals bent on destroying the cherished institutions of our country, but from steady, level-headed leaders of business, education, and government, leaders who recognize the challenges ahead and are committed to preparing our nation to meet them. The call came from: David Kearns, chairman and chief executive officer of Xerox Corporation; John Sculley, chairman, president, and chief executive officer of Apple Computer; Thomas H. Kean, governor of New Jersey; Iris Carl, schoolteacher and member of the National Board for Professional Teaching Standards; Frank Newman, president of the Education Commission of the States; Louis Harris, public opinion analyst; and Albert Shanker, president of the American Federation of Teachers.

The message they brought to us is urgent. We have no time to lose. Progress over the next 11 years will determine our fate for the 21st century. But the message is also exciting. We can build the future. We can create an educational structure that will give new and deeper meaning to the words "equal opportunity for all citizens." We can ensure the economic and political survival of our nation.

To do so requires the commitment of every citizen. Some, however, bear special responsibility. We must say...

## To our president:

Lead us. Embrace radical reform, inspire us with a framework for the future, and lead us on.

## To national leaders:

Engage in a national crusade for fundamental education restructuring.

Fund research and experimental programs.

Create a national database. Allow teachers to draw on their collective experiences to find the best techniques and materials for reaching students.

## "The message is urgent. We must radically restructure American education." James B. Hunt, Jr.

## To our state and local policy makers:

Deregulate. Move resources and decision-making authority out of the central offices and to the schools. Create a system of choice and diversity.

Encourage risk-taking.

Establish a corps of professional teachers. In the words of David Kearns, "Improve working conditions, pay more, pay by discipline, pay for performance." Eliminate the top-down mandates; free teachers to teach.

## To business leaders:

Become involved. Help define what needs to be done, marshal the resources needed, and work in partnership with the schools to accomplish change.

## To teachers and other school leaders:

Throw out the old models. See students as the real workers in school and learning as an active process.

Build flexibility into the school day and learning environment.

Use technology.

Incorporate the values of democracy and work into the everyday school environment.

Dare to be different. Use your creativity to find ways to reach students and involve them in learning.

## To the universities:

Set the example. Change those passive, hierarchical systems into dynamic, involving institutions that will encourage graduates to be daring and innovative.

Reach out. You've held yourselves aloof from public school reform when you should be in the middle of it, recruiting the best students for careers in teaching, working with teachers in the schools, bringing the best teachers into the universities as adjunct faculty, setting up laboratory schools for experimental programs.

Transfer the technology. Follow the extension service example. Make sure the research you do in learning theory and testing is put to use.

## To parents:

Involve yourself in your child's education. Demand that standards be high.

## To students:

Take responsibility for your own education. Learning is an active process.

## To everyone:

Bring minorities into the educational and economic mainstream of this country.
We must do so first because it is right and second, because if we fail, all restructuring will go for naught.

Jefferson and his contemporaries had no proven model for the nation they created. But they had a vision, a vision they believed in so deeply that they were willing to make great sacrifices to make that vision come true.



Like the
Founding
Fathers,
we have
no model,
no charted
course, no
map to follow in creating the
educational
system of
tomorrow.
We must
chart our

own course, break new ground. But we, too, have a vision. In it, young minds explore and challenge the boundaries of knowledge. Young adults enter the work force equipped with skills that will allow them to think creatively, to solve problems, to draw inferences, and to communicate with those around them.

This is the vision of an educated populace, of a nation prepared for the 21st century. Making a reality out of this vision will take risk. It may take sacrifice. It will certainly take hard work. We must accept these gladly and with courage. And we must do so now, for Thomas Jefferson was right.

"If a nation expects to be ignorant and free, it expects what never was and never will be."

Jim Hunt

## "The era of strong bands and deft bands is behind us. The future belongs to the educated."

## David T. Kearns



The free market principles of choice and competition hold the key for improving America's public schools, David T. Kearns, chairman

and chief executive officer of Xerox Corporation, told the opening session of the Emerging Issues Forum.

He called the current system a failed monopoly that only the resourceful and the wealthy can escape. "The people most in need of good schools are least able to find them," he said. "And if they could find them, they would not be free to choose them." But if schools had to compete for students who were free to attend any school, schools would be forced to respond to the demand for better education.

"The keystone is to create a 'public market,' a set of relationships in the public sector that mirrors as closely as possible the best in the private sector," he said. "And that means choice among schools, not just for students, but for teachers, to create voluntary communities of scholarship. The great secret of the free market, of choice and diversity, is that markets harness individual effort and enthusiasm on both sides of the equation. Both the buyer and the seller are invested in the process."

Kearns' speech, titled, WINNING THE BRAIN RACE, echoed strains from a book by the same name that he coauthored with Denis P. Doyle. In the book, Kearns and Doyle outline a sixpoint plan for school revitalization that includes:

- 1. A free-market system in which enrollment at every school would be open to any child in the district.
- 2. Universal year-round magnet schools.
- Greater freedom and accountability for teachers.
- 4. Higher academic standards and accountability for students and schools.
- Instilling the values of democracy.
- 6. Greater federal efforts to encourage innovation, teacher training, and educational research.

Kearns acknowledged that his proposals go beyond most measures for reform. "I feel we must organize and lead a national crusade, not for education reform alone, but for fundamental educational restructuring," he said. "We must do so because if we do not, our economy and our way of life will falter. And our children may in fact be the first generation of Americans not to live as well as their parents."

Although education concerns everyone, he said, business has a special interest because economic growth depends on well-educated workers. "The era of strong hands and deft hands is behind us," he said. "The future belongs to the educated." He attributed the economic revival of Japan to its work force. Ninety-six percent of Japanese young people graduate from high school with a diploma that equals an American college degree. By comparison, 40 percent of American youngsters fail to graduate from high school, and another 40 percent lack basic literacy skills.

"We know what works—incentives to perform, standards to meet, rewards when those standards are met," he said. "That is the power of capitalism. Alone among economic systems, capitalism—free markets—eliminates inappropriate, inefficient, or anachronistic forms. That, indeed, is the purpose of markets and the purpose of competition. Not to serve the owners of capital, not to serve the managers, but to serve the customer. It is this lesson the schools must absorb fully if they are to serve us in the future."

Because business leaders understand free-market principles, he said, they should show the way. This does not mean running the schools, but it does involve more than "adopt-a-school" programs. It means a full commitment to improving schools—visiting them, discovering what is going on in the community, and working in partnership with the schools to achieve common goals.

He cited teacher compensation as one area in which schools could profit from the business example. "As a business leader looking at the work force, I see an incredible anomaly," he said. "The best teacher is paid generally what the worst is. The disciplines in greatest abundance are paid what the most scarce are paid. Teaching will never be a true profession if everyone who teaches is paid simply on the basis of longevity. Doing time and doing well are generally not related....

"As a businessman, I know there is a way to get qualified people to work for me—pay, working conditions, a sense of professional efficacy, and most of all, a sense of accomplishment.... If you can't find math, or science, or French teachers, there may be a reason. Improve their working conditions. Pay them more. Pay by discipline. Pay for performance."

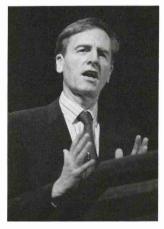
The goal of restructuring, he said, is a citizenry capable of learning throughout their lifetimes. He said business will train workers if schools will first educate them. "Business needs problem solvers, clear thinkers, workers who can troubleshoot, draw inferences, communicate with each other as well as their superiors and subordinates.... The worker of the future needs to know how to think and how to continue learning."

To acquire those skills, he said, they need a broad and deep curriculum. But the school's responsibility goes further than academics, he said. "Schools must also teach the values of democracy and work. They must stress the humble virtues of punctuality, reliability, neatness. They must also teach the more profound values of honesty, loyalty, and integrity." Nothing is value-free, he said. Any school that promotes youngsters regardless of their performance teaches that no one cares and thereby programs those students for failure.

The American public faces no more important issue than education, he said. "This is not some soft esoteric subject. In it lies the answer to budget problems, drug problems, trade problems. Our future—economic as well as political—depends as never before on the quality of our citizens' education."

## "And it is nothing short of revolution that is required in our public education system."

John Sculley



The challenges of the 21st century demand a public school system that will encourage learning, build thinking skills, and empower creativity,

John Sculley, chairman, president, and CEO of Apple Computer, Inc., told the Emerging Issues Forum.

It must emphasize the individual, he said, allowing each student to progress at his own pace using the learning methods that work best for him. Teachers will become coaches charged with creating the proper atmosphere for learning. His speech to the Forum called for a revolution in education. It is the only way, he said, to prepare the nation's work force for the Information Age with its rapid changes and swift flow of ideas and information.

"I believe that the real productivity gains in the Information Economy will come by empowering the individuals inside of those enterprises to be able to act," he said. "It's not to get them to work faster. The challenge is to give them the tools to be able to work better....

"In the Industrial Age, we trained people to memorize facts because we expected them to work in repetitive tasks, to have the same job day after day, and yet we know today that people are no longer cogs in a wheel. We know that people will have many careers during their lifetimes, that learning does not end at the boundaries of the educational institution, that learning becomes a lifelong career. The jobs of the information age are going to be information intensive, and therefore, they're going to require thinking skills....

"What we need to recognize is that we have to prepare future workers for these kinds of jobs, whether they are in high technology industries or whether they are in industries that traditionally had not depended upon technology but are suddenly discovering that technology may become the competitive edge."

Technology holds the key to the future of education as well as industry, he said, but education has failed to recognize the potential. The computer can stimulate curiosity and allow students to learn through mistakes without embarrassment. It can change the focus from teaching to the learning experience. Yet where the computer is used in schools today, he said, it is generally restricted to rote work.

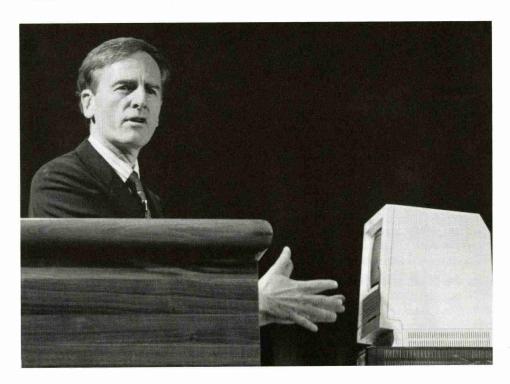
To show the potential, he turned his speech into a live demonstration of the computer as an educational tool. With a Macintosh computer, laser disk player, and two large video screens, he walked his audience through ways the computer can be used to do simulations, show comparisons, and enable collaborative projects. "The personal computer helps us to understand something in more than one way," he said. "It allows us to compare and contrast, to be able to link ideas with other ideas. And it's giving us different perspectives, changing our point of view, that makes it powerful."

Sculley placed his comments within the context of the changes that have taken place since the advent of the computer. The Industrial Revolution brought about a 100 percent increase in productivity, he said, and the microprocessor, a 1000 percent increase. Most of the increase came because the computer allowed institutions to work faster, he said. Now the challenge is to get people to work better. The education they receive, he said, must prepare them for this new world.

Creating a new education system will challenge all citizens, including the political leadership, he said. "It means giving us a vision, a framework for the future that will inspire us, much the way that President Kennedy did several decades ago when he inspired us to put a man on the moon."

Change means risk, he said, but not changing carries far greater risk. It jeopardizes the American middle class lifestyle and a world economy that depends on American consumption, he said.

"It's for these reasons that we need more than reform," he said. "Reform is something you do when you see something's not working very well. It's remedial action to fix something with the perspective looking back. Revolution, on the other hand, is something that you do with passion—that you are inspired to do because you have hope for the future, and it is nothing short of revolution that is required in our public education system."



## "If every minority and every at-risk kid caught up tomorrow...we would still have a national disaster in education." Albert Shanker



The American education system is based on a "fundamentally flawed analogy as to what a school is like," Albert Shanker, president of the

American Federation of Teachers, told the Emerging Issues Forum.

"We think of students as inanimate objects moving along an assembly line, being worked on by teachers," he said. "It makes no sense if you view the student as an active participant who has responsibility for his own education."

He suggested changing the analogy from the assembly line to an office. How much work would be accomplished if employees reported to a new boss for a different job in a different room every 40 minutes, and they were not allowed to talk to their co-workers, he asked. "Any person who manages an office or a business would say, 'You're not going to get any work out of these people.' That's what we do to students, though."

Improving public education demands the recognition that students are the workers in school and that each works at a different pace, he said. Teachers, he said, must be given the power and encouragement to find the best way to motivate them and supply them with the tools they need to do their job.

In his speech, he criticized those who say the answers to today's problems lie in the classical curriculum of yesterday's schools. Those schools failed, too, he said. The dropout rate of 40 years ago was close to 80 percent. It simply wasn't seen as a problem because, unlike today, low-skill jobs were plentiful and paid well. "It isn't that our schools are moving down," he said. "It's that we've either stood still or we've gotten better too slowly compared to the rest of the world." One by one, he tore apart traditional approaches to teaching:

The lecture. "I, as the teacher, have to figure out which group in this class I'm going to talk to, and I usually pick the middle group, which means that one-third of the group is bored to death, and another group doesn't know what I'm talking about, and half of the ones I am talking to are looking out the window having sexual fantasies."

Yet that is the way most classes are taught. What happens to the child who doesn't learn by listening, he asked. "Instead of the lecture, where is the videotape, the audio tape, the group discussion, the simulation game, the computer, the trip, the experience, the whole variety of different ways in which people can connect and learn. Where are those things built into the substance and structure of our education system? They're not there."

The oral quiz. When teachers aren't lecturing, Shanker said, they're calling on students. Although some students love to show off their knowledge, he said, the child who answers incorrectly is humiliated. When you get humiliated, you say, 'This is not my game. I'm not going to play.' ... And that's what we've got in school. We talk about the kids who drop out. We don't talk about the kids who have dropped out in their heads and are sitting there in school all day long, not getting a thing."

**The reward system.** School begins in September; final grades come out in June. Few adults will plan ahead 10 months, Shanker said, but that's what's expected of school children.

As an alternative vision of schooling, he described a secondary school in Cologne, Germany. There:

- Teachers working in teams of seven are given full authority to group their students and organize their day and year as they see fit.
- Instead of hiring substitute teachers, the team organizes itself to cover any absences.
- Teachers stay with the same group of students from fifth grade to graduation.
- Teachers hold each other accountable for performance.
- Students learn by working on problems in teams.

"Now, this is what's meant by teacher empowerment...," Shanker said. "The whole idea is that the people who are right there with the kids are going to have the best judgment, provided that they're given the flexibility to do the job...."

Students coming out of this school surpass all expectations. The population comes from the lower levels of Germany's tracked system, yet large numbers go on to college.

Shanker said his point was not to present the Cologne school as a model, but to encourage innovative thinking. "The fact is that it is possible to very fundamentally alter the structure of the relationship of kids and materials," he said.

He also encouraged American schools to examine ways to differentiate among teachers to alleviate problems of teacher shortage. They should also take advantage of technology. It can open new experiences to students, giving them more ways to learn. Just as important, he said, the technology exists today to create a national database of teaching techniques and materials.

For any changes to be made in the American system, he said, there must be incentives to experiment. Only the strong and courageous educator now dares to risk change and failure in a system that esteems the security of the status quo.

This risk-taking will be encouraged only when Americans grasp how serious the problems are, he said. He reeled off disturbing facts about the capabilities of young people—80 percent of high school graduates unable to write a simple job application letter, 88 percent incapable of arranging ordinary fractions according to size, and more.

Minorities and at-risk children need special help, he said, but they are not the problem. "If every minority and every at-risk kid caught up tomorrow, we would still have a national disaster in education," he said. "And until we realize that and stop comforting ourselves with the view that the problems are only some group over there, not us—until we look at what's out there, we will not be willing to take the risks or to make the changes."

## "Adding another wing to the schoolbouse won't belp us if the main building is structurally unsound."

## Gov. Thomas Kean



Improvements in public education over the past decade have been only a prelude to the real work ahead, New Jersey Governor Thomas

Kean said. What schools need, he said, is "fundamental, systemic change."

Kean led off a panel discussion on REDESIGNING AMERICA'S SCHOOLS during the Emerging Issues Forum. The second-term governor prefaced his remarks with his vision of the school of the future, where students are grouped by subject matter rather than age, advanced technology is "as commonplace as chalk," teachers serve as resources rather than lecturers, and flexibility is built into the structure. Many of those elements can be found in scattered locations, and the reason they have not spread "is not a matter of budgets or bureaucracies," he said. "For all the attention paid and improvements made to education over the past decade, we really haven't attempted any serious restructuring of our schools...

"We cannot mistake 'add ons' for 'changes in.' With our beefed up requirements and innovative programs, we offer the same basic curriculum, calendar, and structure to education that our grandparents grew up with. Schools still look and feel the same as they did 100 years ago... If we are to be truly effective in improving our schools, we need to change our whole approach to education. Adding another wing to the schoolhouse won't help us if the main building is structurally unsound."

The reforms that have already taken place have been necessary and good, he said, but they're only the beginning. His state, he said, is now working out a "core of common values" out of which to build a restructured school system. That core, he said, might include a belief in the future, in clear thinking and reasoning, in having a sense of perspective on society and history, and a belief in democracy and full participation by every citizen.

"When we really begin to redesign our education system, it must be with the full participation of everyone affected by the change—students, teachers, parents, administrators, higher education, and government at every level," he said. "Only then will everyone have a stake in the outcome. Only then will everyone have something to gain by its success."

Kean, however, did not play down the difficulties ahead. He called education "the most conservative sector of American society." Radical change in the schools means overcoming the inertia of the education community, he said.

"But I believe our response to the challenge of redesigning our schools will determine the course of our future as a nation," Kean said. "We have worked hard to get where we are, even if it's only to the beginning. Now is the time for us to begin."

## "With all of those mandates in place and massive infusions of dollars... there is still a desperate need for help."

Iris Carl



Teacher Iris
Carl
brought a
success
story to the
Emerging
Issues Forum. She
outlined a
series of innovations
in the Houston Independent
School Dis-

trict and reported: "Our students are more motivated, they're more directed, and we're proud to announce that our SAT scores have gone up, even as the number of students who are taking the SAT has also increased."

Carl participated in a panel discussion on REDESIGNING AMERICA'S SCHOOLS. Houston achieved success, she said, by eliminating top-down mandates and integrating teachers into the process of solving the schools' problems. She said the administration and board of education have provided teachers with the support and resources they need to improve the learning environment.

Houston's success has come despite the odds. The district is poor and overwhelmingly minority. Of the district's 190,000 students, more than half receive free or reduced price lunches, Carl said, and only 15 percent are white. Some 76,000 speak English as a second language, and among them are represented 96 different languages and dialects.

Elements of the program include:

- Small schools with more variety.
- Connections with business, industry, and community groups.
- Staff development.
- A laboratory operated by the University at Houston.
- · A new teacher-designed curriculum.

In many cases, she said, reforms merely add another burden on an already overburdened system. The schools continue to be assigned roles that once were the responsibility of families, churches, and other agencies and groups, she said, yet the structure of the school remains what it has been for 50 years. The result is standardization of ideas, principles, expectations, and practices, she said.

"We are operating schools that were prepared to teach the basic three Rs to the student body of the past, whose worst offenses were chewing gum and failing to stay in line," she said, "when today's problems are teenage pregnancy, crime, delinquency, controlled substance abuse."

But as the Houston schools show, there is hope. "We are fixing our schools, perhaps not as rapidly as we would wish," she said. "The sustained momentum of that spate of reports that came out following A Nation at Risk really provides an unprecedented opportunity for us to continue to work to improve education within view now of the light at the end of the tunnel."

## "We need a climate of achievement as opposed to a climate of bureaucracy." Frank Newman



School reform and restructuring will need a "flow of bright, well-educated, articulate change agents"—to become the nation's teachers,

Frank Newman, president, Education Commission of the States, said. It will be up to universities to produce them.

"But," he asked, "how can students, if they come out of 17 years of passive, hierarchical training, how can they be prepared to be the person that's going to step forward and take that child into an entirely new dimension?"

Universities as well as public schools must change, he told the Emerging Issues Forum during the panel discussion, REDESIGNING AMERICA'S SCHOOLS. "If universities really want people to be powerful and dynamic, effective, involving teachers," he said, "then they're going to have to reexamine how all of undergraduate and graduate education takes place in the university." They also must revitalize their schools of education, improve the flow of new ideas in education to the field, and recruit more minorities into college and into teaching, he said.

Universities should begin by examining the way their own classes are taught, Newman said. Higher education needs to become more involving of students, he said, and one way to aid the transformation is with an incentive system for teaching and improvement of undergraduate education. He suggested the research model as a way to improve teaching through all areas of study. With peer review competitive grants, he said, research became the way to fame, travel, and university perks. The same could be done for teaching, he said.

The schools of education also need shaking up, he said. A constant complaint is that the faculty are out of touch with the real problems facing schools. That could be solved with laboratory schools in urban areas, he said, "where we desperately need experience on the part of everyone who goes into teaching." The best elementary and secondary teachers might become adjunct faculty to add new perspectives and fresh ideas.



Similarly, he said, attention must be paid to transferring new knowledge about education and the learning process to school teachers. A study by the Education Commission of the States shows the least effective technology transfer goes on in the field of education. "I think we can master technology transfer in education just as well as we can do it in the science and engineering fields," he said.

Universities also need to focus on getting more and better teacher recruits. They should not fear higher standards, he said. "Every place where standards have been raised for teacher education, the applicant pool has also gone up."

One specific place they should look for prospects, he said, is in the minority communities. Even though minorities are catching up in achievement in grade school, he said, fewer are going to college and even fewer still into teaching. The percentage of minorities in teaching and in the student population are going in opposite directions, he said. Universities must start early to recruit promising minorities, and public schools can assist with such programs as the Houston magnet high school for teaching.

While some exciting programs are underway, Newman said, universities overall have failed to reach their potential as agents of change in education. They have assumed that they were good, and public schools were bad, he said.

He described a project by the Education Commission of the States. The Commission is working with officials in several states to restructure a set of schools, the school system, and the incentive system. It has insisted on university involvement in each state, he said, but not only have the universities been seen as ineffective, but two states refused to include the universities.

"In one case I sat down with the governor and said, 'You need the university involved.' He said, 'If we get the university involved, it'll delay this project at least two years.' I did not see that as an endorsement as to how the university was doing."

## "The president must be prepared to embrace the substance of radical reform and mean it."

## Louis Harris



Pollster Louis Harris issued a dire warning: The United States soon will be doomed to second-tier economic status unless it develops a labor force

trained to think creatively and brings minorities into full partnership in economic opportunity. The way to do it, he said, is with incentives that tie rewards for principals and teachers with the performance of students.

Harris' remarks came during the panel discussion, REDESIGNING AMERICA'S SCHOOLS, at the Emerging Issues Forum. Behind the urgency of his prediction lay several major developments in the global economy—the consolidation of the European Economic Community, the growing might of Japan and other Pacific Rim nations, and the rapid industrialization of the Third World.

A superior labor force, rather than technology or methodology, will be the key to successful competition in this new order, he said. The unacceptable alternatives are lower wages, and thus a lower standard of living, or the creation of a two-tiered economy that relegates segments of the population to poverty. Already the United States could be poised for a decline in income, he said, noting that real income has not risen in nearly a decade.

The only acceptable answer is "to educate, train, and utilize a labor force which the world has not seen before and which would be difficult for others to emulate and to compete with," Harris said. "This would be a labor force of people trained to think creatively for themselves and to have a proper frame of reference to know where to get information when they do not know answers. By training a labor force with this kind of capability, this country could also develop whole new industries and businesses which would be the envy of the rest of the world."

The United States also will face internal changes as a labor shortage develops in the 1990s, he predicted. Even more adult women will work, and the elderly will reenter the labor market in record numbers. But the greatest change will come in the country's racial composition.

More than one-third of the U.S. population and half of the school-age children will be non-white minorities by the year 2000, Harris said. With a labor shortage, these minorities—now disproportionately poor and poorly educated—will be crucial to the U.S. economy, he said.

"By the end of this next decade, this country will either have succeeded or failed on the pivotal issue of how to open the doors of opportunity to minority young people," he said. "If we succeed in learning how to make productive citizens out of our minorities, if we can find ways to make them creative, thinking workers, as must happen also with young whites, ... then surely we will have created a strongly competitive America that will be nothing less than the envy of the world.

"But if we fail, then all other bets are off, simply because we will then be mired into a system under which the baggage we will have to carry in unproductive human beings...will be too great a cost. That will condemn us to second-tier economic status as a nation, and mark that well."

For the country's education system, he said, this calls for radical change. Marginal improvements will not suffice, he said, for as U.S. schools have stood still, other nations have rolled ahead.

The key lies in performance incentives for educators, he said. "Unfortunately, the education system has been geared to design standards. The people on top tell those below precisely what to do, and then those below tell those below them in greater detail what to do....It just does not work, but everyone says, 'Well, all I did was what I was supposed to do, just as I was told.' Obviously real accountability is missing."

Performance standards are more successful, he said. They set objectives and allow educators to determine how to meet the objectives. But so far only minimum standards have been established. "The key, I say to you, does not lie in setting up minimum standards or moderate standards or even stringently high standards, but instead the key lies in setting up proper incentives in such a system where the principals and teachers are told the higher the performance of your students, the higher your own rewards will be. Thus, they're always striving to meet higher, not minimum standards, and then when they attain that standard they want to strive to achieve still higher standards."

Even the incentives won't result in "a nation that thinks for a living" so long as student performance is measured by the mastery of basic skills, he said. That's how inner-city children are now measured, and they're taught in mindnumbing rote exercises. "It's no surprise at all that they get bored and drop out," he said. "Sadly, the by-rote exercises they experience leave them little or no time to learn how to think for themselves. That is a foreign experience for them.... We are educating a whole generation of young people who have the basic skills who, I guarantee you, will be largely unemployable."

The country must take decisive action to reverse the trends or place its entire education and economic system in jeopardy, Harris said. He noted President Bush's campaign pledge to become the education president.

"This cannot be done with mirrors or a slick PR campaign, or simple cant," he said. "The President must be prepared to embrace the substance of radical reform and mean it. He must take the leadership for all to follow. He must realize that as a nation we must act soon and act with passion and dispatch. We must act now, not later. Now, before it's too late."

## Words Worth Remembering

"I think the admonition we must enforce is that the poor shall inherit good schools."

### Louis Harris

"We have a fundamentally flawed analogy as to what a school is like, and the analogy is essentially that teachers teach kids and the kids take in the learning.... And what is not seen basically is that all learning occurs as the result of one's work."

### Albert Shanker

"For all the attention paid and improvements made to education over the past decade, we really haven't attempted any serious restructuring of our schools"

### Gov. Thomas Kean

"We must organize and lead a national crusade, not for education reform alone, but for fundamental educational restructuring. We must do so because if we do not, our economy and our way of life will falter. And our children may in fact be the first generation of Americans not to live as well as their parents"

## David T. Kearns

"To go to the future means looking at systemic change. It means looking at world competitiveness, and it's looking at the issues of how do we build the critical reasoning skills of our young people."

## John Sculley

"If universities really want people to be powerful and dynamic, effective, involving teachers, then they're going to have to reexamine how all of undergraduate and graduate education takes place in the university."

## Frank Newman

"You've got to reward the people who succeed, who produce, and then have the courage to say to the others, 'Goodbye. You don't belong here.'"

### Louis Harris

"We are operating schools that were prepared to teach the basic three Rs and the student body of the past, whose worst offenses were chewing gum and failing to stay in line when today's problems are teenage pregnancy, crime, delinquency, controlled substance abuse."

## Iris Carl

"Where's the 'Now here, try this' in education? Instead of the lecture, where is the videotape, the audio tape, the group discussion, the simulation game, the computer, the trip, the experience, the whole variety of different ways in which people can connect and learn. Where are those things built into the substance and structure of our education system? They're not there"

## Albert Shanker

"We cannot mistake 'add ons' for 'changes in'. With our beefed up requirements and innovative programs, we offer the same basic curriculum, calendar and structure to education that our grandparents grew up with."

### Gov. Thomas Kean

"As a businessman, I know there is a way to get qualified people to work for me. It's pay, working conditions, a sense of professional efficacy, and most of all, a sense of accomplishment."

### David T. Kearns

"For our political leaders, it means giving us a vision, a framework for the future that will inspire us, much the way that President Kennedy did several decades ago when he inspired us to put a man on the moon. It wasn't important whether a man actually ended up on the moon. What was important was he focused the energies of the country toward that as being very important, and suddenly it shifted priorities throughout all sectors of our economy and society."

John Sculley

"Every place where standards have been raised for teacher education, the applicant pool has also gone up."

Frank Newman

"If we succeed in learning bow to make productive citizens out of our minorities... then surely we will have created a strongly competitive America that will be nothing less than the envy of the world. But if we fail, then all other bets are off..."

Louis Harris

"It isn't that our schools are moving down. It's that we've either stood still or we've gotten better too slowly compared to the rest of the world."

Albert Shanker

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Betty Owen Emerging Issues Forum Box 7505 North Carolina State University Raleigh, NC 27695-7505 Phone: 919/737-2850 "It isn't just what we teach. It's the learning environment we provide."

John Sculley

"What has been missing... is a clear destination. Education is not something that's nice to do to get back to what we had in the past, but it is inseparably linked to the deficit problem, to the trade imbalance problem, to the survival of our middle class lifestyle."

John Sculley

"Schools need to have the power to make decisions about what is going to be taught and free teachers to teach."

Iris Carl

"Teaching will never be a true profession if everyone who teaches is paid simply on the basis of longevity. Doing time and doing well are generally not related."

David T. Kearns

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