U.S. TRADE COMPETITIVENESS AND WORK FORCE EDUCATION AND TRAINING

HEARING

BEFORE THE

SUBCOMMITTEE ON TRADE

OF THE

COMMITTEE ON WAYS AND MEANS
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

SECOND SESSION

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U.S. TRADE COMPETITIVENESS AND WORK FORCE EDUCATION AND TRAINING

THURSDAY, JULY 25, 1996

HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
SUBCOMMITTEE ON TRADE,
Washington, DC.

The Subcommittee met, pursuant to notice, at 11:28 a.m., in room 1100, Longworth House Office Building, Hon. Philip M. Crane (Chairman of the Subcommittee) presiding.

[The advisory announcing the hearing follows:]

ADVISORY

FROM THE COMMITTEE ON WAYS AND MEANS

SUBCOMMITTEE ON TRADE

FOR IMMEDIATE RELEASE
July 10, 1996
No. TR-27

CONTACT: (202) 225-1721

Crane Announces Hearing on U.S. Trade Competitiveness and Workforce Education and Training

Congressman Philip M. Crane (R-IL), Chairman of the Subcommittee on Trade of the Committee on Ways and Means, today announced that the Subcommittee will hold a hearing on U.S. trade competitiveness and workforce education and training. **The hearing will take place on Thursday, July 25, 1996, in the main Committee hearing room, 1100 Longworth House Office Building, beginning at 11:00 a.m.**

BACKGROUND:

The Subcommittee is aware that increased international competition requires both large and small U.S. companies to position themselves in the international marketplace in order to succeed, which presents new challenges for firms and workers. Entering more forcefully into the global marketplace and improving America's export base will continue to exert competitive pressure on the workforce. The Subcommittee also recognizes the resiliency of the U.S. economy and workforce in responding to these competitive pressures. The hearing will allow witnesses from the Administration to outline education and training programs designed to improve the global trade competitiveness of the U.S. workforce. Witnesses from the private sector, research foundations, and academia will also provide testimony, including an evaluation of the success or failure of past initiatives and suggestions for improving current programs.

FOCUS OF THE HEARING:

The hearing will focus on ways in which the government, business, and industry are working to improve the competitiveness of the U.S. workforce through education and training initiatives.

DETAILS FOR SUBMISSIONS OF REQUESTS TO BE HEARD:

Requests to be heard at the hearing must be made by telephone to Traci Altman or Bradley Schreiber at (202) 225-1721 no later than the close of business, Tuesday, July 16, 1996. The telephone request should be followed by a formal written request to Phillip D. Moseley, Chief of Staff, Committee on Ways and Means, U.S. House of Representatives, 1102 Longworth House Office Building, Washington, D.C. 20515. The staff of the Subcommittee on Trade will notify by telephone those scheduled to appear as soon as possible after the filing deadline. Any questions concerning a scheduled appearance should be directed to the Subcommittee staff at (202) 225-6649.

In view of the limited time available to hear witnesses, the Subcommittee may not be able to accommodate all requests to be heard. Those persons and organizations not scheduled for an oral appearance are encouraged to submit written statements for the record of the hearing. All persons requesting to be heard, whether they are scheduled for oral testimony or not, will be notified as soon as possible after the filing deadline.

Witnesses scheduled to present oral testimony are required to summarize briefly their written statements in no more than five minutes. **THE FIVE-MINUTE RULE WILL BE STRICTLY ENFORCED. The full written statement of each witness will be included in the printed record.**

In order to assure the most productive use of the limited amount of time available to question witnesses, all witnesses scheduled to appear before the Subcommittee are required to submit 200 copies of their prepared statements for review by Members prior to the hearing. **Testimony should arrive at the Subcommittee on Trade office, room 1104 Longworth House Office Building, no later than 11:00 a.m. on Tuesday, July 23, 1996.** Failure to do so may result in the witness being denied the opportunity to testify in person.

WRITTEN STATEMENTS IN LIEU OF PERSONAL APPEARANCE:

Any person or organization wishing to submit a written statement for the printed record of the hearing should submit at least six (6) copies of their statement, with their address and date of hearing noted, by the close of business, Thursday, August 8, 1996, to Phillip D. Moseley, Chief of Staff, Committee on Ways and Means, U.S. House of Representatives, 1102 Longworth House Office Building, Washington, D.C. 20515. If those filing written statements wish to have their statements distributed to the press and interested public at the hearing, they may deliver 200 additional copies for this purpose to the Subcommittee on Trade office, room 1104 Longworth House Office Building, at least one hour before the hearing begins.

FORMATTING REQUIREMENTS:

Each statement presented for printing to the Committee by a witness, any written statement or exhibit submitted for the printed record or any written comments in response to a request for written comments must conform to the guidelines listed below. Any statement or exhibit not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All statements and any accompanying exhibits for printing must be typed in single space on legal-size paper and may not exceed a total of 10 pages including attachments.

2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.

3. A witness appearing at a public hearing, or submitting a statement for the record of a public hearing, or submitting written comments in response to a published request for comments by the Committee, must include on his statement or submission a list of all clients, persons, or organizations on whose behalf the witness appears.

4. A supplemental sheet must accompany each statement listing the name, full address, a telephone number where the witness or the designated representative may be reached and a topical outline or summary of the comments and recommendations in the full statement. This supplemental sheet will not be included in the printed record.

The above restrictions and limitations apply only to material being submitted for printing. Statements and exhibits or supplementary material submitted solely for distribution to the Members, the press and the public during the course of a public hearing may be submitted in other forms.

Note: All Committee advisories and news releases are now available on the World Wide Web at 'HTTP://WWW.HOUSE.GOV/WAYS_MEANS/' or over the Internet at 'GOPHER.HOUSE.GOV' under 'HOUSE COMMITTEE INFORMATION'.

*****

Chairman CRANE. Thank you for coming this morning to the Subcommittee's hearing on U.S. trade competitiveness and work force education and training.

I am impressed with the interest shown in this topic, and I am pleased to have been able to cooperate with my distinguished colleague from New York, Mr. Rangel, to make this hearing possible.

We have already been interrupted by votes thus far, and we could still have more, and so I would ask our witnesses to try and compress their opening remarks, and then any written statement will be made a part of the permanent record.

This hearing will focus on ways in which the government, business and industry can improve the competitiveness of the U.S. work force through education and training initiatives, especially for those preparing to enter the work force for the first time.

The United States is the most competitive nation in the world, and U.S. workers are the most highly skilled and innovative in the world. Business and industry have worked aggressively to ensure that public education responds to its needs, and also have established numerous educational programs to achieve this end.

Business and industry rely on the educational system to provide a pool of talented workers. As a result, the output of U.S. workers is higher than that of workers anywhere else in the world.

American firms scour the globe, developing and expanding overseas markets for our exports. Many foreign companies invest here, providing jobs for our workers. These are not new phenomena.

For decades the internationalization of foreign markets has forced U.S. companies to expand globally as advanced telecommunications and transportation make the world smaller and more interrelated.

The trend toward globalization also has increased competition in labor markets, both here and abroad. I have seen this with my own eyes. It has been my privilege to travel to nearly every continent on the globe.

Mainland China and the new democracies of Eastern Europe, such as Romania and Bulgaria, are the latest countries to emerge as players in the international marketplace.

As we open this hearing on global trade competitiveness and work force education and training, let us keep in mind two things: First, the entry of new countries into the global markets for capital labor is only an acceleration of a process which has been going on for years.

The United States has always responded quickly to become the primary player worldwide.

Second, while the need to be both competitive and innovative continues, I am confident the training provided by corporations tailored to workplace need, along with a responsive education system, will allow American workers to hold their lead as the most productive workers in the world.

And I would now like to recognize our distinguished Ranking Member, Mr. Rangel, for any statement he would like to make.

Mr. RANGEL. Thank you very much, Mr. Chairman.

I would hope that my written statement would be entered into the record.

Chairman CRANE. Without objection.

Mr. RANGEL. And, Mr. Chairman, I hope that today will be one of the most important days in my legislative and political life.

The new changes in the Congress have caused a lot of friction in the ability of Republicans and Democrats to work together. But, as relates to the Trade Subcommittee, there has been a longstanding tradition that, with respect to other nations, we stand as one, and that we have been bipartisan, notwithstanding our other differences in how to resolve problems in the best interests of our Nation.

And you have kept that tradition, and I am particularly glad to have your continued friendship and support in working together on trade issues.

Chairman CRANE. Thank you.

Mr. RANGEL. And especially for agreeing to have this hearing today. I could not think of anyone whom I would want more to be our first witness than Secretary Reich. In all of the conversations I have had, with all of the Cabinet officials, it seems as though there is one thing that you and I agree on—that having a job brings dignity, brings hope, brings productivity.

Having a job, or even the hope of knowing you can get a job, means you do not have time to do those things that are not only detrimental to your life, which may not be worth anything to you, but detrimental to society, and the people who are forced to live with you.

Detrimental to your government in terms of not being productive, detrimental to our ability to effectively compete against other countries that do not have the burden of millions of people locked up in cells, shooting each other, conceiving children, doing crime, doing violence, and continually causing our deficit to increase.

And the bottom line is, there is not one scintilla of evidence that any of this has been productive. It is bad business, it is bad politics, and for the first time that I can remember, it is not just an item on the private sector's agenda.

It is up front, which to me means that the education of the people in our great country is too important to leave up to the local school boards.

The reason I say, Mr. Chairman, that this is the beginning of a process is because the U.S. Chamber of Commerce next week will be giving a briefing on all of the educational projects that they have underway. I would want educators to come and see the innovative and creative ways they are making people productive.

And after that, I hope, you will find time yourself, or to send technicians, along with Secretary Riley, to an overall conference—not a hearing, not 5 minutes—with those of you who understand that to get a job you need the training, and to get the training you need education.

Soon we will be able to have mayors and Governors, and those running for public office, who will be just as proud of the number of people who have graduated and the number of universities they have supported, as they are unfortunately, of the number of people whom we are sending to jail, for lengths of time that are ridiculous, in the number of prisons that we are building.

And so, Mr. Chairman, this to me is the first day of a grand new project. When we talk about business having an even playingfield,

I want every U.S. business to have a fair advantage over everybody else.

I want our businesses to be able not only to compete, but to win. I want every foreign country to know that when they steal our intellectual property rights, when they steal our software, when they steal our movies, when they steal our pharmaceutical products, they are stealing our jobs, and that is not to be tolerated.

And so, I think this new partnership with the private section on work force education and training is the most patriotic thing I have ever done, and I am proud to have partners in the private sector, and proud to have such a distinguished public servant who has been saying this over and over, and I look forward to this being a very exciting, working relationship.

Thank you, Mr. Chairman.

[The opening statement follows:]

OPENING STATEMENT OF HON. CHARLES B. RANGEL

Mr. Chairman, thank you for calling this hearing on the importance of education and training to U.S. trade competitiveness.

Preparing our future and current work force to meet the demands of a rapidly changing and technologically advanced global economy is in our national interest—and should be a priority for our Nation.

Indeed, the public and private sectors must work together to ensure that America has an internationally competitive work force. I hope that today's hearing will advance efforts to develop a framework for such collaboration.

I am pleased Mr. Chairman that so many fine Americans, recognizing the importance of this topic, have chosen to deliver and/or submit testimony.

I am particularly pleased that our distinguished Secretary of Labor is with us today. Secretary Reich has labored long and hard in the economic vineyard for American youth and workers. His commitment and work in both academia and government have been exceptional. I look forward to his insights on increasing U.S. work force competitiveness as well as his ideas on effective public-private sector cooperation. I also welcome Assistant Secretary Longanecker and our other witnesses.

I am very proud of some of the private sector initiatives that we will learn more about today. The firms represented here are trailblazers and have invested millions of dollars in our youth and workers. These firms recognize that investments in education and training yield substantial returns.

I hope other American firms will follow the lead of those that invest in education and training. Businesses, particularly international firms, understand the skills required in the international marketplace and should naturally be involved in education.

There is broad agreement that Americans will live in an increasingly challenging and borderless world—a world so complex and advanced that only the best educated and best trained will succeed. Mr. Chairman, how prepared are we for this new era? How can we best assure that our workers have the skills that this new marketplace requires?

The experts tell me that there is a gap between what the schools are teaching and what the global market is demanding. While skills in math and science will continue to underpin our trade and technology competitiveness in the future, the United States ranks the lowest among industrial nations graduating students in math and science.

While international trade will surely be a cornerstone of U.S. economic growth, the National Geographic Society reports that Americans rank among the bottom third in geographic knowledge.

Mr. Chairman, 60 percent of all jobs by 2007 will require some postsecondary education. The National Alliance of Business reports that a 10-percent increase in the educational levels of a company's work force increases productivity by 8.6 percent.

In an era where Federal resources are shrinking and where raising taxes in our national interest is untenable, international trade may well be the best available option to generate jobs and growth.

I am concerned Mr. Chairman, about those that will not be able to compete in this brave new trade-driven global economy. I am concerned that the cost of doing nothing to enhance our human capital is too high.

There are over 1 million—mostly African-American—youth that are imprisoned for nonviolent crimes in the United States at an average life cost of between $600,000 and $1 million per prisoner. In 1991, public expenditures associated with the consequences of drug abuse and dependence cost American taxpayers about $70 billion. Crime cost Americans about $450 billion a year. These astronomical expenditures diminish productivity and represent investments in the wrong direction.

We cannot be competitive in the global marketplace if a large percentage of our work force is uneducated, in jail, or drug dependent. I hope that America will devise a holistic and serious approach to invest in her youth and workers who represent the only hope for a prosperous and peaceful future.

America's economic leadership in the 21st century indeed depends on the investments that we make today in education and training.

Mr. Chairman, I hope that today's hearing is the beginning of an ongoing dialog between the Trade Subcommittee, the administration, and the private sector on ways to improve continually the education and training of our work force so it can compete in the world marketplace. If we do not succeed in this area, our open trade policies will surely not be sustainable over the long run.

Thank you, Mr. Chairman, for your leadership on this issue and I look forward to working with you.

Chairman CRANE. Thank you, Mr. Rangel, and we have a number of very distinguished witnesses who will be testifying today, and number one of course is Secretary Reich.

STATEMENT OF HON. ROBERT B. REICH, SECRETARY, U.S. DEPARTMENT OF LABOR

Secretary REICH. Well, thank you very much, Mr. Chairman. In the interest of time, as you suggested, with your permission I will submit my formal testimony to you, and make just a couple of brief remarks, and then any questions that any members of the panel may have, I would be delighted to answer.

Again, Mr. Chairman and Congressman Rangel, and other Members of the Committee, let me congratulate you on having this hearing, because it seems to me that issues of American competitiveness in international trade cannot be separated from the quality of our work force. They are absolutely inseparable questions—inseparable issues.

What is an American economy? Is it our companies? No, because they are becoming multinational. In fact. global companies are the rule, rather than the exception these days.

Is it our money, our savings? No, because our savings are moving around the world, almost at the speed of an electronic impulse. Foreign savings are coming, our savings are going there.

Is it our machinery? No, because machinery can be, and is being replicated around the world.

So what is the essence of the American economy? What is it on, which our future standard of living uniquely depends? It is our people—their skills, their insights, their education, and their capacities to work productively together. That is the American economy.

The way in which, and the extent to which, we add value to this increasingly integrated global economy will determine our standard of living in the future. That is the basic principle upon which all else rests.

And Congressman Rangel, you put your finger, on the issue facing us with regard to welfare policy, social policy—all kinds of social problems we have in this country. There is no better social policy, antipoverty policy—there is no better policy that we could have in dealing with all our social problems than a decent job.

Now, what does that mean for all of us? It means that the private sector has a huge stake in a skilled work force.

I just came back 2 days ago, from the Midwest. I was in Ohio, and Minnesota, and several other places. What did I hear from employers there? Over and over again, the same lament: "I can't find the skilled people I need," they said.

"The major thing that is constraining growth and productivity in my business," they said, "is the lack of skilled people; I can't find them."

Now, when we look at the entire debate over growth that is occurring in this country, how fast can we grow without igniting inflation? Again, let us go back to basics.

If we have more skilled people, if we have more educated people, we can be more productive, and more productivity is the key to greater growth. Investments in our people in education, job skills and job training are the key investments the private sector or the public sector needs to make.

And the irony of the trip I just made to the Midwest, when I heard from business leaders that they cannot find skilled people, the irony is that I also met with a lot of people—blue-collar, poor—who said to me, "Yes, we have jobs, but we're having trouble getting ahead."

There are jobs now available, many more jobs than ever before. In fact, the unemployment rate in many of those States is now 2, 3, or 4 percent—terrific. "But," say these people who do not have the adequate education and skills, "we are having a hard time."

Technology is your friend if you have the right skills; technology is your enemy if you do not. The global economy is your friend if you have the right skills; it enhances your marketability. It may not be your friend if you do not.

Business and the public sector have a huge stake in an educated and skilled work force. When I say these things to business groups, I almost invariably find myself in front of people whose heads nod in agreement.

This is not a controversial issue, this is not a partisan issue, this is not a Democrat versus Republican issue, this is not a conservative versus liberal issue. We all understand this basic principle, but where we get into tugs of war is over how we do it.

Unfortunately, cooperation and good news are not the most exciting things to appear on the evening news. When the business community, when public policy makers, when government with community-based organizations, when we work together to make sure that our people are better skilled, that does not make for a lot of excitement, but it is going on.

People do not know about it, they do not hear about it; it is going on. The School-to-Work Apprenticeship Program started 2 years ago. We now have 150,000 businesses involved. We have almost a million young people in grades 11 and 12 who are learning skills, they are also learning their academics.

They are going on after grade 12 to get additional skills, even if they may not go on to college.

We are seeing businesses all over this country beginning to take more and more interest in community colleges, helping people get training at community colleges that fit what those businesses need,

and community colleges are the great unsung heroes of this transition that we are facing.

Businesses are stepping up to the plate. The latest estimate is that American business is spending $30 to $40 billion a year on training workers. But the question I always ask is, "Are you training the people who need the training the most? Who are you training; what are you training them for?"

The public sector is spending—the Federal Government—about $5 billion a year training people. Again, we are consolidating those training programs, providing one-stop training centers, so that when you get an unemployment check, and you want to get a new job, and you want to have access to training, it is all in one place—you do not have to wait in multiple lines.

We have a computerized job bank—America's Job Bank—on the Internet, right now—500,000 job listings. It was visited 6 million times last month alone. We are beginning to create a system in which people can get new jobs, get the training they need, but we are far from the kind of system we need.

I am proud of the progress we have made, and how much the business community, government, the labor community, and community-based organizations, have come together around these basic principles, but there is so much more to do.

Let me end with this note: Somebody said to me once, quite recently, "You know, this training, it works much better than a lot of people think it does, particularly when you know what jobs you are training for, but how about the poor? How about the really poor? How about these dropouts, these high school dropouts? Can you really train them? Aren't they just beyond reach?"

I told the person what I had seen around this country. In Detroit, Michigan, Project Focus Hope—teenage dropouts, learning to be numerically controlled machine tool operators, in great demand—learning and then getting those jobs.

Eighty-five percent of those dropouts—poor, minority—getting those jobs, and they are good jobs. They are not at the minimum wage, those are good jobs.

Or what I saw in the East Los Angeles Skills Center. I went into a large classroom where there were 40 young dropouts—many of them had been gang members—and they were learning about mobile technologies. They were learning to become automobile technicians—not garage mechanics.

They were learning about the computers that are now under the hoods of so many cars, and they were learning to diagnose and repair those computers. Eighty percent of them were getting jobs starting at $15 an hour. They were making something of themselves.

Do not tell me that we cannot train and educate even the poorest young people in our society for better jobs. There are opportunities out there. Employers say they cannot get the skilled people they need; let us create a better match between all of the people who need the training and the skills, and all of the employers who need the skilled people.

That is the goal: That will make us more competitive, it will enable us to grow without pushing on inflation; it will enable us to be more productive; it will generate more tax revenues; it will gen-

erate a more productive society; it will reduce the earnings gap between the high-paid and the low-paid, because the low-paid and the poor will have a future.

This is not rocket science. We are beginning to do it, but we need to focus on the amount of resources, the scale of doing it that is going to be required—both public sector and private sector. We are not there yet.

Let me not end my statements by creating a falsely optimistic sense of security—no. We have a very long way to go, but we know the answers. This is not something in which we do not know what to do.

We can do it, if we have the will to do it—the private sector, the public sector, union leaders, community-based organizations—we can do it if we have the will to do it.

Thank you.

[The prepared statement follows:]

TESTIMONY OF ROBERT B. REICH
SECRETARY OF LABOR

Mr. Chairman, Congressman Rangel, members of the subcommittee:

I am delighted to have the opportunity to present testimony today and I look forward to answering any questions you may have.

Let me commend you for holding this hearing, because I believe you are on to something here. You are making the right connections -- the right links.

For America to succeed in the 21st Century, our industries must succeed in the global marketplace.

For our industries to succeed, their workers must be highly productive.

And for workers to be highly productive, they must have the education and training necessary to keep them in tune with the onward march of technology.

As America moves further into this age of information and global competition, it becomes increasingly important that we make critical investments in our "human capital" -- that is, in the knowledge, education and skills of our workers.

Today, tomorrow and far into the future, a highly-skilled workforce is and will be our comparative advantage.

It's true on a national scale and it's true for individual companies, as well. One study has found companies that introduced formal employee training programs experienced a 19 percent larger rise in productivity than firms which did not train their workers. Two recent studies of 3,000 businesses showed that a ten percent increase in the average educational level of the workers paid off with productivity increases of between five and nine percent in the manufacturing sector, and six to 13 percent in the non-manufacturing sector.

The fact is, Mr. Chairman, training and education work. Don't just take my word for it. George David, the CEO of United Technologies -- which is spending millions of dollars to help employees get more education -- put it best: "It's in our interest to have an educated workforce."

I could give you volumes more from CEOs, economists, investors and academics about these payoffs, and how a better-trained, better educated workforce is so vitally important to the future of the nation's enterprises.

Last Sunday, *The New York Times* ran a lengthy article about the new, well-paying, high-skill jobs that are being created by this economy in great abundance. The article focused on the Minneapolis area, where the jobless rate is less than three percent and employers are reporting that they're having trouble finding enough workers who have the necessary skills to fill these good-paying jobs.

And Minneapolis, the article indicates, mirrors the national economy.

Which begs the question: How do we grow this economy in a non-inflationary way? It seems to me that raising the skill levels of workers -- and with it their productivity and the nation's standard of living and competitiveness -- is, and should be, a vital part of the equation.

Nowhere, however, has the impact of education, or lack of it, been felt more acutely than in the homes of America's working families.

Skills have always made a difference in income, but today that difference is enormous. Earnings for men without college degrees -- three out of four working men -- have fallen by 12 percent since 1979. And, over the same time period, the income gap between men with college degrees and those with high school diplomas has widened from 49 percent to 96 percent. For women, the disparity has gone from 44 percent to 84 percent.

One study, reported in the newspaper the other day, says that this gap may be levelling off. But whether it's 70 percent, 80 percent or 90 percent, it's a substantial difference. And other research indicates that the least-educated are unlikely to improve their skill levels over the course of their careers.

Americans whose skills are out of date, or out of sync with the economy, risk falling farther behind.

According to the Bureau of Labor Statistics, about half of the new jobs that will be generated over the next decade will require some post-high school education, and many will require advanced technological skills.

Left unchecked, the wide disparities in income and opportunity can undermine the coherence of our society. A society too sharply divided between winners and losers cannot win in the global competition of the 21st Century.

So what do we do about it?

Getting the economy moving again -- creating a framework for businesses and working families to succeed -- has been the first order of business in this administration. Under our watch, unemployment is down, interest rates are down, inflation is low, and the economy has generated 10 million new jobs.

But there's a second challenge, and that is restoring wage growth and economic security for the majority of working families, and making the American dream of opportunity for all a reality for all who are willing to work for it.

And central to the task of meeting that challenge is to help Americans get more education and build their skills. Doing so is important to working families. It's important to our industries. It's important to our future competitiveness.

That's why the President has proposed to make the 13th and 14th years of education as universal to all Americans as the first 12 are today. He would do that by giving families a tax credit of $1,500 for each of the first two years of full-time, post-secondary enrollment. The credit would also be available for students who study at least half-time, and it could be used for job training and re-training.

Or, families could get tax deductions of up to $10,000 a year to help them offset college tuition costs.

The President has also consistently favored the exclusion from taxable income of employer-provided educational assistance under Section 127 of the IRS Code. And he has called for a new small business tax credit for 10 percent of the amounts paid for employee education and training.

We're working to change our unemployment system into a re-employment system that will help dislocated workers get the training they need to move them into new and better jobs.

We have begun the process of working with the states to set up "One Stop Career Centers." Any job seeker can go to these centers and get information on where the jobs are, where the training is, and how to get it.

We've proposed to put more power into the hands of unemployed, dislocated workers by consolidating scores of federal job training programs and creating "skill grants" that empower workers to choose the training they feel they need.

In partnership with state and local governments, and the private sector, we're continuing to build School-to-Work opportunities throughout the country. Since its enactment two years ago, states report that more than a half-million high-school students have participated in School-to-Work programs in communities nationwide. Businesses are also becoming involved, with many students getting job experience with participating companies. This initiative is preparing young Americans for the jobs of the future.

School-to-Work, training vouchers or "skill-grants," and our efforts to help dislocated workers find new jobs -- all are important components of our strategy of building a highly-skilled workforce that will keep our nation prosperous in the new global economy.

These initiatives have received broad, bipartisan support in the past. The nation's business leaders have been supportive. And that's why it is so disheartening that the President's workforce development proposal has been attacked here in the Congress. The attacks from outside groups on School-to-Work and America's Job Bank have been distorted, misleading and outrageous. America's workers deserve better. America deserves better.

So we'll fight on -- because our economic competitiveness is at stake, because these initiatives work, and because they are right for the economic future of our country.

Inevitably, some workers, particularly those with lower-skills, will be displaced by trade. That is precisely why we should continue to fund programs such as Trade Adjustment Assistant (TAA) and NAFTA-TAA -- so that we can ensure that these workers, who are hit hardest by the effects of trade, have an opportunity to re-enter the workforce with enhanced skills. Further, we need to continue to support Title III of the Job Training Partnership Act, which serves dislocated workers who have been affected by other economic changes.

And we must continue to seek ways to use education, training and job-placement initiatives as a vehicle of hope for those who live in America's most impoverished areas -- places where jobs are scarce and the prospects for employment are diminished. We simply cannot expect to build a world-class workforce while so many are left behind.

On that point, let me commend Congressmen Rangel and Houghton for their work in reshaping the Targeted Jobs Tax Credit into the new Work Opportunity Tax Credit. The bills that have passed the House and Senate address many of my concerns and those of the Office of Inspector General, and I look forward to working with you further as they are taken up in conference.

There is one other element of our strategy, Mr. Chairman, which I believe is also vitally important to this challenge -- and that is encouraging the private sector to do more to upgrade the skills of their workers.

We know that government cannot possibly do what is needed to ensure that more than 100 million working Americans get the opportunity to learn more, to work smarter and to stay ahead of the technological curve. In fact, we are paring back the amount of resources that government devotes to this task.

So the private sector has to do more. Many companies are going the extra mile to help their workers upgrade their skills. And they are making money in the process.

At the President's conference on corporate citizenship here in Washington a couple of months ago, we heard the CEO's of several companies -- large and small -- outline their strategies for increasing worker education and training. We heard about on-site education centers offering basic math and reading courses to production workers. We heard about college tuition reimbursements and in-house training programs to which every worker must devote five percent of his or her work time. We heard about huge investments of company resources on training.

So, many companies are taking the ball and running with it. We ought to be encouraging others to follow their lead.

Mr. Chairman, there is no doubt that this nation has the resources to make its workforce the most productive on the planet. Doing so would make us a shoe-in to win the global economy of the 21st Century. The question is whether or not this nation's institutions will join together to make the necessary investments in the skills of our people.

Chairman CRANE. Thank you, Mr. Secretary.

Mr. Secretary, with regard to government training programs for our work force, are there any of those programs that you think no longer have validity? In other words, should be terminated?

Or do you have any thoughts on transferring those responsibilities over to the private sector? And, if so, could you elaborate a little more on how private sector initiatives might be helpful in creating and developing our work force in this country?

Secretary REICH. Mr. Chairman, there are several things that we have tried to do, and we are on the way to doing. One is to consolidate the myriad of Federal job training programs into one pool, and providing people with vouchers that they can cash in for the kind of training they need, when they need it, at community colleges or technical institutes.

And it is also providing those people with good, high quality information about which community college, which technical institute, is doing the best at placing people. So we create a market—a real market—in training.

Now, people need this.

The second thing that we are proposing, and have already begun to do, is enable people, through low-interest student loans, to get the kind of training they need—not just people who are going to a 4-year college, but people of almost any age.

The third thing we are proposing is to provide each family with a $10,000 a year tax deduction for education and job training. Now, if companies can deduct the cost of business meals and expenses, and all kinds of other things, at the very least we should allow American families to deduct the cost of education and job training, which is the most important kind of investment anybody can make.

Fourth, we are proposing—the President has proposed—a specific, refundable tax credit which will allow anybody in this country to afford—indeed, to make virtually free—2 years of community college, in terms of the average tuition of community college.

We think that everyone—and it ought to be the norm in this society—every single person in this society ought to have a 13th and 14th year of education, beyond 12 years, and that ought to be affordable.

In fact, literally, it ought to be a refundable tax credit, in terms of average tuition.

Now, there may be many other things that we could. The School-to-Work Program I talked about—every one of these initiatives involves the business community, involves the private sector.

We have, with your help, and with Congressman Rangel's help, reformed, and have a new reformed version of the targeted jobs tax credit, which I think is going to work even better than it does right now. Again, making sure that the business community has an incentive to hire people who are the most difficult to hire, and who are the poorest and most in need of jobs.

Again, I want to emphasize, every one of these initiatives relies upon the private sector, and also relies upon individuals to take initiative. These are not handouts; this is the way we have to go.

Chairman CRANE. Thank you, Mr. Secretary.

Mr. Rangel.

Mr. RANGEL. Thank you, Mr. Chairman.

Mr. Secretary, if it is true that America is really moving toward a crisis, I see this U.S. Congress and this Nation prepared politically to talk about tax cuts and not tax increases, and at the same time talk about balancing a budget. This being an election year, put me down for both.

Having said that, I would like for you to promise me that soon you will have a meeting with the Office of Management and Budget, and ask them how much is it costing the American people to put Federal funds, if we have got to balance the budget, into districts that have the highest dropout rates or the highest poverty rates, or the highest children born out of wedlock, or the highest number of people on drugs, or convicted, or in jail.

And you cannot measure the hopelessness that is involved in how kids know more about going to funerals than to graduations. But you can measure the lost productivity that all the economists talk about, when somebody is caged in a cell.

Now, I am against violations of human rights in Cuba, and violation of human rights in China, but it is my understanding we have got 1 million human beings locked up in little cells, at the height of their productive years. Eighty percent have not committed any violent crimes.

I am a former Federal prosecutor, so, it is OK with me. But somehow, if we find that the billions of dollars that we are putting into the poorest of communities are there to lock them up and at the same time were cutting welfare and other things that we find too expensive, where does a hat cutting lead us?

Don't Secretaries and OMB Directors talk to each other and say, "Hey, if we've got to cut taxes, we'd better cut expenses, and these poor communities are costing us too much." There must be a better way.

Secretary REICH. Congressman, let me give you some figures which dramatize the point that you are making, and ought to be of concern to every American. If you drop out of high school and you are a male, the chances that you are going to be in prison or on parole or on probation are approximately 34 percent.

That is, one-third of all young men who drop out of high school are going to be in prison, on parole or probation.

Now, the cost per year of somebody in prison—not even dealing with the productivity loss that you are mentioning, which is a huge potential loss for the society—the cost simply of having somebody in prison for 1 year is about $20,000 per year.

Mr. RANGEL. It is $60,000 for the detention home for juveniles in the city of New York, Reikers Island.

Secretary REICH. And let me give you one other statistic: If you graduate from a 4-year college, you are going to have an income, on the average, that increases the income gap between college and noncollege graduates about twice as much.

That is, in 1978, the college graduate was earning about 40 percent more than the noncollege; now the college graduate is earning about 78 percent more than the noncollege.

But society, on average has provided college graduates with about $25,000 in low-interest loans and grants, and the university you attended received additional sources and resources.

And that is good. But, if you are a dropout, on the average, you have no help from society with additional training or education.

Instead, society, is spending, for one-third of the male dropouts, at least, $25,000 a year, putting them up in a prison.

Now, that kind of mathematics makes very little sense for our society.

Mr. RANGEL. And it is growing. It is not stopping.

Secretary REICH. Next year in the 1997 budget, the President is seeking $270 million additional funding, focused on the high poverty, high crime census tracts, where more than 50 percent of the high school dropouts are unemployed.

We are seeking those funds for pilot projects, to show that if you get them jobs, if you get them training, if you work with the business community, you can reduce the crime rate—dramatically.

Mr. RANGEL. Well, I am telling you, you should be more optimistic, because this hearing is going to prove that the private sector recognizes this, they think it is a crisis, they think that more has to be done.

They do not want any more Federal bureaucracy or any more new programs; they want whatever they are doing to be recognized and to be coordinated with what we have.

I am confident that, not only in terms of reducing this enormous budget, but in allowing America to continue its leadership in world trade, the private sector is willing to do its part. More importantly, when we say that we are going to lose the low-skilled job, but in the long run we are going to have more jobs, higher paying jobs, for all of Americans, we can be confident that Americans will be well prepared for those jobs.

And every American, no matter what community they are in should be able to say. "You know, that could be me." And when every kid can believe that they will have access to the training to get that job, that is the America that made us so strong, and provided so much leadership for the rest of the world.

You have been a gem, Mr. Secretary, and believe me, this is the time to be optimistic. The private sector realizes not just equitable tax treatment, but what are we doing with their tax dollars to provide them with what they are paying for, and that is a decent professional work force.

And what we are giving or should be giving them—and I support—is a tax incentive for the billions of dollars they are spending in their way to assist in making a more productive society.

So, I am excited. I hope you can get together with OMB; I would like to work with you, because for those who do not care about people, they should be concerned about the taxes that we are paying, and the reductions in the deficit, and those other issues. It is all one.

You are a great guy, and thank you so much for leading off today.

Secretary REICH. Thank you, Congressman.

Chairman CRANE. Mr. Ramstad.

Mr. RAMSTAD. Thank you, Mr. Chairman.

And thank you, Mr. Secretary. I was appreciative of the fact that you visited my State last week. You were in the Twin Cities, Min-

neapolis and St. Paul, and in fact in Bloomington, the largest city in my district, and we certainly appreciated your visit.

I also appreciate the bipartisan pragmatism I am hearing on the panel here today. I think that it is healthy, and we need more of that, generally speaking.

I must say, and I do not want to subtract from that in any way, but I was struck by your written testimony—I actually read your written testimony, believe it or not—and you cited a New York Times article specifically about Minneapolis, the Twin Cities, saying that the situation—I am quoting now—"in Minneapolis mirrors the national economy."

I just have to, for the record, Mr. Secretary, clarify that the Twin Cities economy does not mirror the national economy. In fact, the growth rate for my district, and for the entire State, is about twice the 2.3 percent national growth rate that we are currently experiencing.

In addition, the unemployment rate, we are proud to say, is barely half of the national unemployment rate.

So, I do not believe our economy is a reflection of the national economy. We have excelled at a greater rate of growth, and with lower unemployment than the national economy.

A lot of our success can be attributed to the Minnesota work ethic, and to the successful education system in Minnesota that prepares students. We are always getting blue ribbon awards.

I think we have the highest per capita number of schools getting the Department of Education's Blue Ribbon School Award—a high school in my district just received it. The 1996 National Teacher of the Year is from Minnesota. We are very proud of our excellent education system.

I would just like to direct your attention, Mr. Secretary, to the same article in the New York Times, David Wyss, who is director of research at DRI/McGraw-Hill, was quoted as saying, "Our labor market is a primary constraint on growth right now."

And I think implicit in that statement is the problem in many States, many school districts across this Nation, high school graduates—and I am sure you will agree with me—are not leaving the school system with the knowledge, skills and abilities required to enter and compete in the job market—the high-tech, knowledge-based society in which we are operating today.

I like your emphasis on School-to-Work. Do you think that is our best option? You mentioned targeted jobs tax credit. I hope the administration is going to sign the next tax bill we send that includes the targeted jobs tax credit.

Is that the intention of the administration?

Secretary REICH. Yes, it is. In fact, the work opportunities tax credit, which is the modified version of the new targeted jobs tax credit, is an improvement, in my view, because it has employers certify in advance that a particular employee is qualified, which means that employers will actually go out and seek eligible people for the targeted jobs tax credit.

It also has a longer number of hours as a required mandate for eligibility. That is, in terms of how many hours an employer has to keep somebody at work before that employer is eligible for that tax credit.

Now, the School-to-Work Program is working, as I said, very effectively, and Congressman, I was so impressed in Minnesota. I visited several companies, including a company that was specializing in family friendly policies. The president of that company said to me something very interesting.

Mr. RAMSTAD. That was Ceridian?

Secretary REICH. That was Ceridian. Larry Pearlman was the president. He said to me, "You know, these kinds of family friendly policies, valuing employees as assets to be developed, rather than as costs to be cut, these policies are good for our bottom line, because it means that we can attract very talented people, and we can keep them, and we can make them more and more loyal."

And I talked to other employers in your State, who said to me, "The biggest problem we have—the biggest problem—is getting skilled employees, and keeping them."

Again, the constraint on growth, in Minnesota as elsewhere, right now, is not so much the tightness of the labor market, but it is the quality of the labor market.

Mr. RAMSTAD. I also hope that an idea that certainly my distinguished colleague from New York supports, and I think there is a broad bipartisan support for enterprise zones, is something else I think that is worth considering, as we look at this subject more broadly.

Would you agree with that?

Secretary REICH. Absolutely, and enterprise zones have been already quite successful. We are facing, in the job market, several different related challenges, and even though unemployment is very, very far down, and we have all of these new jobs, and as that New York Times article to which you referred, Congressman, pointed out, most of the net new jobs being created are very good jobs.

They are demanding technological skills, managerial and professional skills, but that is precisely my point. We have got to redouble our efforts—private sector and public sector—to make sure that people are qualified for all of these good jobs that are being created.

Mr. RAMSTAD. Well, just a final comment, Mr. Chairman.

And Mr. Secretary, again, thank you for appearing here today. I think a real litmus test of the importance of the targeted job tax credits will be, in terms of new jobs, in this area—in the Washington, DC, area. Dayton-Hudson's Target Co. is going to open nine new stores in the Washington, DC, area.

I am sure you had to drive past several Target Stores when you were in Minnesota, because there are so many of them. As much as any employer I am aware of, certainly more so than any in my state, Target relies on the targeted jobs tax credit, to employ the type of people, the audience that the School-to-Work Program reaches.

And so, hopefully we can get that restored and get a tax bill with the target jobs tax credit, because I think you are going to see an impact in this immediate area, as well as the rest of the country.

Thank you, Mr. Secretary.

Chairman CRANE. Mr. Coyne.

Mr. COYNE. Thank you, Mr. Chairman.

Mr. Secretary, welcome, and thank you for your testimony. My question has to do with trade policy, and whether or not you think we are adequately responding to displaced workers who find themselves jobless as a result of U.S. trade policies.

Secretary REICH. Congressman, I think we are certainly responding as well as we can, given the restraints on our resources. I believe that we do have a great challenge in this country, with people—particularly middle-aged people—who are losing jobs either because of trade displacement, technological displacement, because their companies are restructuring, or for whatever other reason.

We must make sure that they have every opportunity to get a new job that is as good as the job they left. Now, unfortunately the data shows—and this is not a new phenomenon, it has been going on for 15 to 18 years—that when somebody loses a job, for whatever cause, the next job they get is not likely to pay as well as the job they lost, and not likely to have the same level of benefits as the job they lost.

Now, I believe that it is to some extent a public responsibility to make sure that people have access to the job search assistance, job training, and job counseling they need. We have been, as I said, creating one-stop career centers, putting public resources to far better use than ever before.

But I must say that I also believe that there is a private sector responsibility here as well. If a company is laying off workers, downsizing, and the company is profitable, I think that company does have a responsibility to help its workers—those whom it is laying off—find new jobs and get well positioned.

Mr. COYNE. Is it your experience that industry is meeting its responsibility?

Secretary REICH. It is very difficult to tar all of American industry with the same broad brush. Some companies, as I mentioned before to the other Congressman, are treating their workers truly as assets, to be developed.

Not only are they upgrading their skills, and bringing them in as partners, in terms of gain sharing and partner sharing, but they are also providing, when they must downsize, all sorts of services enabling their employees to get new jobs.

But, at the same time, I have witnessed other companies, and I have talked to both the executives and the employees, those companies are not treating their workers as assets, they are treating them as costs, they are discarding them—particularly lower wage workers.

The high-wage workers—the top executives—are treated to "golden parachutes," often, but the low-wage workers being laid off are treated to lead balloons.

Mr. COYNE. Has your department been denied by Congress the resources to do the necessary training of people being laid off as a result of our trade policy?

Has Congress denied the resources to the department?

Secretary REICH. Congressman, between 1993 and 1994, we were successful in just about doubling the resources for displaced or dislocated workers, and that was extremely important, because not only were we facing all of the downsizings that I mentioned before, and still are, but we also have tremendous restructuring going on

in the health care sector, and we have military downsizing to top it off.

Now, our hope was that we could continue that trend in the 1995 and 1996 budgets, but that was not the case. We have held our own—that is, we are just about where we were in 1994—but there has been no net increase.

And that is because our requests have repeatedly been denied, and we have repeatedly received fewer resources than the President wanted for dislocated workers.

Mr. COYNE. Thank you very much.

Chairman CRANE. Mr. Payne.

Mr. PAYNE. Thank you very much, Mr. Chairman, and I want to thank you and Mr. Rangel for holding this hearing. I think this is very timely.

And Mr. Secretary, thank you very much for your testimony. I was very impressed by that, and learned a great deal from it.

You concluded your testimony by saying that we know the answers, we can do it if we simply have the will. It would be helpful to me if you could elaborate a little bit on that, in terms of more specifically from the public policy perspective.

Maybe just talk a little bit about what you see as the top two or three answers that we know, and what is it in terms of resources that needs to be done in order to make those happen?

Secretary REICH. Congressman, I am delighted. I have alluded to them, but let me summarize. Number one, for low-wage, low-income, particularly poor young people, the School-to-Work Apprenticeship System that we are building is having a dramatically positive result.

I think later on today you will hear from members of the private sector who are engaged in these kinds of programs in which, in grades 11 and 12 young people are exposed to both academic education and on-the-site job experience.

These programs take down that wall, that artificial wall, between academic education and vocational education. They keep academic education, but enable young people to see the relevance of what they are learning in the classroom to the real world of work.

And then they take those children, those young people, through the summers, often give them summer jobs—the private sector has to be actively involved—and then provide them 1 or 2 years beyond high school, where they can develop those skills, and perfect those skills, and develop an area of competence on which they can thereafter build.

Number two, I mentioned for dislocated workers one-stop career centers, in which unemployment insurance is integrated with job counseling, job search assistance, and also access to training.

We have built a computerized system on the Internet, which is kind of a help-wanted section of cyberspace—500,000 job listings on America's Job Bank.

Now, all of that is very helpful to dislocated workers. It makes it easier for people who have lost their jobs to get new jobs that are, hopefully, as good as the jobs they had before. There are resource constraints on both the School-to-Work Apprenticeship Program and also our one-stop career centers and America's Job Bank.

What else needs to be done? I alluded in my statement to several projects around the country that are preparing the most hard-hit young people—actually dropouts from high school—for technology jobs that are not just minimum-wage jobs, but really pay quite well.

Those programs work best when young people are being trained for jobs that exist, when the business community identifies the skills it actually needs, and when there are enough public and private resources brought to bear, so that young people can get the real, both on-the-job and also simulation, training they need.

In Detroit, Project Focus Hope is a tremendous success. In Los Angeles, the East Los Angeles Skill Center is among the best I have seen, but I could give you many other examples around the country.

Now, Congressman, if you get me started, I could talk for far longer than you would like me to talk, but when I say we have the answers, I do not mean to suggest to you that there are uniformly easy answers here.

There are no easy answers, but there are enough successes out there that we know where we should be investing, both publicly and privately.

Mr. PAYNE. Generally, as you spoke about what it is that we ought to do, you talked about the low-income, low-skilled sector, and you talked about dislocated workers.

In terms of those young people who are high school students, who likely would not go to college, but in order to be successful in this competitive, global environment in the future, need to have additional skills.

What role do you think the public sector has? And you spoke about community colleges, for instance, but how can the public sector do the kinds of things that it might best do, to assist in making sure that that segment of the population can be as prepared and as successful as possible?

Secretary REICH. Beyond the School-to-Work Apprenticeship Program, beyond the programs targeted to the most disadvantaged youth that I have already referred to, I believe it is very important that the norm in our society be that everyone has at least 14 years of education—not 12 but 14 years.

And the President has proposed a refundable tax credit equal to the average tuition at a community college, so that every young person can get at least 2 years of post high school education and training. I think that is very important, it is what we all know needs to be done.

Again, it is not a panacea; I do not want to suggest to you that any of these will be the answer for every individual in every case, but this is the direction we must go in, in my view.

Mr. PAYNE. I agree with everything you have said. Let me just conclude by saying, it seems to me that recently the United States was recognized as the most productive Nation in the world, and that—we do a lot of things right—as we look at how we compete with others around the world. I think we need to continue to focus on those things that have gotten us to where we are, as well as these things that we know we need to do to do an even better job.

I appreciate very much all that you have said here, and I would hope that I have an opportunity to work with you in the future, as we implement some of these important things.

Thank you.

Secretary REICH. Thank you, Congressman.

Chairman CRANE. Mr. Neal.

Mr. NEAL. Thank you, Mr. Chairman.

Welcome, Mr. Secretary. Just to follow up on what Mr. Payne was saying, once you scratch back the surface here, we are really talking about city problems, in large measure.

We are really talking about the problems that innercity children have today. There seems to be no appetite in this town, at this particular time, on any side of the aisle, for really addressing in a comprehensive manner the problems that many of these people have, day in and day out. As manufacturing jobs have left and as the economy has changed, the middle class base has been eroded.

We can talk about enterprise zones, and we can talk about special projects and programs, but we really do not do anything on a comprehensive basis, do we, Mr. Secretary?

Secretary REICH. Congressman, we do not have—if by "comprehensive" you are talking about large, national programs, that deal with the problem, as you put it, innercity young people, many of whom are dropping out of high school, no, we do not.

But I would go back to your initial premise. There are three separate problems in the labor force, as I see them now. First, those high school dropouts—how to keep them in school, how to give them the skills they need, how to give them every opportunity to succeed, and how to make their education a true education.

Second, the people who are losing their jobs. They may not be poor, they may be middle class, but when they lose their jobs they may suddenly become quite poor.

The third has to do with the problem of poverty among adults, a segment of the population that simply does not have the right skills, or the right education. Maybe they are living in the wrong place, they do not have the right contacts. They also need help into the job market.

Now, we are dealing in an incremental way with all of those problems, but incremental is probably not good enough. We are the most competitive nation in the world, we have a $7 trillion economy, we have unemployment down to 5.3 percent, we have cut the deficit by more than half, we have no inflation in sight. We can do more.

Mr. NEAL. Well, I appreciate your comments. My sense is that, while we are not prepared at this time comprehensively to deal with many of these urban problems, that before too much longer they are going to be before us, and we are going to have no choice.

Thank you, Mr. Secretary.

Chairman CRANE. And I want to thank you too, Mr. Secretary, and reassure you again that your entire written testimony will be made a part of the permanent record.

And with that, we thank you for your patience, and we will let you break for lunch.

Secretary REICH. OK, thank you. Thank you all.

Chairman CRANE. Next I would like to ask Hon. David Longanecker to come forward.

And, as I indicated earlier, if you can try and summarize your prepared testimony, any written testimony will be made a part of the permanent record.

STATEMENT OF DAVID A. LONGANECKER, ASSISTANT SECRETARY, POST-SECONDARY EDUCATION, U.S. DEPARTMENT OF EDUCATION

Mr. LONGANECKER. You bet, Mr. Chairman. I have submitted my testimony in the full text for the record, and I will just do the abbreviated comments here.

It is a particular pleasure to be here today, both because the Education Department does not often have the opportunity to appear before this Committee, and because the topic that you are discussing, the importance of education in contributing to the economic competitiveness of this country, is near and dear to Secretary Riley's heart, and is central to the department's reason for being.

Now, I am following Secretary Reich, and you should not feel too sorry for me. It is always a tough task to follow Secretary Reich—he's such an articulate and comprehensive presenter. But we have an important and contributing agenda at the Department of Education, so we are thrilled to be here.

Our mission is simple at the Department of Education: We exist to ensure access to educational opportunities and to promote excellence in our colleges and schools. That is it.

To sustain and enhance the United States economic competitiveness, the department, in partnership with the States and local governments, and with colleges and universities and schools, and businesses around this country, must succeed in our mission.

So, we are very pleased to have received your invitation to be here today, to talk about how integrally linked education and economic competitiveness are, and how our Federal programs promote this linkage.

The evidence is clear that education is not "a," it is "the" critical path to economic well being—for our individual citizens, and for our Nation. This is as true today, particularly with respect to postsecondary education, as at any time in our history.

Over the last 10 years, the number of high-skill jobs has grown by 32 percent, compared with 7 percent for low-skill jobs. Earnings have become even more skewed. Unemployment among young adults without a high school education in 1994 was 20 percent, whereas it was only 5 percent for those with a college degree. And while earnings for noncollege graduates actually declined over the last decade, the gap between college and noncollege educated increased greatly, as Secretary Reich has already mentioned to you.

It is virtually impossible for an individual to be competitive economically without some postsecondary education, and the implications of this for our country are obvious: We must be better educated to remain economically competitive in this knowledge-based world economy.

Despite this economic imperative, it is going to be increasingly difficult for us to achieve the higher levels of postsecondary edu-

cation that we will need. The demand for postsecondary education will increase greatly as we move into the 21st century. As the number of high school graduates increases substantially over the next decade, as we convince a larger share of those high school graduates that they need to go on to postsecondary education, and as an increasingly larger number of adults are convinced, as they should be, that they need to go back for life long continuing education.

But financial constraints on the Federal and State governments, and on families themselves, will make it increasingly difficult to provide the quality educational services to all who need and desire them.

Now, to respond to those challenges, this administration has made a commitment to enhancing our economic competitiveness in two major ways. First, by ensuring that all of our citizens have access to postsecondary education, and second, by promoting programs that help these students better understand the world in which we will be competing.

To accomplish this, we have pursued an aggressive agenda. We have proposed a substantial increase in the maximum Pell Grant Program for the most needy students. We have proposed substantial increases in college work-study, and a new presidential honors scholarship program.

We continue to promote the new direct student loan program, including the income contingent repayment program that allows students to pay back on the basis of what they can repay.

And, most recently of course, the President has announced the America's Hope Scholarship Program, the $1,500 tuition tax credit proposal that Secretary Reich discussed. We hope to essentially change the ethic college attendance in this country, making 14 years of education as common tomorrow as 12 years are today.

We like this, as a smart tax cut. We see it as a way for this country to invest in those people who are willing to invest in themselves and their children. And through our School-to-Work Program we are also promoting new ways of earning and learning, by developing intentional relationships between schools and businesses, and between high schools and colleges.

But being successful in this global economy is going to require more. It also requires an understanding of the world in which we live.

To contribute to this, we offer a range of interrelated activities. We support foreign language and area studies programs, international business programs, special initiatives to link America's higher education institutions with those in other countries in association with NAFTA and the European Union.

We are working hard to ensure that your investment in postsecondary education ensures that all the citizens in this country have the opportunity to benefit from a high skills economy, and to gain greater knowledge about the rest of the world in which we live.

We think that is a wise and a prudent investment, and we thank you for the opportunity to be before you today. I would be glad to answer any questions you might have.

[The prepared statement follows:]

Statement by
David A. Longanecker
Assistant Secretary for Postsecondary Education
on
U.S. Trade Competitiveness and Workforce Education and Training

Mr. Chairman and Members of the Committee:

I am pleased to appear before you to discuss an issue of critical importance to our nation's future -- the need to increase the international competitiveness of America's workforce to meet the challenges posed by the globalization of the economy. As you know, the mission of the U.S. Department of Education is to ensure access to educational opportunities and to promote excellence in our colleges and schools. The Department carries out its vital mission in partnership with State and local government, institutions of higher education and other postsecondary education institutions, lenders, guarantee agencies, and individual citizens. This partnership is carried out through the various programs that we administer to provide financial aid to students and to programs that educate Americans about the world in which they live.

INTRODUCTION

Education is critical to the economic well-being of individual citizens. Education is more important today for our country's economic well-being than at anytime in our history as a result of the increase in global competition. New technologies and new forms of organization in American industry have transformed the American workplace. In the last ten years the number of jobs in high-skill occupations has grown more than 32 percent, compared with 7 percent in low- skill occupations. For this reason education and acquired skills have become a much greater determinant of individual economic success. In 1994, the unemployment rate for 20 to 24 year olds who lacked a high school diploma was 20 percent. By comparison, the unemployment rate for 20 to 24 year olds with a high school diploma was 11 percent, and for those with an Associates or Bachelor's degree the unemployment rate was just over 5 percent. Earnings for men without college degrees have fallen by 12 percent since 1979. Over the same time period, the income gap between men with college degrees and those with high school diplomas has widened from 49 percent to 96 percent. For women, the income gap has gone from 44 percent to 84 percent.

As the number of individuals requiring education and training increases over the next decade, our national commitment to providing educational opportunities will be further challenged, given the increase in the number of students at all levels and the constraints on Federal and State budgets. The number of high school graduates is expected to increase by 20 percent, and the number of postsecondary students is expected to increase by 11 percent between 1992-93 and 2004-5. We must be prepared to ensure that the next generation of learners has the ability to acquire the skills that they will need to become part of the new economy.

Furthermore, we know that most of the workforce can expect to change jobs several times in their careers. The rapidly changing requirements of the economy and the increasing complexity of our society require us to rethink the kinds of academic and technical skills our workforce will need in the future, and the way we educate and prepare students to acquire these skills. Education and training must become a lifelong commitment, and opportunities for continuing education and training must be available to all Americans.

To respond to these challenges, the Administration has made a commitment to enhancing our economic competitiveness by ensuring that all Americans have access to postsecondary education and training; ensuring that America's workforce has the opportunity for lifelong education; strengthening programs that prepare Americans for a competitive marketplace; and increasing the level of international literacy among all Americans.

ENHANCING ECONOMIC COMPETITION THROUGH EDUCATION & TRAINING

A competitive economy requires that all individuals have access to the education and training that are necessary to enter a labor market that demands highly skilled labor. The Administration's continuing support for ensuring that all Americans have access to postsecondary education is evidenced by its increased support for student financial assistance and tax relief to encourage investment in education.

The Administration's fiscal year 1997 budget will make available more than $41 billion --

more funds than ever before available -- in total Federal assistance for our grant, loan, and work-study programs to help approximately 7 million students finance postsecondary education and training. According to the College Board, Federal student financial aid accounts for 70 percent of all financial aid available to individuals enrolled in postsecondary education. The Administration has:

- proposed increasing the Pell Grant maximum award -- the amount that the lowest-income postsecondary student can receive under this program -- from $2,300 in 1994-95 to $2,700 in 1997-98 and to $3,128 in 2002-2003.
- proposed increasing support for the Federal College Work-Study program so that one million students will be able to participate in this program by the year 2000. In addition to providing support to students as they pursue their postsecondary education, the Work-Study program offers work experiences that many find helpful in making the transition from school to work.
- requested $130 million for a new Presidential Honors Scholarship program that would provide $1,000 scholarships for the first year of postsecondary study to an estimated 128,500 high school seniors graduating in the top 5 percent of their classes in 1997. This program expands on and complements the effort of the Byrd Honors Scholarships to recognize and reward meritorious students.
- made it easier for individuals to repay their student loans by offering a wide range of repayment plans, including graduated, extended term, and, in the case of the Federal Direct Student Loan program, income-contingent repayment plans.

Building upon the Administration's strong support for student financial assistance, the President recently announced the "America's HOPE Scholarship" to encourage investment in higher education. The President's goal is to make 14 years of education -- including the first two years of college -- as common tomorrow as 12 years of schooling is today by providing a refundable tax credit of up to $1,500 for each of the first two years of full-time postsecondary enrollment. The proposed tax credit is intended to pay more than the average tuition and fees charged at a community college and make a significant down payment at more expensive postsecondary education institutions.

The President's proposed HOPE scholarships build upon his proposed tax deduction of up to $10,000 each year for postsecondary education and training and expanded use of penalty free withdrawals from Individual Retirement Accounts for educational expenses. The tax credit and deduction are specifically designed to assist middle income families who are struggling to put their children through college.

The students who benefit the most from these proposals are those whose incomes are too high to qualify for Pell Grants and other federal grants but whose incomes are not high enough to pay college tuitions without struggling. These proposals will provide $42.9 billion in tuition assistance over six years, and are fully paid for within the President's six-year plan to balance the Federal budget without reductions in any other education spending.

ENHANCING ECONOMIC COMPETITION BY BLENDING EDUCATION & WORK

A competitive economy requires that students have a different type of preparation -- one that blends rigorous, academic instruction with work-based experience. Through the Carl Perkins Vocational and Technical Education Act, the federal government currently provides $1 billion to provide students in high schools with the education and training necessary to achieve in the new workplace environment.

As a result of the technological changes that have swept industry, there are fewer and fewer entry level jobs that require only low level skills. Indeed, economic competitiveness demands that all workers have higher levels of knowledge and skill. To address the needs of the economy, the Administration proposed and Congress enacted -- with bipartisan support -- the School-to-Work Opportunities Act which provides Federal seed money to States and their partnerships to design the school-to-work system that makes the most sense for them. There is no single model for "School-to-Work". Instead, it builds on existing models and efforts such as career academies, youth apprenticeship, Tech Prep, and cooperative education. While these systems are different from State to State, the School-to-Work initiative will make the workplace an active learning environment. These systems will provide every American student with:

- Relevant Education, allowing students to explore different careers and see what skills

are required in their working environment;

- Skills, obtained from structured training and work-based learning experiences, including skills necessary for a particular career, as demonstrated in a working environment; and
- Valued Credentials, establishing industry-standard benchmarks and developing education and training standards which ensure that proper education is received for each career.

ENHANCING ECONOMIC COMPETITION THROUGH GLOBAL AWARENESS

A competitive economy requires that Americans be knowledgeable about the world in which they live. It also requires a cadre of professionals in education, government, and business trained in foreign languages and international studies who are engaged in enhancing our international economic standing and our long-range national security. Through a range of interrelated activities, the Department's international education programs, including two initiatives supported by the Fund for the Improvement of Postsecondary Education, address the Nation's need for expertise in foreign languages and world areas and for a more internationally literate citizenry. Although, individually, these programs are small in comparison to other Federal programs, taken together they provide an integrated, cohesive, and mutually supportive approach to preparing America's citizens for the country's leadership role in the international arena.

As economic and technological issues have become important components in national policy, we have broadened the focus of our foreign languages and international and area studies programs to include business and economics. Two programs meet the needs of individuals and businesses engaged in international commerce:

- the Centers for International Business Education and Research program prepares Americans for the international marketplace by training students, faculties, and business leaders to respond to the new global realities and by supporting research and teaching on issues that enhance American competitiveness; and
- the Business and International Education Program supports the internationalization of the business curriculum and promotes linkages between academic institutions and the American business community.

The Fund for the Improvement of Postsecondary Education is currently supporting two important new initiatives, one in support of the North American Free Trade Agreement (NAFTA) and one with the European Union (EU). The North American Mobility in Higher Education program is jointly funded by the U.S., Canada, and Mexico to support trilateral institutional cooperation and student exchange among the three NAFTA partners in fields such as business, environmental technology, agribusiness, architecture, engineering, marine policy, and law. A similar program of institutional collaboration and student exchange between the U.S. and the countries of the EU seeks new and more effective ways to prepare Americans for participation in the trans-Atlantic community.

CONCLUSION

The challenges of the competitive new global marketplace are immense, and underscore the importance of a renewed partnership between the American people and their government. This Administration is committed to ensuring that opportunities exist for all Americans to acquire the education and training to meet these challenges effectively. It is the responsibility of each individual, however, to avail himself or herself of these opportunities, and to make a lifetime commitment to developing and sustaining the knowledge and skills necessary to secure a productive place in the new global economy. We welcome this challenge, confident in our ability to sustain our leadership in the global marketplace and to thereby enable all Americans to participate in the "American dream."

Chairman CRANE. Thank you, Mr. Longanecker.

I am a former history professor, and I have reflected on the input I have received about the escalating costs of education since my teaching days.

But one of the things that has concerned me is, we were required to teach 15 credit hours a year, and now I have been told that some professors are teaching only 3, they are not even preparing their exams—that is done by assistants—they are not grading their papers—that is done by assistants—and with a pay scale that is just beyond sight, compared to what we were making back in the early sixties.

I am wondering, since the college tuition costs have more than doubled since 1980, what would you recommend we might do to try and contain some of those costs?

Putting professors back to work, it seems to me, is one, because it was not just the credit hours that we taught; there were counseling hours that had to be made available to students as well, and my understanding is that there are not even counseling hours, sometimes, required on the part of these professors, and this is at State universities.

I taught at Bradley University, which is a private school, but have you any thoughts on that?

Mr. LONGANECKER. Well, I think this is an interesting and important area for the Federal Government, but we have to be very careful that we keep in mind our Federal role. We are a partner here, and the primary responsibility for establishing the cost or the price of higher education is generally a responsibility of the states and the governing boards of those institutions.

And while it is, a very significant Federal concern, it is not necessarily a Federal responsibility. On the other hand, we put about $11 billion in Federal funds to support about $40 billion in student financial assistance a year, and we provide an additional $1 billion in direct institutional support.

So, we have a pretty strong vested interest in what you are talking about, and that is a fairly substantial commitment.

You know, most of the studies show that faculty are still working very hard and very long hours, they are just working on different things than the instructional load that they used to have.

Secretary Reich mentioned the community colleges. By and large, the community colleges, and many of the state colleges, still have pretty substantial teaching loads for their faculty.

It is those institutions that are research universities, or that are hoping to become substantial research universities, that have substantially changed the mix of their faculty activities, and I think you have touched on an issue that many state legislatures are also looking at.

That is, not whether the faculty are productive, but whether they are productive in the activities that the citizens had intended them to be.

I do not have an answer for you on how we come back to a rationality, in part because we have got a serious issue—I mean, we have a very strong system of higher education in this country—some would say the strongest in the world. We also have the most

accessible system; we also are getting an increasingly expensive system.

By and large, higher education is still a pretty good deal. The average baccalaureate degree in this country at a public institution, tuitionwise, would cost about $12,000 over the life of that education, and that is a pretty good deal. That is a heck of a good investment, compared to most other things.

So it is a mixed story. We need to be concerned about it, we need to make sure our Federal policies do not contribute, unintentionally, to the escalation of costs. That is probably our strongest role.

Chairman CRANE. Thank you.

Mr. Rangel.

Mr. RANGEL. Thank you, Mr. Chairman.

Thank you for being with us, Mr. Secretary.

Mr. LONGANECKER. It is good to be here.

Mr. RANGEL. I gather from your testimony, and certainly my friendship in working with Secretary Riley, that you would consider education in America to be a very serious issue, that we should be seeking ways to improve the overall quality of that education as we move into a high-tech era.

Mr. LONGANECKER. Very much so, and in my specific area, postsecondary education. I mean, you can see that in our elementary and secondary initiatives—Goals 2000, School-to-Work—those initiatives.

Mr. RANGEL. Now, having said that, our businesspeople are sharing with us what they think, it is a pretty serious thing, if they are going to maintain the high level of competitiveness they have.

Mr. LONGANECKER. Absolutely.

Mr. RANGEL. And then, of course, when you hear Secretary Reich talk about the relationship between those dropping out of schools, and not having jobs, and the tremendous social problems that that creates, and the hundreds of billions of dollars that are involved in not stopping it but containing it, I cannot think of anything that could be described more as a Federal issue than this.

You would agree?

Mr. LONGANECKER. Well, yes, but it is one that we clearly do share with the state and local governments, in part because of the Constitution, but also simply because our investment, although it is fairly substantial, is still a modest portion of the overall investment in education.

So we have to find a way to partnership effectively—I would suggest more effectively than we have in the past. Those Federal dollars, instead of being the tail, ought to be wagging the dog now.

Mr. RANGEL. OK, now, if I understand you correctly, Mr. Secretary, you are saying that, while it is a national issue and a Federal crisis, and could involve our ability to maintain international leadership, that historically and constitutionally we really do not give much money to it, and we have to be in partnership.

And if I was to exaggerate, I would say that this national crisis basically will be resolved by local school boards, with contributions from us.

Mr. LONGANECKER. Well, that is the way the system certainly works at the elementary and secondary level.

Mr. RANGEL. That is why I am here. I am not prepared to allow my country to go down the tube because we have said in this national crisis, that we are restricted constitutionally and budgetarily so that we cannot do anything.

So, it seems to me that if the businesspeople are making a plea, if you know that under this system, and we are the Federal Government, we are saying that while we are making these contributions, and providing incentives, we accept the fact that we are giving so little and that we are restricted by the Constitution.

That in certain parts of this great country we cannot do anything to improve the school buildings that are just falling apart, the dedicated teachers who have forty or fifty students there, the fact that all moneys being put in searching students, that some of the kids cannot bring home books to study with—there are no supplies—that on this Federal problem we are restricted, and it has to be dealt with by our partners at other levels of government.

Are we saying that, Mr. Secretary?

Mr. LONGANECKER. I do not think we are quite saying that, because I think——

Mr. RANGEL. What are we saying then, what comes as close as that, that you believe is true?

Mr. LONGANECKER. I think we need to have a really smart investment of our public funds. That is why we like the Goals 2000; and the School-to-Work Program will fundamentally reform secondary education in this country. Our postsecondary initiatives——

Mr. RANGEL. Mr. Secretary, I do not want to talk about reform which is patchy. There are some people in this Congress who would say that we do not need a Department of Education.

Mr. LONGANECKER. We have heard that.

Mr. RANGEL. OK. Now, you have some idea of the type of Congressional district I represent, right?

Mr. LONGANECKER. Yes.

Mr. RANGEL. If that thought prevailed, and tomorrow we had no Department of Education, could you give me the impact that it would have on the school system in my Congressional district?

Mr. LONGANECKER. Your district would be substantially impacted, because while our role is fairly modest overall in this country, in disadvantaged communities the Federal role is much more substantial, because Federal funds are targeted to those students who most need them, both in elementary and secondary and postsecondary education.

Most of the students in postsecondary education in your district would probably not be able to financially afford higher education, without the Federal Pell grant program.

Mr. RANGEL. Now, how would my district effectively compete with other districts in the United States, if we now are the beneficiaries of this limited, but certainly important, contribution, and we are not producing anybody who can even get into the job market effectively, or there few compared to other communities.

It is really hard to see how much more pain we could take, if your outfit were not in business. But, having said that you have these restrictions, constitutionally and legally, with these partnerships, it would seem to me that, without increasing the Federal bureaucracy, you could at least be providing the leadership to in-

crease the quality of education of all Americans, from border to border and the possessions.

And that you should be working with the private sector saying, I do not have any money, I do not have any constitutional authority, but I am an American, and I want to get a better work force.

I do not know how long I am going to be around here, but I am not going to accept the fact that, if Presidents want people to go to the moon, or my country is going to lose out with foreign countries, that you are going to send me back to my local school board.

I have been down here for a quarter of a century, and nobody has said more honestly and convincingly what you have said, and I dare not try that back home.

"Mr. Rangel, why are our children failing, why are our classes so large, why do we not have equipment, why is it that they are investing more in prisons than they are in our school system, and police more than our teachers?"

And I would say, it is because constitutionally that is a problem for the local government, and that while we in the Federal Government do provide incentives, we have a very limited role, and a very small contribution to make. But we hope, for the interests of our great country, that we can improve it.

No, Mr. Secretary, if people—if my friends want constitutional amendments, we may cut a deal, because there is no way to explain how we can have this great Republic in jeopardy as it is today because the Federal Government has no authority.

So, we will work together. Put me down for the amendment of the Constitution, but I think that when the businessmen get together, and your office is going to be involved, and it is going to happen soon, maybe we can find out what they are doing, and see whether or not constitutionally we can be partners with them.

And so that we could have throughout these counties and congressional districts everyone saying, we have to do more together, and have the Federal Government to be a bigger partner in providing the leadership on this issue, and I look forward to working with you.

Have we met before?

Mr. LONGANECKER. We have met, but not in this capacity.

Mr. RANGEL. Well, we are not going to forget each other.

Mr. LONGANECKER. You bet.

Mr. RANGEL. We have got to work closer together, and I invite you to attend the conference of the businesspeople, who are so proud of what they are doing, and maybe we can have a better working relationship, since a lot of them, most of them, are national and international, and we can get the benefits of their experience, at very little cost.

Thank you, Mr. Secretary.

Mr. LONGANECKER. You are welcome.

Chairman CRANE. Mr. Coyne.

Mr. COYNE. Thank you, Mr. Chairman.

Mr. Secretary, would you give us an evaluation of how well we are doing in educating people in the elementary and secondary education levels, based on the collective experience of those present today.

Mr. LONGANECKER. Well, I think the record is mixed, and we spend a great deal of time working together, so I feel comfortable addressing that concern, even though it is not under my purview of responsibility.

The record is clearly mixed. There has been, recently, some good news, in that—in international comparisons now using what we think are more apples-with-apples comparisons than apples-with-others—the United States students have begun to look more competitive than they did in some of the earlier estimates.

On the other hand, we still are not leading in those areas most Americans would expect or want us to, and I think we still are not moving as aggressively toward achieving those national goals that have been established, of reduced dropout rates, and higher achievement levels, that almost all Americans agree we should be moving toward.

And so I think it is very much a mixed boat.

We are now saying that we believe all people should go on to postsecondary education. Some people have interpreted that as a statement that our elementary and secondary schools are failing. We do not believe that at all.

We live in a much more complex world, where the requirements are going to be both higher job specific skills and citizenship skills.

And so saying that people should have more education should not be taken as an indictment of our secondary system. It is that, logically, acquiring those skills will take somewhat more time than it took in the past.

Mr. COYNE. How do we compare with other industrialized nations, in educating students at the elementary and secondary level?

Mr. LONGANECKER. Let me provide you with, for the record, some of the data that we have on that comparison, which will give you the precise numbers.

I think most Americans, when they see those comparisons, will be both disappointed and, unfortunately nonbelieving. Many of us think there are problems with our education system, but most of us think our schools are great.

That is because we are all proud of our communities, and the places that we support, and so it is very difficult, often, to see an accurate picture of where we logically fit.

Mr. COYNE. Well, I would like to see those figures if you could provide them.

Mr. LONGANECKER. I will provide those to you.

Mr. COYNE. Thank you.

[The following was subsequently received:]

International Comparisons of Student Achievement

Several tests are used to compare academic achievement of American students with students from other countries. The International Assessment of Educational Progress, (IAEP) sponsored by the U.S. Department of Education, the National Science Foundation, and the Educational Testing Service, measures achievement levels in selected disciplines by nationally representative samples of nine and 13 year-olds in participating countries.

In 1991 the IEAP compared performance in mathematics and science by a sampling of nine and 13 year-olds, and performance in geography by a sampling of 13 year-olds. In mathematics the United States scored nineth out of 10 countries for the 9 year olds, and 13th out of 14 countries for the 13 year-olds. In science American students performed better, scoring third out of 10 for 9 year-olds and 12th out or 14 for 13 year-olds. In geography the United States scored fifth out of the nine countries. (See tables below.)

That same year the International Association for the Evaluation of Educational Achievement (IEA) measured reading comprehension among 4th and 9th grade students. A total of 32 countries, including the United States, participated in the study. U.S. 4th graders scored second, after Finland, and U.S. 9th graders scored nineth, after Finland, France, Sweden, New Zealand, Hungary, Iceland, Switzerland, and Hong Kong. (See table below.)

MATHEMATICS

9 Year-Olds

Country	Average Percent Correct
Korea	75
Hungary	68
Taiwan	68
Soviet Union	66
Israel	64
Spain	62
Ireland	60
Canada	60
United States	**58**
Slovenia	56

13 Year-Olds

Country	Average Percent Correct
Korea	73
Taiwan	73
Switzerland	71
Soviet Union	70
Hungary	68
France	64
Israel	63
Canada	62
Scotland	61
Ireland	61
Slovenia	57
Spain	55
United States	**55**
Jordan	40

READING

4th Grade

Country	Overall Mean Score
Finland	569
United States	**547**
Sweden	539
France	531
Italy	529
New Zealand	528
Norway	524
Iceland	518
Hong Kong	517
Singapore	515
Switzerland	511
Ireland	509
Belguium	507
Greece	504
Spain	504
Germany (West)	503
Canada (BC)	500
Germany (East)	499
Hungary	499
Slovenia	498
Netherlands	485
Cyprus	481
Portugal	478
Denmark	475
Trinidad/Tobago	451
Indonesia	394
Venezuela	383

9th Grade

Country	Overall Mean Score
Finland	560
France	549
Sweden	546
New Zealand	545
Hungary	536
Iceland	536
Switzerland	536
Hong Kong	535
United States	**535**
Singapore	534
Slovenia	532
Germany (East)	526
Denmark	525
Portugal	523
Canada (BC)	522
Germany (West)	522
Norway	516
Italy	515
Netherlands	514
Ireland	511
Greece	509
Cyprus	497
Spain	490
Belgium	481
Trinidad/Tobago	479
Thailand	477
Philippines	430
Venezuela	417
Nigeria	401
Zimbabwe	372
Botswana	330

SCIENCE

9 Year-Olds

Country	Average Percent Correct
Korea	68
Taiwan	67
United States	**65**
Canada	63
Hungary	63
Spain	62
Soviet Union	62
Israel	61
Slovenia	58
Ireland	57

13-Year Olds

Country	Average Percent Correct
Korea	78
Taiwan	76
Switzerland	74
Hungary	73
Soviet Union	71
Slovenia	70
Israel	70
Canada	69
France	69
Scotland	68
Spain	68
United States	**67**
Ireland	63
Jordan	57

GEOGRAPHY

13 Year-Olds

Country	Average Percent Correct
Hungary	70
Slovenia	65
Canada	63
Soveit Union	63
United States	**62**
Spain	60
Korea	60
Ireland	59
Scotland	58

Mr. RANGEL. Mr. Chairman, I ask unanimous consent to ask just one question.

Are there parts of our educational system that warrant being indicted for failure to perform? Communities?

Mr. LONGANECKER. Yes, there are certainly. But again, as I think Secretary Reich says, it is difficult to brand all schools in all levels with the same brush.

Mr. RANGEL. I want to agree with you a hundred percent, but there are certain communities that are very costly, in terms of our budgetary problems, that can be, and should be, indicted.

Mr. LONGANECKER. There are school districts that one can look at and wonder why the productivity is not higher. But keep in mind, different communities face very different circumstances.

The community in which we live, this area, has to spend much more resource on protection of students, and on counselling services, and on issues that the student brings to the school——

Mr. RANGEL. You are talking about the reason for the indictment. I am asking whether or not, if the kids are not being educated——

Mr. LONGANECKER. Yes.

Mr. RANGEL. OK.

Mr. LONGANECKER. No, there are——

Mr. RANGEL. We have got to work on that, that's all.

Mr. LONGANECKER. Yes, absolutely.

Mr. RANGEL. We have got to work on it.

Mr. LONGANECKER. Yes, we do.

Mr. RANGEL. I am sorry.

Chairman CRANE. Were you finished, Mr. Coyne?

Mr. COYNE. Yes.

Chairman CRANE. Mr. Payne.

Mr. PAYNE. Thanks very much, Mr. Chairman.

And thank you, Mr. Secretary.

Mr. LONGANECKER. You are welcome.

Mr. PAYNE. Because we are the Trade Subcommittee, and our interest is in how we can be more competitive in the world, certainly any improvements we make in education and training must be done with the public and private sectors working in conjunction with one another.

Mr. LONGANECKER. Yes.

Mr. PAYNE. What is the Department of Education doing with the private sector, and particularly business and industry, as it relates to some of the objectives you mentioned in postsecondary education?

Mr. LONGANECKER. A couple of things. The higher education community has been working closely with the business community for some time.

We have specific initiatives. Obviously the most significant is the School-to-Work Program, where a major partner is the business community providing the work-based learning component of that program.

The School-to-Work Program is a secondary/postsecondary linkage program as well. Therefore, I consider that to be part of my charge, as do the other assistant secretaries who deal with that issue.

In addition, we have developed our programs to encourage the participation of businesses. We have supported the provisions that allow businesses to provide education with a tax deduction for their employees, and we have worked closely with them.

It is also important to keep in mind that our system of higher education is fundamentally different from most other countries. Ours is a privatized system of higher education. We do not have Federal institutions of higher education; most countries run their systems of higher education.

We buy services in a system where about 75 percent of the students attend state institutions of higher education, about 25 percent in traditional colleges and universities that are private, not-for-profit institutions.

We also, in the Federal Department of Education, contract with over 3,000 private, for-profit trade schools, some of which have problems in their operation, but most of which are offering a quality, important service to the community by providing trade and technical education.

And so, we have got a variety of ways in which we work with an almost privatized system for high school graduates for the country.

Is that responsive, Mr. Payne?

Mr. PAYNE. It is, and one of my observations, and I think Secretary Reich alluded to this earlier, is that the community colleges seem to be playing a really important role, in terms of ensuring that the postsecondary education that people are getting is in fact applicable to their community, and to the employment needs in their communities.

I think that is because these institutions are very interested in working with the private sector, and understanding what the opportunities are.

Mr. LONGANECKER. Absolutely.

Mr. PAYNE. Anything that we can do to encourage more of that happening, so that the kind of education that people receive is as applicable in a practical way as possible to the needs in their community, would be very, very helpful.

Mr. LONGANECKER. Absolutely.

Mr. PAYNE. There is one other thing I wanted to touch on, and that is, one of the Goals 2000 objectives is that we will be first in the world in math and science by the end of this decade.

In terms of trade, in recent years the balance of trade in high technology goods has gone from a surplus to a deficit.

I understand that in 1975 the United States and Asia each graduated 60,000 bachelors of engineering, and yet 20 years later the United States is graduating 65,000 bachelors in engineering, and Asia is graduating 300,000.

It seems that one of the things that we really need to do is to encourage more people to participate in science and in engineering, in terms of postgraduate work.

What ideas do you have, or what can be done, to encourage that to happen?

Mr. LONGANECKER. Well, one of the dilemmas that is hurting us, particularly at the graduate level, is that some of those programs that traditionally have supported science and research in this coun-

try are areas in which we are currently, as a country, reducing our investment.

Now, that may make a lot of sense, but it is having the secondary effect. The Department of Defense—and normally you do not hear an official from the Department of Education arguing the case for the Department of Defense, and I do not intend to do that—but the fact that we are not investing in the kind of resources in defense research.

Much of that research was being done in our colleges and universities, in our science and engineering programs, and was providing support for students in those programs.

So, our disinvestment in various areas clearly takes a toll on the highest levels of achievement in our country.

I think one of the other dilemmas that we have is that the market really does work, in this country, and students go where they believe the jobs and opportunities are going to be and have been. There has been a tremendous amount of interest in business education at the postsecondary education level over the last decade, and a declining interest in science and engineering.

As the market requires and demands those services, and remunerates people appropriately for them, we will see a return in interest in those science and engineering programs.

They are relatively expensive programs for colleges and universities to provide, so unless there is a clear demand from the market, it is not one of those areas they are going to jump into without pretty strong evidence that student demand will be there.

You cannot support the program for long without a strong student demand component.

Mr. PAYNE. Thank you very much.

Chairman CRANE. Thank you, Mr. Secretary.

Mr. LONGANECKER. You are welcome.

Chairman CRANE. And with that we are going to recess.

Mr. RANGEL. Let me——

Chairman CRANE. You had another question, Charlie?

Mr. RANGEL. Yes, I just have one. This marketplace thing—some of our communities cannot compete in this market thing, and that is where my colleague and I have some major problems.

If those schools that we were talking about, that are operating at a substandard level, those districts—I guess that is the best way to describe them—is it possible that you could locate, geographically, where they are? Do they come up in clusters, and are there other indicators that would show why these schools are not being productive, the District of Columbia being one?

Would they be basically inner-city schools?

Mr. LONGANECKER. Mr. Rangel, I really—I do not know the answer to that.

Mr. RANGEL. Well, I never mentioned race or Hispanic or anything—I did not think there was any need to—but when we talk about the marketplace, certainly you are not talking about these places, that are not productive.

Mr. LONGANECKER. No, that's the——

Mr. RANGEL. And you would agree that there are clusters that have other characteristics besides unproductive schools.

Mr. LONGANECKER. Oh, absolutely, sure. There are a lot of schools where the students either do not come out, or when they do come out, have a very difficult time competing with the rest of the world.

Mr. RANGEL. So, if this is throughout the United States, that is Federal, isn't it?

Mr. LONGANECKER. Yes, it does sound like it. It is certainly national, and it certainly is a Federal interest, and it does suggest that the resources we put in, whether they are at the level that you and I might hope, or the level that we have, we have to do the smartest job possible of assuring that we——

Mr. RANGEL. OK, we have to go and vote, and I will be in touch with you personally. But I would like to see what Federal program you have that is constitutional and that says it is more important that this issue be left up to the local school boards.

I would like to see how you look at this, so that I can work with you.

Mr. LONGANECKER. Great.

Mr. RANGEL. With your restrictions.

Mr. LONGANECKER. We will work with you.

Chairman CRANE. Thank you again, Mr. Secretary.

Mr. LONGANECKER. You are welcome, Mr. Chairman.

Chairman CRANE. And the Subcommittee stands in recess until this vote is over.

[Recess.]

Chairman CRANE. Mr. Weill, we welcome you before the Subcommittee, and before your presentation I would like to have Mr. Rangel make an introduction.

Mr. RANGEL. Thank you, Mr. Chairman.

I will be brief, because the testimony will explain what an outstanding individual Mr. Weill is. He has proven his success as a businessman throughout the world, but the thing that has impressed me the most is that he recognizes that in order to have a strong economy you need a strong work force; in order to have a strong work force, we need a strong educational system.

And when he found the system was not working, it did not stop him. He went out and built one, and it serves as a model as to what can be done, and I am so glad that he is able to be here. More importantly, he is willing to share his expertise and his staff with the Federal Department of Education, and other businesspeople, so that we can come together and find out what works, what can be duplicated, without even thinking about another layer of Federal bureaucracy.

So, thank you for giving me the opportunity to introduce my friend.

And thank you, Mr. Weill, for being here.

Chairman CRANE. You are more than welcome.

STATEMENT OF SANFORD I. WEILL, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, TRAVELERS GROUP, NEW YORK, NEW YORK

Mr. WEILL. Congressman, thank you for that kind introduction.

Mr. Chairman, I have managed to live for 63 years without ever doing this, so this is a first. So, you have got to forgive me if I am

a little bit nervous, but I would hope that you would be able to put my whole testimony in the printed record.

Chairman CRANE. It will be included, yes, sir.

Mr. WEILL. Thank you very much.

Basically, I would like to say that I am proud to be an American, I am a great believer in the free enterprise system.

I think that as we face the next millennium, our country is in a fantastic position vis-a-vis the rest of the world, and I think it is all of our collective jobs to make sure that we are in that position 50 or 100 years from now, for our grandchildren and our grandchildren's grandchildren.

That is why I think we all do what we do, but I want to talk today a little bit about the Academy of Finance and the National Academy Foundation, a little bit about why it started, what is happened since it started, and our hope for the future.

Basically, this program started with an idea in 1980. New York City was the financial capital of the world, and yet financial companies were thinking about moving out of New York City because they claimed there were not enough people in the work force to keep a vital kind of economy going in New York.

And yet, when one drove around the five boroughs in New York, you saw young people playing in the street, young people without having a clue of what life was about, and how they can become part of the system.

That was the beginning of the idea that maybe the private sector should get together with the public sector and see if we can create a high school level program that can train young people for a career in the financial services industry.

In 1980 I approached Frank Makurola who was then the Chancellor of the Board of Education, and I said, can you be a little enough of a bureaucrat that we can work together to try and create a program where the business sector will be part of writing that curriculum, so that the program will relate to what is happening today and tomorrow, rather than what happened 50 years ago.

And we developed that program. Sandy Feldman of the Teachers' Union cooperated with us, encouraged the teachers to work in business during the summer, so that they could understand what they would be teaching, rather than just teaching from the book, and to help develop the curriculum so that it would make sense to the young people.

We started this program in 1982, in John Dewey High School, with 30 students, and it was an example of public/private partnership, and it was an example of a School-to-Work Program.

We worked in that school for 3 years before we went to the next school. Today we are in 200 schools in 25 States, with 12,000 students, up from that original 30, 14 years ago.

And, what is even better than that, is, 90 percent of these students go on to college or some kind of higher education, because they have learned in this program the value of School-to-Work Programs. And part of this program, and our only limitation on the growth of the program, is getting industry to provide summer internships.

Because in internships, young people can find out the value of education, that education can take them beyond the entry-level job

and just sweeping at McDonald's. It is important in their seeing that they can have a future, because they are the future of this country.

Our program really operates in inner-cities throughout the whole country. The population of our program is 70 percent black, Hispanic, and Asian, so it is really a good representation of the people in this country.

And it is a program where, when the young people work on it, they realize the benefits. The participating industries see that these young people are really terrific. We teach them how to interview, proper manners, and we teach them how to dress.

We teach them how to feel good about themselves, the value of education, and the value of the future, and I think that our goal in the Travelers, and in America really, should be that we have a program here that is replicable.

It has been copied, it works everywhere, and we would like to go where we are teaching 1 million students a year, and have 1 million summer internships, because that is the future of this country, rather than the 12,000 that we now have.

I love to preach on this subject. I know I do not have much time, but I really want to say that I am thrilled to be here. I can talk about this all day, and if you give me the opportunity I will.

I would like to introduce John Dow, who is the chief executive officer of the National Academy Foundation, who is sitting in the back there, whom I work with. I am not sure who is whose boss, but we work pretty well together.

And this is a program that I think has worked, not only in the financial business, but it has been replicated in the travel and tourism business and can work well in other industries, with the cooperation of business and the public sector.

So, Mr. Chairman, thank you very much for giving me this opportunity.

[The prepared statement and attachments follow:]

STATEMENT OF

SANFORD I. WEILL
CHAIRMAN AND CEO
TRAVELERS GROUP
NEW YORK, NEW YORK

Introduction:

Mr. Chairman, thank you for the opportunity to speak to the Ways and Means Committee Subcommittee on Trade today. I am Sanford I. Weill, Chairman and Chief Executive Officer of Travelers Group.

Today, I want to describe to you a truly unique - and successful - program between the private and public sectors. The program is the Academy of Finance, which provides specialized education, college counseling and summer jobs to mostly inner-city high school students. I have attached a more detailed description as Attachment 1. The Academy of Finance has program sites in over 25 states nationwide (see Attachment 2). By 1995, we had a total number of Academy graduates of over 8,000 (see Attachment 3).

History of the Academy of Finance
The history of the Academy of Finance began in 1980 when I approached the then-Chancellor of New York City schools and the head of the New York City teachers union. As an employer in the financial services industry, we had trouble obtaining qualified employees and experienced high turnover of those we did hire. I believed that this was largely the result of a lack of proper education and training.

As a result of these shortages, many employers in our industry were less competitive and were considering leaving New York City. This would result in a vicious cycle: a lack of qualified employees resulting in fewer and fewer jobs. In order to stop this cycle of job loss and lowered skill levels, I believed we needed to match the needs of the students with the financial services expertise of New York corporations. This was the original "charter" of the Academy of Finance. By producing well-qualified employees, the Academy of Finance has helped young people and has increased the competitiveness of the financial services industry.

The first Academy of Finance started in 1982 at John Dewey High School in Brooklyn with 30 students. There has been a major expansion of the program since 1982. For the 1996 school year, we now have 202 programs (see Attachment 4) throughout the U.S. with over 12,000 students enrolled (see Attachment 5 -- 1995 numbers). In 1989, The National Academy Foundation was created as an umbrella organization for the Academy of Finance and other specialized academies of instruction.

Elements of the Academies
There are certain elements of the Academy of Finance which I believe have been key to its success. First, specialized courses developed with financial industry experts have been offered as part of the regular high school program. In addition, career-oriented courses are offered at a participating college at no extra charge. Second, the Academy places a strong emphasis on technology in order to give participants the skills needed to compete globally as well as interpersonal skills to help them in business and social situations. Third, we provide six to ten week paid internships which give students practical real life experience. Most importantly, the summer internships show the students that there are opportunities beyond the entry level positions. They learn that education is the path to reach those higher levels (see Attachment 6). Fourth, the Academy gives students access to successful, helpful mentors who can guide the students' careers. And to provide the proper background, the Academy offers college counseling. May of the students who have participated in the Academy and continue on to college and careers are very motivated. The mentoring and college counseling programs help to provide them with direction.

Criteria for Acceptance Into the Program
The criteria for acceptance into an Academy of Finance are also important. The criteria include: (1) a desire to learn about the financial industry; (2) a good attendance record;

and (3) a minimum grade point average. We don't just take the top students; a large majority of our students are considered at a "high risk" for dropping out of school.

Results Are What Counts

Having described our program, what counts is not our effort or our design but our results. The most important result is that virtually 100% of Academy students graduate from high school. In addition, numerous scholarships are given to offset the ever-increasing burden of college tuition. Consistently, over 90% of our students go on to two or four year colleges (see Attachment 7), and many continue to work in the financial services industry during college. Finally, over 50% of our students return to the financial services industry after college.

Corporate Support

Matching our record of growth is our record of private sector support. Today, more than 1,000 corporations and organizations in America support the Academy of Finance. The support comes in the very necessary form of financial support but also in sometimes more important ways. Summer jobs, real work experience and the involvement of senior executives are just some of the examples of how corporations can get involved in helping students. I would encourage more corporations to take part in this or other education efforts. Many corporations are already contributing time, expertise and money. I serve as the Chairman of the Board of the National Academy Foundation and many of the other fine executives and corporate supporters are described in the materials I have brought today.

Conclusion:

In conclusion, I want to state that I am very proud of the Academy of Finance and I'm sure that shows through. In just 15 years, the Academy of Finance has gone from an idea with no precedent to a nationwide program that benefits thousands of kids. I am especially proud of the major efforts - the partnership between the public school officials and the private sector comprised of corporations across the country. I firmly believe that the future of effective education will be found in this type of partnership between the private and public sectors.

THE NATIONAL ACADEMY FOUNDATION: A LESSON IN LEARNING

When high school students understand and confront the challenges of their lives beyond the classroom, their dedication to learning is transformed. Equipped with knowledge, skills and practical experience to solve real-life problems, young people acquire a sense of direction and resolve.

The National Academy Foundation (NAF) offers students academic opportunities and practical experiences within their own high schools through a two to four year Academy program. The Academy model consists of a comprehensive, exciting sequence of courses that focus on a particular industry and supplement regular curricula. Classroom learning is reinforced by on-the-job experience acquired through paid summer internships - a combination that bridges the gap between the classroom and the workplace while offering students a chance to explore career interests.

In 1988, after several years of success with the Academy model, the American Express Company created an independent foundation, NAF, to reach out to more students and respond to growing interest from the private sector to become involved in the education of America's youth. Today, NAF combines the resources of business, government, schools and communities to bring high school students a multifaceted, relevant educational experience. In addition to the American Express Company, the Travelers Group, the Corporation for National Service, the Bankers Trust Company, and the Fannie Mae Foundation, more than 750 corporations, civic agencies, non-profit organizations and small businesses have joined NAF in its drive towards integrating the real world into the classroom and offering students a choice about their futures.

The NAF Academy programs include the Academy of Finance, the Academy of Travel & Tourism and the Academy of Public Service.

NAF continues to replicate its Academy programs in new sites and will adapt the Academy model to new industries. NAF's Academy of Finance is a member of the US Department of Education's National Diffusion Network (NDN), which disseminates exemplary educational programs across the country.

A school principal or superintendent is often the first to contact NAF to request information about planning and developing an Academy. If the school system decides to request funding and other support services to establish an Academy, a proposal describing start-up plans must be submitted and approved by NAF.

PARTNERSHIPS AND WIDE COMMUNITY PARTICIPATION ENRICH SCHOOLS AND THEIR STUDENTS

At each Academy, local, civic and business leaders join educators to offer a comprehensive program of classroom instruction, work experience, and career preparation to every Academy student. Academy partners may assist in one or more ways.

They can:

- **Serve on Local Business Advisory Boards**

At each Academy site, a Business Advisory Board advises on policy and operations, assists in fundraising, provides guidance in locating and planning student internships and promotes the Academy in business, education and government forums.

- **Assist with Curriculum Development**

To ensure NAF curriculum is current and relevant, partners collaborate with instructors, supply support materials, develop teacher training opportunities and serve as guest speakers.

- **Provide Scholarships and Other Incentives**

Companies, organizations and individuals offer scholarships and financial assistance to students who wish to continue their studies in college.

- **Participate in Mentoring and Shadowing Programs**

Students receive valuable one-on-one guidance and encouragement from local business volunteers. They also learn about the world beyond the classroom through shadowing experiences in which students follow the daily activities of managers in businesses and government.

THE ACADEMY MODEL: A VEHICLE FOR SCHOOL REFORM

- Over 100 Academy Advisory Boards have been established and more than 700 business partners offer students paid internships.
- 167 public high schools offer their students a choice for enriched academic curriculum and a dynamic means of learning through Academy programs.
- Over 600 public high school teachers have undergone industry training, continuing education and professional development to teach Academy courses.
- More than 8,000 students have graduated from NAF Academies since 1984. The annual graduating class is expected to increase to 3,000 in 1996.
- 90% of Academy graduates nationwide pursue their education beyond secondary school.
- Academy students earned $3.5 million during summer internships in 1995.

DIVIDENDS

- Students stay in school and gain a meaningful base of knowledge and skills as well as work experience for career preparation.
- Schools offer a choice to students, improved credentials and opportunities for teachers, and up-to-date resources.
- Students successfully completing program requirements are awarded certificates which evidence skills competence.
- Business participates in educational improvement, and helps ensure the development of a well qualified, motivated workforce.

FROM THE CLASSROOM TO INFORMED CAREER DECISIONS

Thousands of students participate in NAF's Academy programs in communities across the country. Students applying for admission must meet a minimum grade point average, have a good attendance record and a positive attitude towards learning. Some students who enter Academy programs are at risk of dropping out of school, or are not realizing their full potential, but by the time Academy students graduate, virtually all are high achievers and motivated to succeed in higher education or their chosen career.

PROGRAM ELEMENTS

Specialized Courses
Academy students take specialized courses designed by industry leaders and educators in addition to their regular high school curriculum.

A Chance to Establish Personal Career Goals
Academy students get to know the people and organizations involved in their respective industries. They visit banks, tourism facilities, real estate offices, government facilities, attend industry meetings, hear guest speakers in the classroom, and meet business leaders who serve on the Advisory Board for their Academy.

Paid Internships
After successfully completing the Academy requirements in their junior year, students are screened and interviewed for paid summer internships. Each student is hired for a position that assumes entry-level responsibilities. Many interns later work part-time or full-time for the companies at which they interned.

Special Graduation and Scholarship Awards
Students attend a special Academy graduation ceremony and are often eligible for hundreds of thousands of scholarship dollars.

Encouragement to Pursue Higher Education
Academy courses are developed to give students strong academic experiences at the high school level. When possible, students take college-level courses in their home schools or at local colleges. Success with these programs encourages many students who had not considered continuing their education after high school to include college in their future plans. More than ninety percent of Academy students go on to college.

Teacher Training
Academy teachers strengthen their credentials and abilities through participation in industry training programs, local university courses, and staff development activities at NAF-sponsored conferences.

ACADEMY OF FINANCE

There is more to the financial services industry than money in the bank. Over six million people research, analyze, and buy or sell commodities, stocks, bonds, foreign securities, credit, real estate, insurance and other financial products. Hundreds of thousands more people work in accounting, computer programming, telecommunications and other industries that support the activities of the financial services companies.

Experts predict that there will be almost 1.86 million new jobs in the field by the year 2000, coupled with a simultaneous decline in the number of young people entering the workforce. Preparing students to enter the financial services industry is essential to maintain the continued growth and strength of America and to secure its leadership role in the world economy.

The Academy of Finance is a program that gives high school students an opportunity to learn about, and prepare for, careers in financial services. It is one of several model programs established to promote educational excellence by the National Academy Foundation (NAF). This partnership links the resources of business, education, government and community.

The Academy of Finance bridges the gap between the classroom and the workplace. It helps students develop career skills, evaluate their own potential for success and establish personal goals through an enriched, two-to-four year comprehensive academic program housed in public high schools.

In addition to required academic high school courses, students at the Academy of Finance take two or three specialized courses per semester developed by NAF in collaboration with leading educators and industry experts. These include: *Economics and the World of Finance, Financial Operations, Banking and Credit, Financial Planning, International Finance, Real Estate Practices and Principles, English for Finance,* and *Mortgage Banking.*

The June 1992 US Labor Department's SCANS (The Secretary's Commission on Achieving Necessary Skills) Report, "SCANS in the Schools," cited NAF's Academy of Finance curriculum as exemplifying the manner in which SCANS competencies might be successfully integrated into schools. The report also noted that "NAF curriculum has a wide range of activities to foster interpersonal skills needed in the world of work."

The recently enacted School-to-Work Opportunities Act validates that the Academy model and the Academy of Finance have been cited by many independent agencies and organizations as prototype programs for this new federal initiative.

NATIONAL ACADEMY FOUNDATION

ACADEMY OF FINANCE

PROGRAM SITES

1996 - 1997 Academic Year

Program Sites	# of Programs
Alachua, FL	1
Anderson County, SC	1
Anne Arundel County, MD	1
Baltimore, MD	1
Baltimore County, MD	2
Boston, MA	1
Broward County, FL	6
Buffalo, NY	1
Burbank, CA	1
Charlotte, NC	2
Chattanooga, TN	2
Chicago, IL	1
Cincinnati, OH	1
Clayton County, GA	3
Cleveland, OH	1
Cumberland County, NC	1
Dade County, FL	2
Dallas, TX	1
Denver, CO	3
Detroit, MI	1
Durham, NC	1
Duval County, FL	1
East Hartford, CT	1
Gloucester, VA	1
Hartford, CT	1
Henry County, GA	1
Hillsborough County, FL	1
Honolulu, HI	2
Indianapolis, IN	1
Jefferson County, KY	2
Jefferson Parish, LA	3
Jersey City, NJ	1

Program Sites	# of Programs
Lee County, FL	1
Los Angeles, CA	6
Mercer County, KY	1
Montgomery County, MD	2
New Hyde Park, NY	1
New Orleans, LA	2
New York City, NY	11
Northport, NY	1
Oconee County, SC	1
Okasis County, NC	1
Omaha, NE	3
Orange County, FL	2
Osceola County, FL	1
Palm Beach County, FL	1
Pickens County, SC	1
Polk County, FL	1
Prince George's County, MD	4
Providence, RI	1
Red Bank, NJ	1
St. John's County, FL	1
St. Lucie County, FL	1
Salt Lake City, UT	3
San Francisco, CA	7
San Jose, CA (East)	2
San Jose, CA (Unified)	1
Seattle, WA	3
Seminole County, FL	1
Union County, NC	1
Wake County, NC	1
West Seneca, NY	1
Wilmington, DE	1
Yonkers, NY	1

AOF TOTAL: 115

NATIONAL ACADEMY FOUNDATION

PROGRAM SITES

1996 - 1997 Academic Year

Program Sites	# of Programs
Baltimore, MD	1
Boston, MA	1
Broward County, FL	4
Burbank, CA	1
Charlotte/Mecklenberg NC	1
Chattanooga, TN	1
Chicago, IL	2
Cranston, RI	1
Culver City, CA	1
Dade County, FL	3
Dallas, TX	5
Deer Valley, AZ	1
Denver, CO	4
Detroit, MI	1
Duval County, FL	1
Fayette County, KY	1
Highline, WA	1
Honolulu, HI	1
Jefferson Parish, LA	2
Kauai, HI	1
Las Vegas, NV	1
Lee County, FL	1
Los Angeles, CA	2
Martin County, FL	1
Maui, HI	3
Minneapolis, MN	1

Program Sites	# of Programs
Monterey, CA	1
Newark, NJ	1
Newport, RI	1
New Orleans, LA	2
New York City, NY	6
Orange County, FL	1
Osceola County, FL	1
North Chicago, Il	1
Palm Beach County, FL	1
Providence, RI	1
Ridgeland, SC	2
Roanoke, VA	1
St. John's County, FL	1
St. Lucie County, FL	1
Salt Lake City, UT	2
San Francisco, CA	2
San Jose (East), CA	1
San Jose (Unified), CA	1
Seminole County, FL	1
Sweetwater Union, CA	1
Volusia County, FL	1
Warwick, RI	1
Washington, DC	1
Westbury, NY	1
Westchester BOCES, NY	1
Woodriver Junction, RI	1

AOTT TOTAL: 78

NATIONAL ACADEMY FOUNDATION

ACADEMY OF
APS
PUBLIC SERVICE

PROGRAM SITES
1996 - 1997 Academic Year

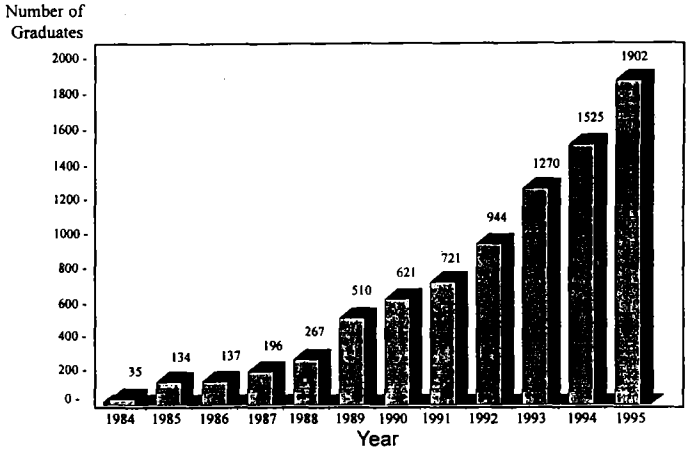
PROGRAM SITES	# of PROGRAMS
Boston, MA	1
Buffalo, NY	1
Hillsborough County, FL	1
Mobile, AL	1
New York City, NY	3
San Jose, CA	1
Tallahassee, FL	1

APS TOTAL: 9

NATIONAL ACADEMY FOUNDATION

NAF GRADUATE HISTORY

1984 - 1995

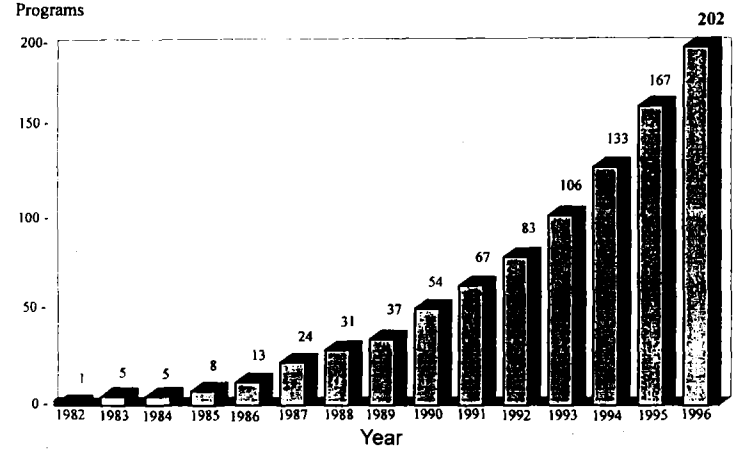


	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AOF	35	134	137	196	267	458	547	639	757	926	1028	1112
AOTT						52	74	82	187	248	384	654
APS										96	113	136
TOTAL	35	134	137	196	267	510	621	721	944	1270	1525	1902

TOTAL NUMBER OF ACADEMY GRADUATES = 8262

NATIONAL ACADEMY FOUNDATION

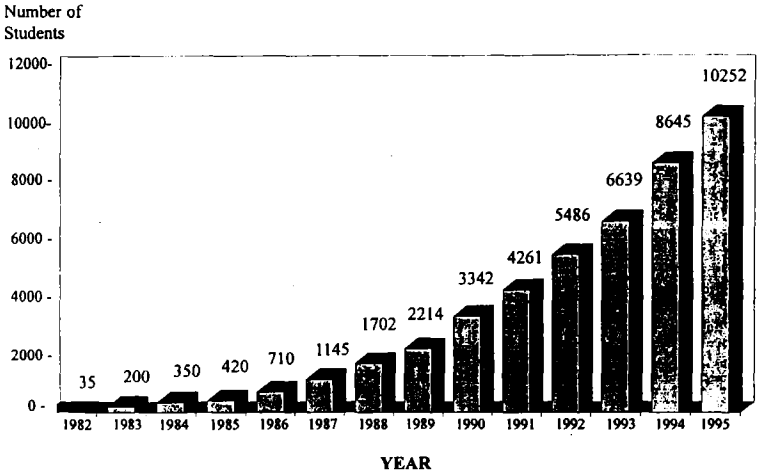
NAF PROGRAM EXPANSION
1982 - 1996



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
AOF	1	5	5	8	13	22	29	35	45	50	58	60	76	93	115
AOTT						2	2	2	8	12	19	38	49	64	78
APS									1	5	6	8	8	10	9
TOTAL	1	5	5	8	13	24	31	37	54	67	83	106	133	167	**202**

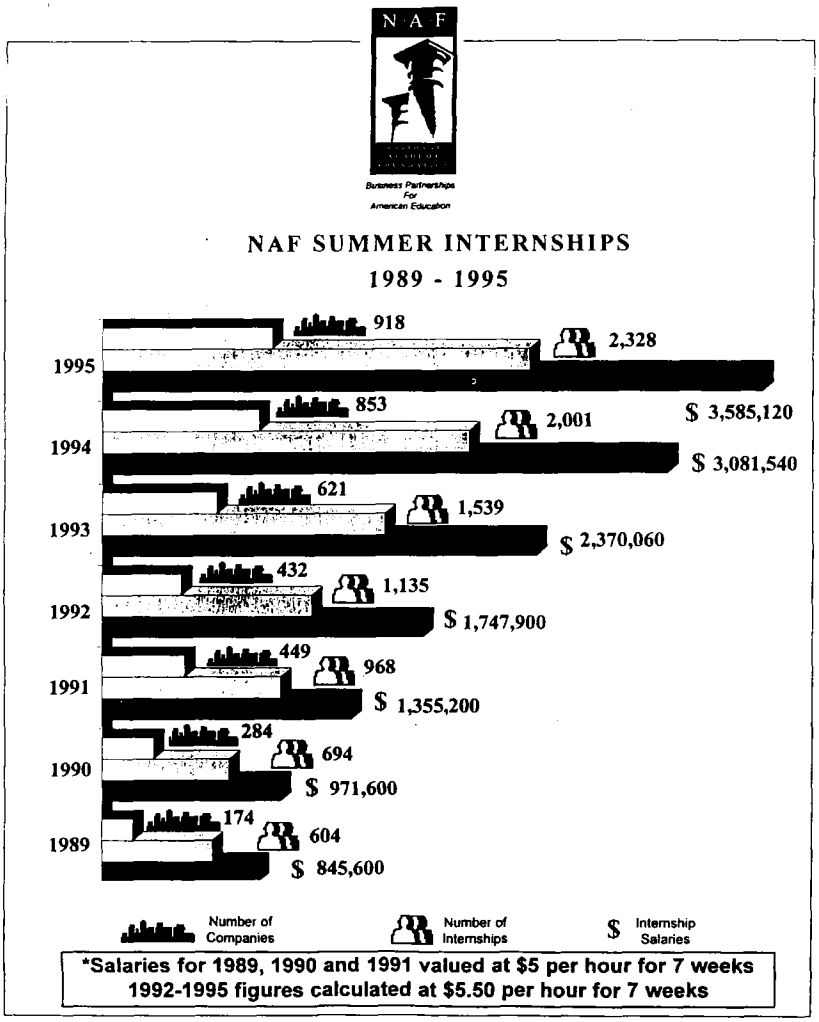
NATIONAL ACADEMY FOUNDATION

NAF STUDENT ENROLLMENT HISTORY
1982 - 1995



	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
AOF	35	200	350	420	710	1069	1541	2019	2715	3169	3628	4139	5340	6226
AOTT						76	161	195	564	904	1519	2006	2878	3659
APS									63	188	339	494	427	367
TOTAL	35	200	350	420	710	1145	1702	2214	3342	4261	5486	6639	8645	10252

NATIONAL ACADEMY FOUNDATION



NATIONAL ACADEMY FOUNDATION

NAF ACADEMY GRADUATES
1989 - 1995

	1989	1990	1991	1992	1993*	1994*	1995*
Graduates	510	621	721	944	1270	1525	1902
College Bound	464	558	670	861	1139	1393	1708
College Bound	91%	90%	93%	91%	90%	91%	90%

* Figures include Academies of Finance, Travel & Tourism and Public Service graduates

Chairman CRANE. Thank you, Mr. Weill.

How do the courses designed by industry leaders and educators fit in with the regular school curriculum of these students? Are they required to take additional classes?

Mr. WEILL. They take courses that balance the normal high school course, and have courses in accounting, courses in investing. We have developed, with this program, college level courses. So, in their senior year the students who want to can take courses in a local college or a community college, so that when they go on to higher education, they are better equipped than a lot of other kids, because they are not intimidated by the education process.

We have lots of people from industry come in and speak to them quite often, so that they can better relate to people, and the mentoring program in this is alive and well.

Most of the young people who have these summer internships are offered jobs by the companies they work for. They want to have them back, because they are really terrific young people—they just were not given the chance, or shown, and a lot of them did not have the role model who could lead them into the future, and that is what this does.

Chairman CRANE. In your written testimony, you have talked about mentors, and I think all of us have experienced that at one time or another in our lives. Can you elaborate a little bit on that relationship?

I mean, some of the courses, as I understand it, are tailored on a very brief basis. I mean, it is not like over the entire 4 years of a high school education.

Mr. WEILL. No, the program really started as a 2-year program for the junior and senior years of high school. And we had this summer internship where every student would be guaranteed an internship in their junior year, so that they could get a better understanding of what they are studying, why education is important, and hopefully raise their self-esteem.

So, while it is only 2 years, I do not think that that is a short period of time, because we are getting over 90 percent of the participants to decide to continue their education, versus something that might be half that in a normal public school, and we are taking the same people who are in those public schools.

We have just started a full, 4-year program, so we have a full, 4-year high school. The first one was in New York next to the American Stock Exchange. We are going into our 4th year, so we have about a hundred students in each class.

We have started the same program in Hartford, and we believe that we can have a 4-year balanced education program, with an emphasis on accounting, finance, and business, because the financial services industry is one of the biggest employers in the United States.

It is an industry that we are a leader in globally. If we are going to keep that position, then it has got to be led by the people who are growing up in our high schools today.

Chairman CRANE. Well, you are to be commended.

Let me welcome Mr. Dow.

And, Mr. Dow, would you like to add anything to what Mr. Weill has already said?

Mr. DOW. Thank you, Mr. Chairman.

I would just say that you can see from his presentation that he is very passionate about this program. Certainly he had a vision, a long time ago, and I think he is to be commended for staying with that vision, and not only having a vision and starting a program, but some 15 or 16 years later he is chairman of our foundation, and still providing leadership.

I think that it is a wonderful opportunity to provide for Mr. Weill, and for everyone else here, to come and talk about improving the work force in this country.

You are right on target with what you are doing here, and I certainly hope that you can continue the momentum.

Chairman CRANE. Thank you.

Mr. Rangel.

Mr. RANGEL. Thank you, Mr. Chairman.

Mr. Weill, you saw a need and you did not buck the system, you became a partner with the system, and you showed them what the needs were in the workplace, and how they could be partners in doing what they have to do to fulfill their mandate, but at the same time allow the graduates to be better prepared for a job opportunity.

There used to be a time that I used to feel so proud to say, without ridicule, "I am from the U.S. Congress, I am here to help you." But that is not accepted the way it used to be.

At the same time, we do get some things done. For example, we have provided for benefits in certain areas, and I represent one that has an empowerment zone, which provide tax relief in order to get private sector people to do what you are doing, because it is the right thing to do, for their business and for America.

But, if you did have the ability to have these additional resources available, it would seem to me that your creativity and your imagination could serve as a broader blueprint for the corporate world that may not see the instant benefit for their company, their industry, or their country, but they would see the instant benefits on the balance sheets, as they see their tax liability being reduced, as their participation in programs like this increases.

If we were to work with you and Dr. Dow, do you think that you could up with a list of things that could be done to allow you to increase and to spread the work you are doing for the country?

Mr. WEILL. I think there is no question that working together we can come up with a lot of ways to really substantially increase participation, and I think that that is really what is needed today, because, yes, we do have something that has proven that it can work in 25 different States, in 170 different cities, across America, over a decade and a half, and it has momentum.

So that sometimes, unfortunately, we need to have incentives to get a lot of our associates to want to play the game and be part of something, and I think that that would be a message to them, that this is something that has to happen.

If we are going to look into the future and say our tax dollars are going to pay it all, or we are going to leave it to the private sector to do it all, without the cooperation of all parts of our society, whether it is business, labor, or the public sector, I think that is the only way it is going to work.

And a lot of people in business also are proud, or like to be proud, of what we do, and what we accomplish. And we do not want people to want us for just our money; we want people to want us for our ability to make things happen, to lead change, to be a part of change.

And so this is a great example of how that partnership can work, and some of the things that you are thinking about can accelerate it dramatically.

Mr. RANGEL. Well, Mr. Weill, I want to thank you.

Sometime—I hope in September—we will have national leaders such as you coming together with Secretary Riley and his staff, to see whether they can imitate and expand these programs, or what can we do without putting another layer of bureaucracy out there, to support your good efforts, but to make certain it becomes a part of tradition.

Doctor, I had a chance to speak and meet with many of the teachers who had a conference in New York. How many teachers were there?

Mr. DOW. We had over 600 at that conference.

Mr. RANGEL. And how many States were involved?

Mr. DOW. All of them, some 25 States.

Mr. RANGEL. Mr. Chairman, you can tell, almost, the quality of education that a kid gets, without the kids, when you see the enthusiasm of the teachers. This was one of the most exciting groups of people I have ever seen, and all they were talking about was how they could do better.

Mr. WEILL. Congressman, they are doing it because they know they can make a difference in people's lives. That is why they are so enthusiastic, it is terrific.

Mr. RANGEL. And I am glad you mentioned Sandy Feldman, who is a very aggressive leader of the union, who has said a number of times that she is prepared to support any program that will show that teachers can teach, when given the tools and the environment to work with.

And so we do not have that union problem here, because the teachers are all union and enthusiastic.

And I hope, Doctor, that you might share with me some of the things—not now—that came out of the conference, that you think I, on any level, might be supportive of.

Mr. DOW. Certainly.

Mr. RANGEL. But let me thank you both, because it makes me proud to be a New Yorker, to see that we do not wait for constitutional changes, we move on with what we have to work with.

Thank you.

Mr. WEILL. Thank you very much. And as an American citizen, thanks for giving me the rest of the summer off, and not doing this until September.

Chairman CRANE. Mr. Coyne.

Mr. COYNE. I have no questions.

Chairman CRANE. Well, I thank you both for your presentations, and keep up the good work, and I look forward to examining in depth, as Charlie already has, the program you have set in place.

Mr. WEILL. Thank you very much. We appreciate it.

Mr. DOW. Thank you.

Mr. RANGEL. Thank you.

Chairman CRANE. And now I would like to call up Mr. Jones, president and chief executive officer of the National Alliance of Business, Stanley Litow, president of IBM Foundation, and Leo Reddy, president of the National Coalition for Advanced Manufacturing.

And let me tell you panelists that, if you can condense your presentations to 5 minutes or less, all of your prepared testimony will be made a part of the permanent record, and we will start with Mr. Jones.

STATEMENT OF ROBERTS T. JONES, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL ALLIANCE OF BUSINESS, WASHINGTON, DC

Mr. JONES. Thank you, Mr. Chairman and Congressman Rangel.

We appreciate the hearing. We think that it is not only important on the substance, but this Subcommittee has a growing leadership role on this set of issues.

I will keep my comments quite short. Many of the items that I would speak to you about on the changing nature of the economy and its impact on human beings and workers have already been stated. I would suggest two things.

One is that this set of behavior, from global competition, technology and everything else, is not going to abate, it is going to increase, and its impact on our institutions and on individuals will be felt more in the future, not less, and we need to deal with the underlying implications of that.

The greatest underlying implications are, in fact, as the Secretary pointed out, good jobs, and high skill, but the key to the future, in terms of wages, benefits, tenure on the job, reemployment, access to the original job, all, more and more, come back to the education investment that is in our system.

We are replete with data about the increasing impact of education on each of those points. I will not go through them now. But, we would raise it as a significant issue for the Congress, and for the public to understand.

One of the implications of this is the growing role of corporate leadership on this issue. You just heard an outstanding example of it, you will hear more in a moment from IBM and other companies. But, across this country, Mr. Chairman, the increasing role of large and small businesses on this set of issues is visible and seen, not as a political issue, or a social issue, but as an underlying economic issue, both for the company and for the individual.

You may have heard that we now live in an era in which we do have data that show directly the impact of education on productivity in a company. We have data which show the direct impact on the individuals.

So, when companies take leadership, both in the school system, in their own company, or in the broader community, it is for very significant and serious reasons.

Let me just cite a couple of things. Corporate spending is increasing rather dramatically. The Secretary indicated $30 billion a year; indeed, the recent number is $52 billion a year, just up since 1990.

Sixty percent of the companies are increasing their spending, while only 2 percent, in the last 2 years, have decreased it. Forty-one percent of employees are now receiving skill training, compared to 36 percent just 5 years ago.

Companies providing remedial education have increased from 4 percent to 20 percent, from 1990 to 1996. There are over 1,000 company universities, increased over 50 percent in 5 years. Business involvement in community coalitions across this country—we now have over 240 business-led coalitions in every major state and community in the country, focused on education reform and training reform, within those communities.

Indeed, I would suggest to those of us today who want to look at this issue, we need to be looking outside of Washington, in the communities. School reform is alive and well, and going phenomenally successfully. Reform inside the companies, in terms of how we relate to employees in training and education, is growing rapidly.

But it is all on a local basis. There is a commitment, as you heard, in the summit recently from New York, where education leaders agreed unanimously from across the country, to stay focused on high education standards, high assessments, and for companies to use transcripts in hiring and concern themselves greatly with Congressman Rangel's question about where schools in fact are dealing with these issues when they locate their businesses.

Goals 2000, controversial as it is, was supported by the business community; the financing, indeed, this year in this Congress, was supported by the business community. The CAREERS bill that has been in trouble was supported dramatically by the business community.

National skill standards, to communicate these kinds of things to people, are supported by the business community.

The bottom line is, there is a great concern that without those kinds of success efforts, the ultimate discrimination will take place by people not being skilled enter into the workplace.

We think in the end this is a partnership issue. As the Congressman pointed out earlier, it is not a Federal issue by itself, it is not a local issue by itself, it takes the business community, the government, and the schools to work together, both financially and substantively.

There is a role for the Federal Government, and it is a role of strong and vociferous leadership on this important issue. The role of the companies indeed is a responsibility to their employees and their communities, a different kind than we had in the past, and there is a role of the individual, but it will take all three working as partners to make this happen.

Thank you.

[The prepared statement follows:]

TESTIMONY OF
ROBERTS T. JONES

ON BEHALF OF THE
NATIONAL ALLIANCE OF BUSINESS

BEFORE THE
SUBCOMMITTEE ON TRADE
COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES

ON
"THE IMPACT OF WORKFORCE QUALITY IN THE NEW AMERICAN ECONOMY"

JULY 25, 1996

Mr. Chairman, I appreciate this opportunity to discuss the changing world of American business competitiveness and the impact of those changes on human resource issues.

I am Roberts T. Jones, President and CEO of the National Alliance of Business. The Alliance is a nonprofit corporation advancing business leadership at local, state, and national levels to increase workforce quality through improved training and education.

Fundamental Economic Changes

The economic world that American companies compete in today is very different from that of even 15 years ago, and the change is both continuing and accelerating. Unprecedented challenges are coming from new pressures of competition worldwide, technological developments, deregulation, shortened product life cycles, and new standards of quality and customer satisfaction. These factors are restructuring entire industries while reshaping how companies organize their workplaces and manage and train their employees. Staying in the competitive game requires companies to have unprecedented flexibility, constantly refocusing as new technologies and emerging players reshape markets virtually overnight.

These realities have fundamentally and permanently changed the U.S. economy. Static institutions and old assumptions about roles and responsibilities (including those of government, the company, schools, and the individual) are increasingly irrelevant.

The Change is Necessary

Some of the short-term, transient effects that accompany these changes, like downsizing by an employer, often generate headlines. But, painful as they are, these changes are often vitally needed if companies are to remain responsive to economic realities over the long-term. What the media often misses is that layoffs are only a small part of the story. In an industry where layoffs might occur with one large employer, millions of new jobs are being created through new technologies, spin-offs, and new customer services. For example, even as major telecommunications companies have announced workforce cuts, the rapid convergence in computers, communications, and entertainment technologies has generated about 400,000 jobs in the past year alone in that industry.

Corporate leaders are predicting that this period characterized by constant turnover in the structure of markets, innovations in technologies, and customer needs will continue well into the next century. So the issue is not how to police the short-term economic effects of change, but how to restructure public policies to support the long-term productivity of companies, individuals, and educational institutions.

Impact of Economic Change on Employees

The ramifications of all this change on people must be looked at in a new light also.

- *New jobs require more education.* Job growth in the past decade has been concentrated in sectors requiring high education attainment, which outpaced job growth in less-demanding sectors by about 3 to 1. The trend shows no signs of abating. Sixty percent of all jobs created by 2005 will require some postsecondary education, according to the Bureau of Labor Statistics.

- *Better knowledge of job requirements is needed.* Due to the accelerating rate of change in needed skills and workplace structures, far more explicit information about worker knowledge and skill requirements is needed. We need a common, clear language of quality and expectations for everyone -- employers, employees, job seekers, educators, students, and human resource managers. Initiatives that develop voluntary, industry-based skill standards are necessary to improve training and to inform people seeking jobs and promotions about employer's needs.

- *New employment options and flexible benefit packages emerge.* As skill demands escalate and the competition for labor intensifies, we are seeing a host of new employment relationships, including full time, part time, contract, or contingent workers. This calls for a new relationship between employer and employee which is rooted in building employability. To cultivate the long-term employability of their employees, and to increase loyalty, companies are restructuring benefit packages to provide: portable health insurance and pension benefits, family friendly workplace policies, more dependent care options, and flexible education and training for all employees, including education aid for additional knowledge outside of the person's specific job requirements. In addition, firms are participating in the development of portable skill credentials. Employers that provide these things have the best chance at winning skilled employees and gaining their loyalty.

What Employers are Doing for Workforce Quality

The rapid changes in the labor market have made employers far more attentive to human resource development issues, because their competitive advantage relies on workforce quality. Companies are investing more in workforce development, because new data directly links the value of education and training to the bottom line of business.

- *More is spent on education and training.* Corporations are increasing their investments in education and training. In 1995, corporate training budgets totaled about $52 billion. That represents a 15 percent increase from the level reported in 1990. Over 60 percent of companies surveyed are increasing training investments, and only 2 percent are decreasing investments. More employees are receiving training. Over 41 percent (approximately 46 million employees) reported receiving skill training from their employer in the most recent data (1991), a 36 percent increase over the prior 1983 figure.

- *Corporate programs for educational remediation are increasing.* The number of companies providing remedial education programs has increased five-fold, rising from 4 percent in 1989 to over 20 percent in 1994. For example, MCI Communications Corporation, which spends about $75 million per year on training, devotes 10 percent of that total to basic educational skills.

- *Corporate universities are increasing.* We are seeing a dramatic growth in corporate "universities." There are now over 1,000 company universities, up from a level of 400 in 1989. These institutions commonly train the employees of suppliers, contractors, and service companies in addition to training their own employees. Some better known examples include: McDonalds, Motorola, Xerox, Disney, Intel, General Electric, and Sprint.

- *Business involvement in community coalitions for education reform is up.* Business has increased its involvement in community partnerships to improve local schools. The number of formal state and local coalitions of business, educators, public officials, parents, and administrators has increased to over 240 nationwide that the Alliance has been able to document so far.

- ***Smaller companies are linking to form learning consortia.*** For smaller companies, the cost of training is a major concern and economy of scale is a practical problem. The importance of training for economic success has produced innovative arrangements Companies in similar economic sectors pool resources, define common curricula for job skills and quality standards, and work with training institutions or community colleges to share costs. The employer defines the curriculum and pays for individual tuition; the institution provides teacher training, facilities, equipment, and certification.

Direct Benefits from Education and Training

There is a direct payoff to both the company and the employee for the investments in education and skill development.

For companies, studies show that productivity directly increases based on the educational level of the comapny's workforce. A 10 percent increase in the education level of a corporation's workforce (about 1 year of additional education) increases productivity by 8.6 percent. By contrast, a 10 percent increase in investments in plant and equipment increases productivity by 3.4 percent. [National Center on the Educational Quality of the Workforce, University of Pennsylvania.]

For individuals, the clearest basis for economic success is education and skills. Estimates for U.S. workers suggest that an individual's earnings increase about 8 to 9 percent for each year of educational achievement beyond high school.

- According to 1994 data a high school graduate (including GED) earns 64% more than a high school dropout. A person with 1 to 3 years of college (including associate or vocational degrees) earns 21 percent more than a high school graduate. A college graduate with a BA degree or higher earns 52 percent more than a person with 1 to 3 years of college. [U.S. Census Bureau]

- The benefits for individuals are not just in dollars. There is a direct correlation between education levels and reemployment rates, job tenure, and participation in benefit plans. Unemployment also decreases with greater education. Individuals with more education and training have more stable employment compared to those with less. And more educated workers are likely to be covered by, and participate in, a pension or health plan.

The New Social Compact

The social compact, which traditionally defines the relationship between employer and employee, is not dead, as the media would have us believe, but there is a change in what in contains. While the old compact was founded on adversarial assumptions about the roles of individuals and companies, the new compact is built on maximizing life-long learning for the benefit of employees and employers.

The success of the social compact in the new economy requires new ways of looking at the roles of companies, individuals, and the government.

A New Role for Business. Companies have responsibilities for continuous growth and profitability of their business in a complex and changing world market. But, they also have responsibilities to their employees. They are responsible to provide employees with portable benefits like health care and pensions, and with credentialed skills that are world-class, and therefore portable to other jobs. These factors comprise the foundation of worker security in the new economy, and employers have a responsibility to help provide them.

A New Role for Individuals. Individuals will take on added responsibilities for pursuing additional learning, for making key decisions about investments for health care and pensions, and sharing in higher level decision making at the workplace. Individuals will have a responsibility for pattern of life-long learning.

A New Role for Government. The role of government becomes very different in this new environment. Government must provide strong policy leadership, encourage flexibility so companies can adjust rapidly to competitive needs, and, at the same time, ensure the security of workers in this environment by facilitating the portability of benefits and increasing investments in training. Most current government programs and institutions are not structured to respond to changing labor market needs. Our challenge is to build a new foundation for worker security that embraces change, renovates laws and regulations to accommodate new realities, and equips workers with the tools they need for the economy ahead. Policies must reflect the new labor market realities, not the old ones. Government officials must work with, not against, market forces.

The Commitment to Learning

At the heart of these new economic realities and social relationships lies an increased demand for education and life-long learning. It is a fact that job security, mobility, portability of skills, and gains in standards of living rely on increasing levels of education and continuous training. This is why business sees education as important.

Education is such a critical foundation for economic success that the marketplace will become a place of absolute discrimination for those without it. Recognizing education as the core of our social and economic strength, business has also been involved in opportunities that bring schools and academic curricula into close coordination with work site learning curricula. That is why business has been dedicated to education reform for over 10 years and continues its involvement in everything from the recent education summit with the governors to the more than 240 state and local coalitions. That is why business leaders and governors have committed themselves to establishing higher academic standards, meaningful assessments of educational progress, reviewing transcripts and academic achievements in making hiring decisions, and other activities to encourage state and local reforms.

The corporate value placed on education is also why more and more companies are increasing investments for in-company training that meet the life-long learning needs of employees.

Proceeding as Partners

Mr. Chairman, the new economy requires increased investments in education and skill development on a life-long basis. Not all of it can be financed by government, particularly at the federal level, nor should it be. Success will require the joint efforts of business, government, and schools working together. None of these can make it happen by themselves. New partnerships that ensure all parties are working together toward the same goals are essential.

I would be happy to answer any question you may have.

Chairman CRANE. Thank you, Mr. Jones.
Mr. Litow.

STATEMENT OF STANLEY LITOW, PRESIDENT, IBM FOUNDATION, ARMONK, NEW YORK

Mr. LITOW. Thank you very much, Mr. Chairman and Congressman Rangel. I am delighted to be here.

You have our written testimony. I would just like to highlight a couple of points, because IBM is one of those companies that thinks education, and education and adult training included, are the primary issue that we should focus our attention on.

And we came to that conclusion after doing a fair amount of our own research. We asked our employees, since IBM is the leading company in terms of corporate social responsibility in the country, what issue do you think is most important in your community? Where would you like to see the IBM company involved?

They identified education as issue number one. In five cities around the country where we did surveys of community leaders and our customers, we asked them what issue they felt was most important, where should we focus our effort and our attention; they said education, kindergarten through 12th grade.

We looked at the CNN poll that demonstrates that Americans overwhelmingly believe that the quality of our schools is the major issue facing the country today.

So, we have focused our contributions program within the IBM company on energizing our people, our cash, our technology and our technical assistance in finding ways to use technology to improve our schools.

We have moved beyond join-a-school and adopt-a-school to working in two States and eight cities around the country to identify ways where technology can eliminate some of the key barriers that have stood in the way of reaching those high standards that we want to achieve.

So for example, in Charlotte, North Carolina, we have put our technical ability to work on the gap that exists between home and school. Many parents cannot or are not involved in their children's education.

IBM has designed a system, grounded in IBM technology, that will permit parents in the Charlotte school system to view their child's academic records and portfolios, to talk to their child's teachers, electronically, through access points at public libraries and community centers, and housing authority projects, so that they can be involved in their child's education on a day to day basis.

It does not have to be between the hours of 9 a.m. and 3 p.m., it does not have to be once a year at a parent-teacher conference; it can happen on a regular and steady basis.

We think, by this example, not in one school but an entire school system, we can demonstrate to other school systems some constructive ways to involve parents in their child's education, and it does not have to depend upon technology in the home to be able to do that.

In Cincinnati, Ohio, we are experimenting with a system that will extend the school day and the school year, by allowing stu-

dents to work on independent projects through the use of technology and distance learning.

In Dallas, Texas, we are working on a program that will combine the teaching of math and science in a technology base, so that we will not have to segment the school day in a 45-minute math period, or a 45-minute science period.

And through technology, in the Philadelphia schools, we are creating electronic teacher mentor programs, so that teachers can have steady and regular access to experienced teachers, who can advise them, work with them, and sharpen their classroom techniques.

In this way, through a program that we call reinventing education, we have identified 25 million dollars' worth of IBM talent and technology, to be able to create these systems, and then make them available to school systems and states around the country, who want to reach high standards, but need the technology and the help to be able to do that.

We would agree that we are never going to attain any level of achievement unless we have an agreed upon set of high academic standards, a regular system of measuring and assessing how we are doing, and some way of holding people accountable for the results.

The question was asked earlier about the status of grades kindergarten to 12. In some cases we are doing all right, in some cases we have lost ground, and by and large we have been treading water, while many other countries are improving dramatically.

And if we want to improve, there is no way that is going to get us there faster or better than by having a system of high academic standards, quality assessment, and some measure of accountability for performance, that holds people accountable for results.

Now, we have extended our work in grades kindergarten to 12, working with adults and those people who are out of school, because the challenge is to see to it that technology is not something that creates a gap between haves and have-nots, but closes the gap.

So, we have identified 12 projects around the country where we are using IBM technology to simulate work experiences, so that people can be trained through technology, that connects training sites to work sites, so that people can have access to the high quality training materials that they need, and that we can use technology to create a network of programs that can help meet people's educational needs, and skills training needs.

IBM is a company that offers its technology to paying customers. In our philanthropy we are treating school systems and adult training providers as if they were valued customers. We are sitting down with them, with our resources, and we are designing the systems that can help take them to the next level.

That is what this company is doing. We are doing it largely out of self-interest, because we cannot be a successful company if communities are not successful, and communities will not work unless their schools work.

So, thank you very much for inviting me. I have left you with our written testimony and a lot of materials that we have developed, and I would be happy to answer any questions at a later point.

[The prepared statement follows:]

STATEMENT OF STANLEY S. LITOW, PRESIDENT
IBM FOUNDATION

Chairman Crane and members of the Trade Subcommittee, my name is Stanley Litow, President of the IBM Foundation. We appreciate the opportunity to discuss our education and training programs with you.

These programs are designed on the belief that the same information technology innovations that are revolutionizing business can provide important breakthroughs for public and nonprofit organizations. Technology has the power to help these organizations deliver higher quality services, manage costs, maximize effectiveness and implement exciting new programs.

IBM's commitment to solutions-oriented innovation requires that we go beyond simple checkbook philanthropy to more comprehensive programs of corporate citizenship.

Our primary focus for our corporate citizenship efforts are K-12 education and adult education and training. We focus on the issues of education and training because our employees, shareholders and customers tell us they think education is the number one challenge facing our country, and also because we know that no business can succeed in an unsuccessful community; and the most important factor in determining the success of a community is its education program. The American public agrees since the latest CNN poll suggests Americans rate education as our number one challenge. Moreover, all research indicates that educational attainment is the greatest and most reliable predictor of economic success and a stable work life.

One way we are using IBM expertise and corporate contributions to improve education is to help school systems solve some of their toughest challenges through the use of technology. We are investing $25 million through IBM's Reinventing Education initiative in 10 school districts and states over the next three to five years. This program reflects our belief that technology solutions can redefine and improve how our schools function. To be selected for an IBM Reinventing Education grant, school districts or states had to commit to setting world class academic standards, but we did not select only the highest performing districts. In fact, we selected some of the most challenging geographies in the nation. We wanted to find locations where there was a commitment to change and a desire to use the power of technology to bring that change about. The nature of this initiative is best demonstrated by describing the sites in which we are working.

In Charlotte, North Carolina we are using technology to get at the serious question of parent involvement. As the Charlotte schools struggle with the challenges of parent involvement and fight to overcome the twin barriers of time and distance that oftentimes keep parents (especially working parents) from full involvement in their children's education, we are building a "parent friendly" computer network to bridge the gap between school and home. In Charlotte's new Governors Village complex of schools due to open next month, computers will connect parents to their child's school via access points at community centers, public libraries and homes. In these locations, parents and community caregivers will be able to review information about current classroom activities and homework, view test papers and examples of student work. In addition, "electronic" parent-teacher conferences will keep

parents connected to the process of education and learning. If successful in Charlotte, this system can be replicated in other districts and states and applied to increase connections between teachers and teacher, parents and other parents, etc.

In Dallas, Texas educators are struggling to overcome the segmentation of the school day which often frustrates learning, especially in areas such as math and science. The typical 45 minute class period stands as an impenetrable barrier to the teaching of advanced math, especially problem solving and laboratory and hands-on science. Working together, IBM and the Dallas Public Schools will create the first ever interdisciplinary math and science software. Initially focused on the middle schools (grades 4 - 8), it will provide more time on task in math and science. All of this is designed to help students meet new, tougher math and science standards. Obviously, the software can be utilized by a host of school districts and states.

In the other areas such as Vermont, West Virginia, San Francisco, San Jose, Philadelphia, Chicago, Broward County, Florida and Cincinnati, Ohio, technology is helping rethink teacher training, lengthen the school day and year, improve student assessment and develop better information for school-based decision making.

Just as technology can be vital in the education of our children, it can also be a powerful tool in education and job training for those who are out of school. Contrary to the view that technology deprives people of jobs and deepens the divide between society's "haves" and "have-nots" we have discovered through organizations we support through IBM's new Workforce Development Technology grant program that technology can help broaden opportunities and strengthen programs and services available to those in need of new skills and education. By simulating real work conditions it can make the acquisition of education and skills more effective. Moreover, technology can bridge the gap of time and distance connecting people to training and then to available jobs.

Unfortunately, while technology can provide a vital set of solutions, for the most part adult education and job training programs currently use technology in very limited ways, i.e. simple keyboard training or the teaching of basic office skills. At a leaders forum that IBM sponsored a year and a half ago for those involved in adult education and training programs certain key barriers were identified, standing in the way of the more effective use of technology in adult education and training. They are: cost, knowledge of technology, staff expertise, equity, poor practices and the need for clear standards. To develop the practical experience base to help eliminate those barriers we targeted our technology and technical expertise on programs that deal with the core elements of effective training and education. These elements are: Recruitment and Assessment: the central and critical first step in adult education or training. Program Content and Education: i.e. increasing the scope, and quality of the tools used in adult education and training. Job Development and Placement: i.e. developing the right match between skills and jobs, the A´er Placement Process: ensuring that people succeed on the job and, lastly, Staff and Professional Development: i.e. ensuring

that staff who work in adult education and training programs are able to meet the demands of their jobs. In each of these five areas, we agreed to support programs that use our technology to eliminate barriers and resolve systemic issues.

In March, after sponsoring a nationwide competition, we awarded a dozen technology grants valued at a total of $2.5 million.

Let me give you a sense of the scope of this initiative by running through the organizations that have been selected to receive IBM equipment, software and technical support:

Veteran's Leadership Program (New York) -- The Veteran's Leadership Program (VLP) provides interactive modules of education and training that enable participants to translate their military skills and experience to the job market and entrepreneurship. VLP will use IBM technology to provide on-line access to curriculum modules, individualized education and employment planning, job development and placement services, communications lines with employers and one-to-one training and consultation for staff and trainees.

Atlanta Regional Commission (Atlanta) -- IBM will provide technology to ARC to create a regional technology model for case management, training, employment services and referrals. An innovative voucher program will allow clients to purchase education and training directly from a list of pre-approved institutions that will increase flexibility in client choice.

El Centro College (Dallas) -- IBM will provide technology to El Centro College to create a comprehensive career path in digital imaging. This program will provide leading-edge technology and training to all student populations, including the physically challenged. Faculty support and professional development will be accomplished through the use of interactive teleconferencing and on-line networking.

F.E.G.S. (New York) -- Since 1934, F.E.G.S. has been helping new immigrants and displaced workers enhance their job skills. Their grant from IBM will be used to establish a Technological Applications Learning Center to integrate technology into an array of existing programs and demonstrate effective uses of technology in training clients. The Center will also provide a valuable link between job listings and employment listings.

Na Ohana Ho omalamalama (The Hawaii Collaboration) -- IBM will fund a collaborative adult basic skills and workforce training program that links Alu Like, a local multi-service community-based non-profit organization, with the Governor's Council for Literacy and Lifelong Learning and the Hawaii Literacy Policy in Action Academy. The technology from IBM will help this collaboration use telecommunications and create multiple access points for clients for distance learning, on-line services, a referral system for job training, and resources for clients and practitioners throughout the four islands of Hawaii.

Jobs for Youth (Boston) -- Jobs for Youth is a nationally recognized school-to-work transition program. IBM multimedia technology will be used by Jobs for Youth to convert their environmental industry instructional materials to computer-based instruction that will enable

Chairman CRANE. Thank you, Mr. Litow.
Mr. Reddy.

STATEMENT OF LEO REDDY, PRESIDENT, NATIONAL COALITION FOR ADVANCED MANUFACTURING, WASHINGTON, DC

Mr. REDDY. Thank you very much, Mr. Chairman.

I would like to congratulate you and your colleagues for having the insight to recognize the direct relationship between our trade competitiveness and the importance of having a skilled work force, able to produce the goods and services we need to compete globally.

It is a connection that people have needed to make more firmly than in the past.

For our part, our organization, which represents a broad coalition of companies, trade associations, and technology centers around the country, focuses on introducing advanced technologies into our factories. Our coalition has taken a very close and hard look, in the last year, at what the public policy climate should be to accelerate the movement and transition of our industrial base into the third wave, if you will—into the information age.

We will distribute our report, which we published this year, separately to all the Members of the Subcommittee. The report is called "U.S. Industrial Strength for the 21st Century."

I can confirm Mr. Rangel's observation earlier this morning that, indeed, work force training and education is now up front on industry's agenda, and I think you have already heard that from my colleagues here at the table.

The reason for that is quite evident. Companies are facing a growing shortage of the kind of work force they need to be competitive, and it is hitting the bottom line.

As one example I could give you—there are many examples—I am going to distribute to the Members of the Subcommittee a chart which one of my members just gave me, which describes the advantages of a career as a precision machinist or tool maker, where many experienced tool makers are making in the $40,000 to $60,000 range annually.

And basically they are no longer working in gloomy rooms and on greasy machines. They are working with computers and high technology machinery.

It is a wonderful career. The problem is, there are now 20,000 jobs in this particular area that cannot be filled, in a $25 billion industry. There is a real problem. Our data show that 4 out of 10 companies are unable to adopt advanced technologies to improve their productivity because they lack sufficient skilled workers.

After looking into and debating this issue carefully, we came to the conclusion that the Federal Government indeed plays an important leadership role. The government can act as a catalyst. It has done some excellent things. I think the skill standard projects that Mr. Jones mentioned are a good example.

We certainly support School-to-Work, Tech Prep, and other programs—Job Corps, JTPA—these are all worthy programs. However, the Federal Government is limited in its resources in this area.

Our basic feeling is that the only way we are going to begin to close the gap between what schools are providing and what the employer community needs is far-reaching structural reform—a change in priorities, a change in philosophy—that goes well beyond individual programs, that goes far beyond individual tax credits.

It is a fundamental change in priority.

To illustrate that, let me very briefly go over the four principal recommendations in our report. The first, in the area of priorities, is the Charlottesville Education Summit—you may remember that in 1989, between the President and the 50 Governors.

They put out a communique that said the purposes of education are threefold. First, responsible citizenship; second, further learning; and third, productive employment.

We would submit that these priorities should be reversed, that productive employment should be put at the head of the class. Our view is perhaps too much of a business oriented view, but it is a practical one, and I think it goes back to another point Mr. Rangel made earlier this morning.

Without a good job, it is very difficult for an individual to discharge the responsibilities of citizenship, or to afford further learning. It really is the starting point.

The next recommendation we have is that, again, to close the gap between what schools are doing and what the employer community needs is to place much greater emphasis on the development and use of standards—skills standards—for people coming out of the school system.

The key to the success of skills standards—and we hear a lot about skills standards these days—is they must be employer driven. The starting point has to be the employer community. They first have to use those standards themselves in their own workplace, and when they do that, then they can communicate effectively to the broader community what they are seeking.

Our third recommendation is to place much greater emphasis on beginning career awareness and preparation at a much earlier stage in a student's development. Begin even in the primary grades to get people used to developing some of the skills they need in the workplace, and to begin to think at a much earlier age about future career directions.

In our perspective, the whole dialectic about college-bound and noncollege-bound and work-bound is entirely wrong. There should be only one question, namely whether all individuals—not an exclusive, but inclusive approach—whether all individuals graduating from school or leaving school, are prepared for productive employment.

If they can get that preparation in grades kindergarten through 12, so much the better. The idea that everybody has to go into 2 more years of school, misses the point. That is a process point.

The substantive point is that everybody should be prepared for productive work, and should be thinking much earlier in life about their careers. They should not be going to college just for its own sake, but to go to college to get additional skills they may need for special areas of employment.

students to learn at their own pace. Software training applications will be based on the most current industry requirements, and will be developed in close consultation with industry experts and with the MIT Media Lab.

Michigan Career Technical Institute (Plainwell, Mich.) -- MCTI will coordinate the Michigan Workforce Support and Development Network, which is a collaboration of six non-profit organizations. IBM technology will be used to create on-line training and employment systems for Michigan's workforce, especially workers with disabilities. It is anticipated that this program will enable persons with physical disabilities to gain access to quality training and appropriate services regardless of where they are located. Emphasis will be on training for the automotive, pharmaceutical and food service industries.

National Center for Adult Literacy (Philadelphia) -- Based at the University of Pennsylvania, the National Center for Adult Literacy with technology from IBM will significantly expand the national capabilities of the Adult Literacy Technology Innovation Network, which will provide hands-on training, as well as on-line training and technical support to the adult literacy community.

Rebuild LA/Los Angeles Trade-Technical College (Los Angeles) -- IBM technology will be used to create a "teaching factory" model for technical training of students studying the apparel, fashion and textile industries. A high tech apparel production line and simulated work environment will help students learn to operate in a real-time computerized production mode. The program, based at Los Angeles Trade-Tech College, will also offer seminars and courses to employers interested in learning about technological developments in the fashion design and production industry.

SER Jobs for Progress National (Dallas) -- SER Jobs for Progress, the largest Hispanic service-oriented non-profit corporate in the United States, provides extensive employment training. SER will use IBM's technology to create new instructional English-as-a-Second Language (ESL) and Adult Basic Education (ABE) training materials and distance learning programs geared specifically to high-growth occupations such as those found in health care, insurance, travel and pharmaceutical industries.

Tennessee Urban League Affiliates (Memphis, Chattanooga, Nashville, Knoxville) -- Working in partnership with the Tennessee Valley Authority and the University of Tennessee-Knoxville, the Tennessee Urban League Affiliates will use IBM technology to develop a model to analyze local economic data to identify industry-specific job opportunities, profile local industry requirements for these jobs and then develop computer-based training for staff and clients. Using on-line communications, all offices will be involved in project design, development and testing of an industry- specific career path training program which moves from entry level through advanced skills. It is expected that distance learning programs will also be established to provide training at the workplace and at multiple training sites.

Training, Inc. (Boston, Indianapolis, Newark) -- IBM will provide technology to three Training, Inc. Affiliates to help redesign and upgrade student assessment, training, employment services and staff development. Training, Inc./Boston will create a database of individualized student portfolios for assessments, personalized education and employment plans and outcomes. Training, Inc./Indianapolis will enhance existing workplace simulations by adding interactive communications between customers and other entities outside the simulated business environment. Training, Inc./Newark will develop new workplace simulation models for the security and surveillance industry and for computer aided manufacturing and design (CAD/CAM).

All grants consist of the outright donation of IBM equipment and software, as well as IBM consulting assistance to develop the systems and know-how necessary to use technology effectively in workforce development and training.

The issues in K-12 education and those in adult education and job training are different, but the applications of technology to the core operating questions have in fact more similarities than differences.

What is most vital to us, however, is our conviction that the technology that is driving change and economic growth in the private sector can, if used properly, help us cope with the educational challenges in front of us. As a technology company we take our responsibilities in this regard very seriously.

In cash and technology valued at market rate, we will contribute over $90 million this year. It goes to a host of programs and projects in the United States and around the world targeted on technology as a problem solving tool in education and training. This makes IBM's contribution efforts in education and technology one of the nation's largest -- and we think one of the best.

Our final point is that we need much stronger engagement by the business community in this whole process, and I am delighted with Bob Jones' report about the growth of business school consortia.

We are very encouraged by IBM's leadership in forming and convening the summit meeting in Palisades, New York, earlier this year. We think those are encouraging steps in the right direction.

But all of these are essentially moving around deck chairs on the Titanic and putting Band-Aid solutions on the problem, unless we really look at the need for structural reform and change in priority and philosophy.

Thank you.

[The prepared statement follows:]

U.S. TRADE COMPETITIVENESS AND WORKFORCE EDUCATION AND TRAINING

Testimony by Leo Reddy, President
National Coalition for Advanced Manufacturing (NACFAM)

Before the Subcommittee on Trade,
Committee on Ways and Means
U.S.House of Representatives - Longworth Building
July 25, 1996, Washington, D.C.

Mr. Chairman:

I would like to congratulate your committee on its foresight in organizing this important hearing on U.S. trade competitiveness and workforce education and training.

You have recognized that global competitiveness and growing exports exert added pressures on the American workforce.

The only way in which our workforce can withstand those pressures is to continuously improve the skills it needs to produce globally competitive products and services.

No sector of our economy understands this better than manufacturing. Manufactured durable and non-durable goods represent over 80% of our nation's exports. Employment in the manufacturing sector together with nonmanfacturing industries directly related to manufacturing accounts for about 41 percent of the nation's workforce.

I would like to focus my remarks, therefore, primarily on the manufacturing workforce--although much of my analysis and recommendations could apply equally to the services sector.

Industry Perspective

The National Coalition for Advanced Manufacturing is a non-profit, non-partisan organization of companies, technology and training centers, and national trade and technical education associations that are working on and around the factory floor to improve the quality and competitiveness of products made in America. We are committed to developing and helping to implement national programs and policies designed to accelerate the use of advanced, Information Age technologies by all tiers of the U.S. domestic industrial base.

This year, NACFAM published a comprehensive White Paper, *U.S. Industrial Strength for the 21st Century*, that represents our industry-led view of the public policies measures needed over the next five years to maintain the U.S. lead in global industrial competitiveness well into the next century. We will distribute copies of this paper to all the members of the Subcommittee.

One of the principal sections in that White Paper is on workforce education. I will use the analysis and recommendations in that paper as the basis for my testimony today.

Changes in the Workplace

The aggressive development and deployment of Information Age manufacturing technologies offer immense opportunities for expanded economic growth and competitiveness. Yet the key to the practical use of these technologies is the availability of a highly skilled workforce.

The pace of technological change is transforming the manufacturing workplace. Advanced production technologies have replaced large quantities of unskilled, low-skilled jobs and single-craft jobs with positions requiring multi-skilled "techno-professionals" able to deal flexibly with information-based, computer-integrated technologies and to participate in decisions related to process and product improvements and scheduling.

In a flatter, "high performance" manufacturing environment, these workers must have the personal attributes, communications and business knowledge to work in teams, accept responsibility for customer satisfaction, and be fully accountable for their own actions.

Industry is discovering that it can not enjoy the full flexibility offered by advanced manufacturing technologies without a skilled workforce. The demand for techno-

professionals is growing. Technological change leads to a shift in favor of workers with higher levels of education.

Shortage of Skilled Workers

The supply of techno-professional workers, however, is insufficient, sometimes dramatically so. For example:

- Twenty percent of our adults are functionally illiterate, compared with only one percent in Japan.

- Four in ten business executives say that they can not modernize their equipment because their workers do not have the appropriate skills.

- Many employers have to work their way through 40 to 60 interviews to fill a single position.

- The lack of basic job skills also compels firms to invest heavily in remedial training, leads to higher wastage rates, and increases downtime.

This gap has grown so wide that many companies have given up on the school system, the traditional source of preparedness for entry level workers:

- A 1992 study by the National Association of Manufacturers, based upon a series of 14 CEO-level focus group meetings across the U.S. concluded that "school systems have failed...All groups felt that the school systems are providing neither adequate basic skills nor an adequate understanding of business and the necessary work ethic."

- The 1993 report of the Competitiveness Policy Council concluded, "we will have to dramatically improve the education and training for new, young labor force entrants if we hope to compete effectively."

The Root Problem: Wide Gap Between School and Work

The root cause of this shortage of techno-professionals is the yawning gap between what schools are teaching and what the workplace is demanding.

Many of the nation's high school graduates move to low paying, low skills stop gap jobs, usually in the retail and service sectors, and have to wait several years before they are even considered for a job with decent prospects. It is with reason that this large population of the nation's youth has been dubbed "the Forgotten Half."

The problem of transition from school to productive work is not confined to secondary school graduates. Many college graduates also finish school without a clear career direction. Large numbers drift into assorted jobs, experiment with postgraduate courses, remain living at home, and postpone family responsibilities until they are in their late 20s and early 30s. According to recent research findings:

- Even seven years after high school graduation, less than half of our young adults can correctly predict the occupation they will be in five years later.

- Twelve years after high school graduation only 28 percent of young adults followed a pattern of either full-time school followed by full-time work or had worked the entire 12 years.

- By age 30 only a third of working adults in the U.S. have been in their jobs for more than one year.

A very substantial research challenge would be to assess the enormous cost and productivity loss to the national economy and to our global competitiveness of:

- the years spent by both secondary school and college graduates between the completion of their studies and entry into their principal place of future employment

- the cost to employers of remedial training needed to educate entry level workers in basic math and communications skills that they should have learned in K-12

- the cost to parents of sending their children to schools that do not prepare their graduates for productive employment.

This disconnect between school curricula and workplace needs is a basic structural problem that will only grow more serious as schools, as they are presently organized, are unable to modernize rapidly enough to keep pace with the dynamics of technology.

Federal Programs: Only Partial Solutions

In parallel with growing concerns the 1980's over the ability of the U.S. to compete effectively in the global marketplace, there was a heightened awareness of the need to focus more strongly on developing the skills and knowledge of the American workforce. This, in turn, led to various federal initiatives. These programs, however, represent only partial solutions that do not address the underlying structural gap between school and work.

The Job Training Partnerships Act, JOBS, and the Perkins Vocational Education Act are worthy programs and deserve support, but they are focused heavily on special populations. The Tech Prep and subsequent School-to-Work programs enable the federal government to stimulate local initiatives to close the gap between school and work, but their funding levels are modest. Indeed, in a 1993 NACFAM study of all federal education programs, we found that less than 10% of the funds were allocated for all forms of vocational-technical education.

The federal government has an important leadership and direction-setting role. Even modest federal funding can have a strong catalytic effect at the local and industry level. As noted in the recommendations below, the federal role in supporting industry-led, voluntary national occupational skill standards is an example of this federal leadership role at its best.

The principal responsibility for educating and training America's industrial workforce, however, rests with employers, teachers, schools, and state and local government. In keeping with our national culture, the major resources for this purpose also reside with states and localities, not with the federal government.

As suggested in the recommendations that follow, more fundamental reform is needed far beyond what the federal government can accomplish. These reforms go to the heart of the school culture and business-school relationships and would give the employer community more leverage, but they do not require additional resources. Indeed, they will lead to greater efficiencies and cost savings.

In preparing NACFAM's recommendations in this field, we thus went on the assumption the education improvements would have to be effected through re-direction of resources and organizational change, not in additional dollars or school hours. This U.S. already scores high among OECD countries in both categories.

NACFAM Recommendation 1: A Basic Change in Priorities: Make Productive Employment for All Students the First Goal of the Nation's Schools

The starting point for genuine school reform must be at the level of basic priorities. Current priorities are embodied in the "National Education Goals" adopted by the President and state governors at the Charlottesville Education Summit in 1989, which stated that students should be prepared for "responsible citizenship, further learning, and productive employment."

This paper recommends that "productive employment" be put at the head of the class. Under this approach, the first priority of schools should be to prepare its graduates to move promptly into a rewarding career field that is commensurate with the student's interests and abilities.

This change in priorities does not signify indifference to education for "responsible citizenship" and "further learning," but rather makes the simple point that rewarding employment is the foundation stone upon which the other benefits of education rest. A citizen without a good job is less likely to meet his civic responsibilities and to afford "further learning" than is a citizen who is productively employed.

Under this new approach, the measure of a school's success and of student achievement would be the placement of all graduates onto a clear track toward a productive career either immediately following school or through more specialized training at post secondary level.

With career placement as the driver, the distinction between "college-bound," "vocational," and "work bound" students would be irrelevant, since all students will be

viewed as bound for productive employment. Indeed, if a student can move quickly to satisfying, economically rewarding work without the time and expense of college, this should be viewed as a more successful model than a student going on to college without a specific career objective.

The focus on preparation for work would give greater motivation and recognition than is presently the case to students who are gifted in team-building and applied learning and technical skills. In addition, schools would have greater accountability for the employment of *all* its students and give far more emphasis to career preparation than is presently the case.

This shift in priorities would require a far closer interaction between the employer community and the schools. In particular, employers would need to take greater ownership of the schools and communicate their own workforce skills requirements more clearly.

Some of the succeeding recommendations point to how this basic change in priorities could be accomplished.

NACFAM Recommendation 2: Use Employer-led Standards as an Important Tool for Curriculum Planning and Student Learning

One key to ensuring that students can gain productive employment is to base the school curriculum on employer-led standards. The employer is, after all, the "customer" of the school system. Employers will become better "customers" if they communicate clearly their specifications for job skills--and follow up by employing individuals with those skills.

Fortunately, new methods are now available to facilitate this communication process. States and communities are beginning to make employer-driven skill standards, often in connection with School-to-Work programs, an integral part of their education systems.

They are aided in this connection by innovative work done by industry groups since 1992. In that year, the U.S. Departments of Education and Labor began providing federal matching funds to leading national trade groups to identify voluntary national occupational skill standards for their respective industry sectors.

In supporting this program, the federal agencies wisely let the national associations design the standards according to their own perceptions and needs, thus making them more authentically employer-led. These are thus *national*, not federal, skill standards.

The main value of these pilot projects is that they provide useful national benchmarks against which states, communities, and companies can develop *standards of their own that fit into their individual economy and labor market conditions* .

States, colleges and schools must take these skill standards and integrate them into broader curriculum frameworks and performance standards. In addition, each state must decide at what level (secondary, post secondary or incumbent worker) they will be targeted for instruction.

While the employer community should take the lead in initiating work on skill standards, participation in the standards setting process by school, state and local governance, parent, and labor organizations will also be needed. Standards must be updated on a regular basis and should be cross-checked against national standards.

This requires a higher level of employer-school collaboration and partnering. Business-school skills standards councils, co-chaired by employer representatives, might be the appropriate format. This process is beginning: In several states, schools are required by law to work with business advisory committees to assure that school programs meet local employer needs.

In basing curriculum and student learning on demanding employer-driven standards, the school systems would take a major step towards shortening the time between school and productive employment. There would be another major benefit: making the high school diploma meaningful again for all students.

This would reinforce the efforts in some states to do just that and would help elevate the skills of the entire national workforce, not just those who go on to college. To participate successfully in an information age economy, *all* students should perform at the 12th grade (not the 9th grade) level before receiving their high school diplomas.

NACFAM Recommendation 3: Strongly Emphasize Career Preparation

Another requirement for effecting a basic shift in school priorities towards productive employment is to place much stronger emphasis on career guidance. Most students are not well informed about the world of work and have few guideposts to steer by. As a Competitiveness Policy Council report observed, "Students not immediately bound for college get little in the way of occupational counseling or know anything about career opportunities and requirements and their rights and responsibilities on the job."

Career orientation and preparation for work in an Information Age economy should start should start in the primary grades and continue throughout secondary school--not be postponed until graduation time.

An effective system of career orientation would require that teachers also become more familiar with the employer community in their areas. Teachers and employers should create increased opportunities for teacher summer training within local firms and for company experts to offer instruction at schools. Teacher interning, job shadowing and career mentoring are invaluable tools in furthering student learning and workplace awareness. Provision should be made to fund the release time for teachers to engage in these activities.

Some of the same practices described above could also be applied to good effect at the college and university level. In particular, these institutions are weak at helping students with job placement and tracking their progress after graduation (except for alumni contributions). Industry-university ties should be greatly strengthened for this purpose.

In sum, meaningful career preparation requires a seamless web of orientation from the early grades through technical schools, community colleges and higher education through which youths and young adults can obtain information about:

- careers and the qualifications needed to enter them
- the academic and occupational skills needed to enter the field
- post secondary systems that offer more advanced programs, and
- employer programs that offer opportunities for greater expertise.

This continuum of opportunity will provide students a chance to "be all they can be"--a slogan that the military did not choose by accident.

NACFAM Recommendation 4: Increased Employer Engagement and Leadership

The work-based school system described above would require a major culture change in most school districts. Yet even employers who take a direct interest in the schools feel that their ability to change the system is limited.

Perhaps the most effective way for employers to increase their influence over the schools is to become actively involved at the community level, following the lead of employers that already do. A more vigorous role by industry underpins all these recommendations in the field of workforce education.

The employer community must communicate its needs in specific terms through leadership in creating skill standards, preferably benchmarked against national standards. They should strongly support those educators and trainers who undertake change to meet those needs, and insert the concept that "all students can learn" into every discussion. Most importantly, when individuals who have met employer-driven specifications are prepared for work, employers should give them good jobs.

An investment of human resources and leadership in helping to re-direct the schools towards preparing individuals for productive employment will provide companies with workers with the skills needed to increase productivity, improve quality, and response to customer needs.

This investment will also enable companies to enjoy substantial cost savings in recruiting and screening entry-level workers, remedial training, and re-training of incumbent workers. In addition to helping students find rewarding employment, employer leadership will also assist schools and teachers in gaining the support of the employer community in meeting their resource needs.

For these reasons, NACFAM is highly encouraged by the meeting this spring in Palisades, New York, organized by industry leaders. The focus of responsibility was correct: on employers and state governors. The strong emphasis on standards was also right. The key requirement is follow through to ensure that those standards are, in fact, employer driven and that the schools use these standards as the foundation for curriculum at the classroom level.

Mr. Chairman, the challenge of educating and training the American workforce to meet the pressures of the global competitiveness challenge of the 21st Century is vast. As the recommendations I have cited suggest, the starting point for rising to this challenge is to make productive employment for all of our students the first priority of the nation's schools.

Chairman CRANE. Thank you, Mr. Reddy.

I commend all of you for your presentations, and the information you have provided the Subcommittee.

Let me throw out a generic question, and that has to do with even better integration than we have now between the private sector and our government sector, if you will, referring to government's involvement in education.

You people are in the frontlines, in the trenches, so to speak. Is there any impediment to the advancement of the initiatives that you have all made already, and want to see continue and expand with any of our exiting government programs?

Mr. LITOW. We selected 10 school systems and states to operate in. There are 15,000 school districts in the United States. We selected those districts that were willing to make systemic and fundamental changes. That assumes that there were thousands of school districts that were not.

I think that largely the structure of education, grades kindergarten through 12, is a vestige of the 19th century; we are getting ready to go to the 21st century.

The length of the day, the length of the year, the training of teachers the jobs people have in the school system, the total absence of any new technology, is basically, the way that schools were operated decades before.

And we need to create incentives for school systems to change, and obviously to reward those incentives, but also to have some sanctions for those that do not, or will not, change.

I think that this is not an industry that is going to change by the few shining examples, and then allow the overwhelming number of schools and school systems to exist the way they existed before, whether that pressure comes from one level of government, at the Federal level, or from the State level, which has most of the responsibility for education.

I think it has to come from all levels, of government and the private sector, to let people know that the current way that we operate our schools is just not satisfactory, and parents and citizens overwhelmingly agree.

If you read the latest public agenda poll on what people think about education—we had a speaker earlier who said that people are largely happy with their neighborhood or local school. I would wake up and read the latest polls, which indicate that is no longer the case.

People are not so happy or content with the schools the way they are, and they do not think that their children are going to graduate with the skills to be able to work in the workday today.

So, I would think that we need to get a consensus among government and business that there are going to be some serious and system changes. That is what people began by agreeing to at the National Education Summit in the Palisades, but it is going to take a lot of work to make it happen.

Chairman CRANE. Well, something that I do not begin to grasp is our sophisticated computer technology, and I have seen studies that indicate that in a lifetime you tend to, on average, make five career changes.

And, since I am 65 years of age, and I was a traveling salesman, a university professor, a headmaster of a private school, and then a politician, I am going to have to go back to school before I make that next shift.

I thank you for your presentation.

Mr. Rangel.

Mr. RANGEL. I knew today was going to be one of the most exciting days in my legislative career, and your testimony has proven it.

I would hope that before I set up this conference that I would have the opportunity just to meet with the three of you, to make certain that we do not have a waste of time. And when you said that your firm, IBM, was doing this for the company, you meant the broader community, and that there has to be change.

What is really working against us is the system that allows local property owners, and state legislators, to fund the schools. The schools are not funded according to need, they are funded according to equality.

And so each legislator has to go back home saying he got just as much as someone else did, or the bill is not going to pass. And since the majority of the legislators do not have the same problems that a few of the districts have, we do not have a system that is based on the needs of our country, it is based on the political needs of our legislators.

One of the things that has been missing is that the private sector, recognizing this, could not find a forum to express the issues in the way that the three of you have today.

If we met with the people who set the policy, and if indeed this Subcommittee, that not only deals with tax policy, can provide incentives, we can provide ways that in every town and every village it would not be just the local legislator, it would be people saying, "Well, what about America?"

And so, as you said, Mr. Jones, so eloquently, I am out of doing social work. I am with Mr. Crane, I want to broaden the economy; economic wealth is the only answer, and reducing our national deficit, and reducing taxes, and providing more incentives for those people with money to invest with little or no risk, so that we'll be more productive.

And while we are doing those things, you will be also a part of the national group that are saying, "And do not forget that investment in human productivity, because we need them both."

And so, I am out of social programs, and I think what we say is three things. One, we have to find out from you what your specifications are going to be, not just for your balance sheet this year, but for the decades after, and what you need.

Two, we cannot just merge our companies, and say that we do not need this human machinery, and so you are just dismissed. We have to find a way to make certain that these people are going to be trained for something, because they have mortgages, they have families, they have responsibilities, but for God's sake, do not let them lose hope.

Because there are some people who depend on taking advantage of their hopelessness, they do not make a positive contribution.

Finally, and again staying away from social work, we have to make certain that we do not create economic problems for ourselves by having to invest productive money into programs that do not produce anything, and hardly contain the problems.

I find this to be very exciting, not what we have done today, but to consider this a beginning, where nobody's going to tell you to stop what you are doing, but it will give you an opportunity to see what the other partners and government can do to encourage and enhance your efforts.

And Mr. Litow, people who do not see the advantage of doing what you are doing in selected communities can be made to understand better that those who produce get, and there is a nicer way to say it, and I will find that language.

But you do not take Federal dollars and just say, in a general way, we have got scholarships. We want to be able to see what are the results of the investment that we are making, especially since the private sector has not come to the Congress and asked for the type of assistance which you do for research and development, and any other number of things that allow you to remain competitive.

But I want you to know that I am going to be here, and receptive, when you start asking for those incentives to make a more educated and more productive America.

We are not going to change anything overnight, but I have an idea that more Americans are reading from the same page than we hear in the halls of the U.S. Congress.

Let me thank you so much, for what you have been doing, but more importantly for what you are going to help me, this Subcommittee and this Congress to do for America in the future.

Thank you very much.

Thank you, Mr. Chairman.

Chairman CRANE. Thank you.

Mr. Houghton.

Mr. HOUGHTON. Yes, thank you, Mr. Chairman.

Gentlemen, I am sorry I was not here for most of your testimony, but in reading quickly over your papers, and some of the questions that you have suggested, let me just ask this.

You know, we could talk about increasing governmental programs, and you have said that that is really not the answer, although it is part of the answer. We can do a variety of different things in terms of our communities; businesses can increase the educational component.

But doesn't a change in attitude have to take place, because our problem is that there is a whole group of people here who are not getting educated at all, and those are the people who have the potential, but there is no incentive for them—there is no Sputnik out there, to enthuse them.

How do we change that around? There are all sorts of things which businesses can do, but it cannot change the attitude outside of the corporation—peripherally in a community, but not that much.

How do we change this attitude.

Mr. JONES. Congressman, let me suggest that business does have a role on that issue, in conjunction with government. It may be one of the most important ones of all, in getting the American people's

attention, to understanding a very significant shift in the ultimate American value.

That was the belief that you could get a job in this system, and you could work your way up to be president of the company, or indeed President of the country, and that simply is not true any longer.

Without basic education skills, the ability to get in, and to maintain wage equity, has changed forever, and the American public—parents, teachers, students—do not understand that. It goes to the heart of the financing issue, it goes to the heart of the way we run schools, it goes to the heart of the public policy structure, and how we work within companies.

But we need to make the public, business, parents, teachers more and more aware of the impact of this shift that we are seeing, and its growing impact over the next few years, and I think we all have a role in it.

But if we do not do that, all the programs we pass, all the structures we engage in, are only going to have minimal impact on this discussion.

Mr. HOUGHTON. Would anybody else like to make a comment on this?

Thank you, Mr. Jones.

Mr. LITOW. Well, I think it comes back to this issue about standards. We are the only country that does not have a set of clear academic standards, that people are held to, and are accountable for.

Again, the latest public opinion poll indicates that while people have a lot of different opinions about what to do about the education problem, the thing that they all have consensus on—rich, poor, black, white, north, south—is that they would support high academic standards, and they are actually quite frustrated that there are no standards in the schools—a clear expression of what children should be able to know and do, by grade level.

So, I think if you are looking to get at the issue of attitude and motivation, I do not think that there could be anything that would contribute more to that than having a clear set of standards, assessments that tie to them, and some sense of accountability for performance.

Mr. HOUGHTON. Mr. Reddy.

Mr. REDDY. Just a couple of points, Mr. Houghton. Some of our research has indicated that—I can cite a couple of points here that you will find in more detail in my written testimony—even 7 years after high school graduation, less than half of our young adults can correctly predict the occupation they will be in 5 years later.

Related to that, by age 30, only one-third of working adults in the United States have been in their jobs for more than 1 year.

This is what we have come back to in our analysis. There is an enormous yawning gap between what the education system is providing and what the workplace is demanding. The best solution that we have been able to come up with on that is for companies and employers of all kinds to communicate more clearly, to parents, schools, and to students, what the workplace needs.

And the school system needs to respond. That means that when people move out of school, they are prepared to move into produc-

tive employment. So far that is really not happening, and we are very far from that.

So, I just want to reemphasize the importance of that point.

I shy a little bit away from the fact that people place a lot of this blame at the feet of teachers and say that schools are "failing." I do not really think so. I think that most of our teachers really do want to teach young people, knowledge and skills they will need for their future.

I do not think we have some kind of an evil school bureaucracy out there, that is really trying to undermine our young people at all.

I think one of the larger failings comes from the fact that the employer community has not addressed this question effectively enough, and has not made clear enough to the schools what it is they are seeking, and we hope that the standards movement will help to close that gap.

Mr. HOUGHTON. Could I just ask one more question, Mr. Chairman? I know my time has run out.

You know, there are many issues out there that you cannot quite tie together, the many different solutions to those issues, and I suppose we have just got to peck away at it, and the greatest example, probably, is better than a lofty sermon or a set of principles.

But there is one approach that has been used in the area in which I live, Upstate New York, It is the relationship—and maybe you have talked about it, and I am sorry if you have, and I missed it—of businesses and secondary schools, high schools—summer programs for people to come in—coming in and understanding what the manufacturing, retail, or the service process is.

So that the business leaders in the community have this sense of responsibility, and all of a sudden opened up to many others who never would have that opportunity, other than just going and knocking on the door and asking for a job—an introductory exposure to what the business is all about.

It seems to be working, and I do not know whether that is so in other parts of the country, or what your experience has been.

Mr. JONES. There are several programs, Congressman Houghton, around the country that are designed to bring teachers and administrators into the workplace during the summer, on a rotating basis, and vice versa—bringing businesspeople into the school system.

It is a piece of this equation, there is no question about it. It helps a great deal. Standards become more real if they can relate them to such an experience, but the standards issue still is at the heart of the debate.

There is no question that putting these together, along with the recognition that standards are not created for the final outcome. Twelfth grade is a little late in life to solve this problem.

The standards movement is really designed because the major impact on education in this country, with young people, is up to the fourth grade. If we do not keep them at standard by the fourth grade we lose them; it is hard to ever recapture it after that fact.

Putting teachers in workplaces together, getting this message across to them, in that place, but the real meaningfulness of stand-

ards and assessments and impacts—and it is not just teachers, it is administrators——

Mr. HOUGHTON. OK, let me interrupt you for a minute. I mean, let us cut to the chase for a minute. Is this something business should do? Is it something government should do? Should we do it together?

What has to happen in order to make your vision come closer to the goal?

Mr. JONES. Business has to take the leadership for stepping up in these communities to do what we talked——

Mr. HOUGHTON. OK, so is that going to happen by spontaneous combustion? Do we do something about it? What happens?

Mr. JONES. It is happening now, almost by spontaneous combustion. It is growing at a rate that we cannot even keep up with across the country, these kinds of programs, and it is growing because, if you will, of the bankruptcy of the debate in Washington.

This is a real, underlying economic issue in communities, in families and companies, and it is happening out there, in business leadership and school leadership, and we have all said to you, teachers are not the problems, even schools are not the problems—it is getting people together to sit down and understand what is going on, what its impacts are, and then how you do business.

Now, it happens that there is a role for the government, in the sense that there are a lot of things that need to be supported and put into this system that are not there, that can help in the new way we are going to go.

But you cannot dictate that from here, in terms of behaviors of people; It has already moved far beyond where the Congress is.

Mr. HOUGHTON. OK.

Thank you very much, Mr. Chairman.

Thank you.

Chairman CRANE. Mr. Coyne.

Mr. COYNE. Thank you, Mr. Chairman.

I thank the panelists for all your testimony; it was very informative.

Mr. Reddy, you called for structural changes if we are to address the problem of matching training for job opportunities.

Mr. REDDY. Yes.

Mr. COYNE. I wonder if you could expand on that. Where would you make these structural changes?

Mr. REDDY. Mr. Coyne, the concept we would have is that—and we are working in some communities to try to develop this concept—is that using the concept of standards as sort of the keystone, if you will—the core idea.

We would start with a series of companies and have them use national standards as a benchmark to draw upon, essentially to develop standard-based work force skills. We are actually working in some factories right now.

We think the starting point has to be to use standards in your company. I mean it is easy to come to the Palisades and talk about standards; it is different, however, to actually use those standards in your company, and to use standards as the basis for your work before they are conveyed to the school system.

Once a company sets its standards, they will have a much clearer idea and be able to define more systematically the skills they are seeking from the work force.

Then we will collate these skills, and discuss them in communitywide groups, in order to try to find commonalities that schools can deal with. But it is really a bottoms-up approach.

By the way, I should mention that when we do factory floor standards, those standards are defined by the workers, not management. People actually using the skills define the standards.

Then that gets interpreted back into the community, and through meetings with school boards and teachers, then it is up to the schools to reexamine their curriculum, reexamine their classroom instruction, and make sure that there is a greater correlation between those requirements and what the schools are actually doing.

I am not just talking here about the factory floor, by the way, I am talking about the work force generally. This would apply as well up through white collar, up through management—the same kinds of principles. We are thinking of doing the same thing with engineers, for example.

With the concept of employer driven standards being the driver, the schools then would adjust their curriculum appropriately, and then there is an obligation back on the employer community to give those people jobs.

The key thing is that employers use the standards themselves, so that when people come back prepared with those skills—which have to be revised continuously, by the way, to make sure they are still relevant—then they will get the work.

But if that happens, then you can see a very close correlation between what people are getting at school and what they are taking to work.

In drafting this part of our report, we got involved in a very volatile argument, with people who thought that we were taking a grossly utilitarian approach, and were attacking the whole concept of liberal arts, that we were attacking the whole concept of learning for its own sake.

Of course we are not really saying that. However, I think we would agree with the observation, from my friend from IBM, that, when you really look at it, the way our school structure and philosophy is currently organized, it is a very old kind of philosophy.

It has its roots in a society where people really did not need to get an education for a job. They already had wealth. I mean, they had aristocratic lineage, or they were the gentry, they did not need to work. Therefore learning for its own sake, and dabbling in various areas of knowledge was enough, and perhaps appropriate for that particular time in history.

But at a time when our work force is in a globally competitive environment, where their skills are being tested every day, by countries that are fiercely competitive in the global marketplace, we think we are not doing a service to our own people unless we much more consciously prepare them to be prepared for the workplace, using the kind of approach we mentioned.

I am sure there are other approaches, but that is really more or less what we mean by structural change.

What I am describing, by the way, bears no relationship to anything that is actually going on, that we have seen at the present time. This is really quite different.

Mr. COYNE. You had mentioned that at the present time there are 20,000 job openings for, I believe you described them as some type of machinist—tool——

Mr. REDDY. Sure, this is just one example of what employers mean when they talk about a shortage of skilled workers. We will hand copies of this out. This has been produced by Charmilles, Inc., an advance technology company, talking about career opportunities in tooling and machining.

In this example entry level toolmakers average $27,000 a year. Experienced precision metal workers earn $40,000 to $60,000. The industry has thousands of unfilled, high paying, secure jobs that do not require a 4-year degree.

Gloomy rooms and greasy machines are replaced by computers and high technology, and so forth. These are highly desirable jobs—well-paying, solid jobs—in the information age. They have 20,000 openings that they cannot fill; they cannot find the people with the skills to fill these jobs.

That is just in one industry, and if you have been out in the Midwest recently, the common figure there is that "the Big Three" are going to need to fill over 250,000 jobs in the next 5 years, because the work force is graying, and the old work contracts are ending.

We have got all kinds of people in their fifties or sixties who are going to go to Palm Springs, and companies just do not see the supply of skilled workers coming in to take their place, at a time when they are adding more and more technology to their plants. This is causing very serious and deep concerns out there in U.S. manufacturing.

So, there really is a shortage of people with the right skills, and the only way we can figure out to close that gap is, first of all, for employers to say what are those skills. I mean, companies complain to schools and say we need good workers, but the schools do not know what they mean when they say they need good workers.

Exactly what are companies looking for, when they are asking for good workers?

That is the kind of structure, at least, that we have in mind.

Mr. COYNE. Thank you.

Chairman CRANE. Well, I want to thank all of our panelists for your presentations, and Mr. Rangel wants to make one final comment.

Mr. RANGEL. Yes. First of all, I hope that the three of you would agree that we could meet when it is convenient, to see how we can better form a closer relationship with business and the government, so that the type of changes that have to be made can be made in a way that you do not find the heavy weight of the Federal Government, but you find the encouragement of the Federal Government.

And also, I have heard from some very high tech companies that, in order to do these jobs, as Mr. Reddy said, you do not really need the Ph.D.'s. We do have master teachers, and videos, and so many things, that we can take someone almost from zip to the threshold,

as where the company can take over from there, and do what has to be done.

And I have 36 videos in my office that were sent. I have not the slightest idea what to do with them, but I will have a chance to listen to New Yorkers.

When we see all that you have done, believe me, I am excited about the possibilities. You will have an opportunity to express to those people who are restricted constitutionally, but have the same goals that you have, to say how we can do it.

You have spent more time on this than the public sector, and it is not, Mr. Reddy, that the teachers are not dedicated, or the school system is falling apart, it is that, as somebody said, they were taught to deal with the nuclear family—mother, father, and a dog, and go to church on Sunday, and to have reasonably sized classes that they could teach.

They were not prepared to go into communities where the parents are more of a problem than the kids—the kids bring in problems of neglect and abuse and addictions and weapons, and the teachers are 40 and 50 years old. The teachers are appointed by seniority now.

They pick where they want to go, and the least experienced can burn out when they do not have the proper equipment to teach the kids.

So, they find one or two students who are going to make it, and they stick with that, in order to survive.

But I think what you are saying, and I totally agree, given the opportunity for them to do what they were trained for, they will be excited about change. Just do not mess with their pension, and we can take care of that too.

But they are wonderful people, and we will be meeting, and I am going to ask that Ms. Whittaker just take your cards, and find out when it is convenient for you, and then we will plan that bigger meeting, with a structure, because the three of you is all I need, since where you want to go is where I want to go.

And I think that your companies are going to have more persuasive power than my Secretary of Education. I have got that feeling.

Anyway, thank you so much for what you have done, and for sharing it with us today.

Chairman CRANE. And I want to thank you all again, and I take an offense. Maybe I misunderstood what Mr. Rangel said, but I have got a Ph.D., and you just said we do not need those Ph.D.'s.

Mr. RANGEL. Oh, no, I am sorry. [Laughter.]

Mr. RANGEL. I have a half dozen of them that I have not earned, but no, we were saying everybody does not need a Ph.D. to be productive.

Chairman CRANE. Oh, very good, Charlie. Thank you.

And thank you all.

I would like to call our next panel: Howard Rosen, executive director of the Competitiveness Policy Council; Thomas Bailey, director of the Institute on Education and the Economy, and professor of economics and education—undoubtedly another Ph.D.

And Howard Samuel, senior fellow on the Council on Competitiveness.

And gentlemen, we will proceed in the order I introduced you: Mr. Rosen, Mr. Bailey, and then Mr. Samuel.

STATEMENT OF HOWARD ROSEN, EXECUTIVE DIRECTOR, COMPETITIVENESS POLICY COUNCIL, WASHINGTON, DC

Mr. ROSEN. Mr. Chairman, thank you very much.

My name is Howard Rosen, and I am with the Competitiveness Policy Council, which is one of a rare and becoming almost extinct breed of bipartisan Federal advisory commissions. The Council was established by the wisdom of Congress, to bring together representatives from business, labor, the public and the government, to develop policy recommendations to enhance U.S. competitiveness. The group makes reports to the President and Congress, and is chaired by Fred Bergsten, the director of the Institute for International Economics.

I cannot resist the opportunity to comment that Congressman Houghton was instrumental in setting up this Council. In fact, when Fred Bergsten was appointed Chairman, he and I visited Congressman Houghton. He was one of the first people to whom we spoke, and his insights that day have been a very important part of the way we have been running the Council.

With your permission, I would like to request that my full formal statement be entered into the record, and I would also like to include some of the Council's reports, which directly addresses these issues.

I also want to commend this Subcommittee for holding these hearings. First, we have not had much discussion, on these issues, and I think it is very important to continue having these discussions.

Second, I have had the privilege, and honor to testify before this Subcommittee in the past, in my role as a trade economist, to talk about trade issues, and the one important thing that I think needs to come out of this discussion today is that we can no longer just look at these issues discretely and separate. We have to see them as linked. The fact that this Subcommittee is holding hearings on the relationship between education and training to trade, is an example of this point.

This morning I have heard a lot about the issue of competitiveness. Let me just say, that competitiveness is not a static. It is not something you have today and is gone tomorrow. It is an ongoing challenge. I get quite concerned when I hear people saying that the United States is the most competitive economy in the world. We are, and I am very proud of that. It is due to a lot of the effort by the business community, and by workers in this country. But it does not suggest that we can just sit back and rest on our laurels. It does not mean that we have won the battle. Competitiveness is an ongoing and we have to continue thinking about it that way.

We have heard some very successful individual stories today. They are great cases, and one of the great parts of this hearing today is to get these stories out. But we have to ask ourselves, why is it that they are doing it and others are not?

Part of the reason is because people do not know about these great stories. We have to share these success stories and that is part of the function of these hearings. I think that you should be

congratulated for that. But, at the same time, we have got to make sure not to lose sight of the fact that these are individual stories; these are the trees, and there is a very big field out there, with not many trees. There is no great forest to look at. There are many great, individual stories and we need to capitalize on them. But they do not really reflect what is going on in the whole economy.

If we do nothing else today, I would like to leave you with one question, which I think we all need to answer. Mr. Chairman, if training is so good, why do we do so little?

Let me turn to the real issue which brings us here today, which is the anxiety over wage competition. That is what this is all about. We are afraid that we are going to have to compete against wages from lower wage countries, which will hurt our jobs and hurt our living standards.

I have two responses. First, overtime labor costs are becoming increasingly less important in deciding who wins markets.

Second, it is really competition over wages and productivity, not wages alone. If we were competing purely on the basis of wages then the United States would not produce anything, because our wages are higher than those in other countries. But it is the fact that we have higher productivity that allows us to enjoy higher wages. And so the real question becomes, if we want to preserve our higher wages, how do we enhance productivity?

The only way I know how to do that is through investment in physical and human capital—no great surprise. And here I want to just pick one example: Personal computers. At some time we have all sat in front of a personal computer, and I am sure there has been some frustration in terms of our own skills and using that personal computer. A computer is an investment. That is an investment in physical capital, but it really cannot enhance our productivity unless we know how to use it. Putting it a different way, the ability of that computer to improve our living standards is limited by our ability to use it.

And that is why we have to have a trained work force. Workers have to be trained to use the equipment—not just physical equipment, but also used to produce goods and to provide services.

Training in this country is ad hoc and inadequate. In fact, the major ingredient to training in this country is luck. A person's education and training depends on what school district you are from, on which industry you go into, and on which state you live in, if you are eligible for a Federal program or not. And in the case of programs for dislocated workers, it even depends on the cause of your dislocation.

Luck is at the center of our system, and in fact we really do not have a "training" system per se.

Mr. Chairman, we know why we should train, we know how we should train. In fact, we have heard many good examples this morning. The key question is, who is responsible for providing the training, and who should be trained?

Should the worker or the employer be taking on that responsibility? Or, is it some shared coalition between workers, employers, and other institutions in our society?

There is one other thing I want to leave with you. There is a lot of talk today in Washington about the level of government spend-

ing. I believe we need to move beyond discussing the level of spending and focus on the composition of spending.

We are spending more on training, but it is going to the same people. We are not training the people who really need it. We are still not training the low-skilled workers, These people need the training and if trained, can make a contribution to society.

There is a lot of rhetoric on the issue of training, and if only we could just turn some of that rhetoric into actual action, I think we would not only have a more productive economy, but we could return to the time when our living standards were rising.

Again, I want to end where I began: Competitiveness is an ongoing challenge. There are no simple answers, there are no magic bullets. It is going to take a lot of things, being done by a lot of people, together, and a shift in the way we think about things, in order to solve these problems.

I look forward to our discussion. Thank you.

[The prepared statement and attachment follow:]

INVESTING IN EDUCATION AND TRAINING: SIMPLE RHETORIC OR THE KEY TO US COMPETITIVENESS?

A Survey of US Efforts

Statement by

Howard Rosen
Executive Director, Competitiveness Policy Council

before the

Subcommittee on Trade
House Committee on Ways and Means

July 25, 1996

Thank you for the opportunity to appear before the Subcommittee this morning to present the views of the Competitiveness Policy Council on the issue of education and training and US competitiveness. The Council is a 12 member, bipartisan advisory commission comprised of three business CEOs, three labor union presidents, three representatives of government, (both federal and state), and three representatives from the public. (Complete membership list is attached.) The Council reports its findings and policy recommendations to the President and Congress. Dr. C. Fred Bergsten, Director of the Institute for International Economics, chairs the Council.

The Council defines competitiveness as "the ability to produce goods and services that meet the test of international markets while our citizens earn a standard of living that is both rising and sustainable over the long run." Thus the Council's work focuses on ways to raise US living standards in an environment of increasing international competition. Sustainable improvements in living standards, in turn, must be based on gains in productivity, and continuous investment in human and physical capital are key to achieving those gains in productivity.

Investment in human capital -- developing an educated workforce, equipping workers with relevant skills and strengthening the science and technology base -- is now considered to be as important, if not more important than traditional forms of investment in plant and equipment in terms of contributing to economic growth and raising incomes. In a competitive environment, firms must continuously invest in maintaining the most up-to-date equipment to produce goods and provide services at the highest quality, although at a price people are willing to pay. But equipment can only be as useful as the skills of the people who use it. This awareness has brought businesses and workers to appreciate the importance of continuous investment in their workforce.

Until recently, there has been a tendency to view human capital development as a series of separate and discrete stages. By contrast, building and maintaining a world-class knowledge base demands continuous investment with the various pieces feeding into one another. Instead of discrete, unrelated programs, continuous investment in human capital should be viewed within the context of a system of "lifetime learning."

Lifetime learning begins with basic education at the primary and secondary level. Some students may continue onto higher education at colleges and universities. Others will attempt to immediately find jobs in the workplace. Efforts at facilitating this "school-to-work" transition may include apprenticeship programs, vocational training, skill certifications, business-labor compacts, co-op education and professional mentoring programs. These programs are designed to ensure that youngsters learn the kinds of skills they need to enable them to find and maintain productive, rewarding and stable employment.

It is not enough to just acquire skills in order to enter the workplace; it is also important for workers to maintain a high level of skills in order to continuously contribute to improvements in productivity and facilitate labor force flexibility. Thus the next stage in the lifetime learning continuum is ongoing training for active workers. The final stage of the continuum is training to assist workers who move from job-to-job, from occupation-to occupation.

THE WHAT, WHEN, WHY, WHO AND WHERE OF TRAINING

WHAT

Training is undertaken in order to improve workers' skills with the aim of increasing productivity and economic efficiency. Consequently, training is seen as an investment in the workforce, i.e. an investment in "human capital."

There are both private and public returns to training. By improving workforce skills, raising economic efficiency and contributing to the creation of wealth, benefits from training are expected to be widely shared throughout the economy. Accordingly, investment in education and training is viewed as a classic "public good." Training also produces private returns to both firms and individuals. By improving worker productivity, training should result in reducing costs and raising profits for firms (holding everything else constant) which in turn should lead to higher wages for workers.[1] Thus training has qualities of both public and private goods.

WHEN

Training has traditionally been viewed as primarily acquiring skills for a new job and has concentrated on people either entering the labor force or voluntarily or involuntarily changing jobs. In recent years, a more comprehensive view of investment in human capital has emphasized the role of training in the system of lifetime learning. This broader view of human capital development includes basic education, the transition from school to work, active worker training to improve skills, and training for dislocated workers in order to assist them move from job to job. This understanding of training has expanded beyond acquiring skills to also include skill enhancement.

WHY

Training is usually undertaken for five reasons[2]: (1) Training is viewed as a response to a labor market failure. Individuals are physically constrained from diversifying their knowledge base, thereby constraining labor flexibility. Publicly supported training is seen as a means of offsetting this market failure. (2) Training facilitates labor market flexibility, which in turn contributes to improving economic efficiency and increasing economic growth. (3) Investing in human capital is believed to improve the marginal product of labor (raise labor productivity) and enable workers to warrant higher wages (higher living standard). (4) Training is sometimes provided to compensate for lower wages or job loss. For example, as a response to massive layoffs, the government or individual firms may provide some training to assist workers find new jobs. (5) Training is simply undertaken as part of one's quest for more knowledge.

WHO

According to the lifetime learning model, training should be seen as part of an ongoing process, for which everyone is eligible and continuously participating in order to expand their skills and knowledge. Returns to training are based on an individual's potential for using the newly acquired skills. Basic education is geared toward children and adolescents, school-to-

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[1] Under conventional free market economic models, the price of labor is set at the marginal product of labor (the change in labor productivity).

[2] This list is not intended to be comprehensive.

work transition programs are generally provided to older adolescents and younger adults, and training for active and dislocated workers is usually provided to adults.

Those undertaking training tend to differ from those financing it. Basic education has traditionally been viewed as having high public and private returns. Furthermore, based on the premise that the public returns from basic education outweigh its private returns, the costs tend to be shared throughout society (a classic "public good").[3] The balance between public and private returns shifts at later stages in the lifetime learning model, and the ratio between private and public returns increases. Accordingly, costs for school-to-work programs tend to be shared by government, firms and unions, active worker training tends to be financed primarily by firms and unions, and training for dislocated workers tends to be financed by the government and individuals.

Government support for training is divided into national, regional and local efforts. National governments generally aim to achieve full-employment and therefore have the greatest interest in labor market flexibility. Regional and local governments tend to be more concerned with raising living standards. Thus national governments tend to focus their efforts on programs geared toward unemployed workers and state and local governments tend to focus their resources on attracting high wage jobs into their regions. In this sense, regions should be concerned with workforce skills in order to attract investment. Firms are more concerned with increasing economic efficiency in order to raise profits rather than labor market flexibility. Accordingly, firms tend to care more about the complete complement of skills within a firm rather than the skills of individual workers. Individuals, concerned about job and income security, obviously have the most to gain through training.

WHERE

Basic education takes place in public and private primary and secondary schools. School-to-work programs take place within schools, firms, and community facilities. Active worker training can take place at the firm (on-the-job training), at public or private educational facilities, like secondary schools, community colleges, or universities, or at community facilities like churches, adult education centers or public libraries. Individuals may perform independent study, working on their own at home or at work. Training for dislocated workers can occur at any of the places mentioned above.

THE MISSING PIECE

Many assertions are made concerning its value, yet very little is known of the actual returns to training. This is primarily due to the fact that very limited evaluations are performed on the effectiveness of training programs and their short and long term effects on workers and the economy. Methodologies to determine the impact of training on productivity are inadequate and almost non-existent. Accurate evaluations would entail labor-intensive and costly studies over a lengthy period of time. Many variables may also be involved, beyond the actual training program, which would require additional expertise. To date, there has not been much collaborative work between those who study human capital and those who study broader business and economic issues such as productivity, investment and business management.

This lack of information is convenient for those who expound on the virtues of training. Thus there is no evidence to contradict the common sense view that the marginal returns to education are always positive (i.e. more education is better than less).

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[3] This view has been changing in recent years and there is a movement to subsidize private education.

A SURVEY OF TRAINING IN THE UNITED STATES

Outside of basic education, the United States tends to invest less in formal training programs than other nations (see Tables 1 and 2). For the most part, government programs are limited and targeted toward select populations. This is due in part to the fact that the labor force is growing, which relieves pressure felt by firms to have to train their workers. In addition, beyond basic education, Americans tend not to place a high value on skill enhancement, especially for one's current job.

To compensate for this lack of training, over the last thirty years the federal government has developed an array of labor market programs, primarily designed to assist unemployed workers move into new jobs (see Table 3 and Graph 1).

Basic Education and School-to-Work Transition

There are two important developments relating to government support for basic education which have occurred over the past few years. One development is the move toward subsidizing private education and allowing more choice in where to send children to school. The second development is the establishment of academic standards and assessing the achievement of those standards. In 1993, the US Congress passed and President Clinton signed into law the Goals 2000 program which established national educational goals and provided funding to those states interested in implementing them.[4]

It appears that federal school-to-work programs may face a similar fate. Approximately fifty percent of all US high school students enter college or university. Of those, only fifty percent complete four years of schooling. Spending on basic education is directly related to the amount of schooling, but inversely related to the number of students (See Graph 2). The United States has a consistent history of investing very little, particularly in the transition from school to work.[5]

Several experiments are currently underway with different types of school-to-work transition programs in the United States: apprenticeship programs, compacts where employers guarantee jobs to students who do well in school, cooperative education where seniors work part-time in areas connected to their training specialty, and career academies where students develop skills around a specific field. Several elements are essential whatever technique is followed: provision of mentoring and jobs by local employers, integration of academic and vocational learning, protection against exploitation of student-workers, and the provision of broadly recognized certificates of occupational skill mastery that will be readily accepted by employers.

The federal government, despite its historically limited role in easing the school-to-work transition, has recently initiated several steps to expand its efforts in this area. One of the centerpieces of President Clinton's initial legislative agenda included expanded financing for pilot school-to-work programs and the creation of a national youth service corps (Americorp).[6]

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[4] Since 1993, the House of Representatives and the Senate have tried unsuccessfully to terminate the Goals 2000 program.

[5] In contrast, 20 percent of German students who qualify for college participate in the government-sponsored apprenticeship program, and German companies contribute about 3.5 percent of payroll to national training accounts which back a wide range of employment and training institutions (including the apprenticeship program). The results are stunning: two thirds of the German workforce has completed an extensive apprenticeship program compared with three-tenths of one percent in the United States.

[6] There have also been several Congressional attempts to terminate or significantly cut-back funding for both of these initiatives.

Unemployment Insurance

Unemployment Insurance (UI) is the primary labor market adjustment program in the United States. It is clearly the largest and most far reaching. Under the existing unemployment insurance scheme any unemployed worker on whose behalf contributions have been made to the UI trust fund is eligible to receive 26 weeks of benefits, equal to, on average, between 35 to 40 percent of his previous wage. The program also allows for an additional 13 weeks of benefits under certain conditions during periods of considerable economic downturn. Workers must show evidence of an active job search in order to receive benefits.

Reflecting a reluctance for large government-supported income maintenance programs, the US unemployment insurance program is shorter and less generous than similar programs in other industrialized countries. Advocates claim that the shorter program has resulted in less long-term unemployment in the United States relative to Europe, where unemployed workers receive benefits for longer periods. On the other hand, only about one-third of unemployed workers collect benefits under the US program, due in large part to restrictive eligibility criteria. Only half of the total number of unemployed workers in the 1980s were eligible for these benefits, as UI does not cover new entrants, re-entrants, disgruntled job-seekers and voluntary job leavers.[7]

Unemployment insurance aims primarily to offset income loss during spells of unemployment. Only limited attention is paid to making job search assistance available, and there is no training provided under this program. The program is structured around previous wages, and is not sensitive to difficulties which individual workers might experience in finding a new job, such as age, family status, education level or location.

Job Training Partnership Act

Dislocated workers receive job search and training assistance under the Jobs Training Partnership Act (JTPA), and more recently under the Economic Dislocation and Worker Adjustment Assistance (EDWAA) program. The Reagan administration proposed JTPA in 1982 as a replacement for the Comprehensive Employment and Training Act (CETA). JTPA contains many of the same activities which were available under CETA, except for public service employment, but funds allocated for JTPA are substantially lower than the level of CETA funding. JTPA is a decentralized program, providing states with increased benefit delivery and oversight responsibilities. JTPA covers training services for economically disadvantaged youth and adults (Title II-A), the summer youth employment and training program (Title II-B), employment and training services for dislocated workers (Title III), employment and training services for native Americans and migrant and seasonal farm workers (Title IV-A), the Job Corps (Title IV-B), and veterans' employment and training programs (Title IV-C).

Title III of JTPA authorized state programs to provide job search assistance, classroom training, on-the-job training, relocation assistance, and pre-layoff assistance to dislocated workers, defined as those people laid off and who are unlikely to return to their previous industry or occupation. This includes workers who lose their jobs as a result of a permanent plant closing, and long-term unemployed who have substantial barriers to employment, such as age and lack of skills. States received three-quarters of the Title III funds according to a formula based on unemployment and long-term unemployment rates.

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[7] It is becoming increasingly evident that the traditional survey of the labor force is missing many people. For example, the survey does not follow people if they move. In addition, individuals can decline to be interviewed and only people actively looking for a employment are counted in the survey. It is unclear how this affects the survey, but some have suggested that it results in under-counting the long-term unemployed.

In addition to decentralizing the distribution of the program's benefits, the Federal government also delegated data collection and program monitoring to the states, making it more difficult to evaluate the program's effectiveness. An early review of the program by the US General Accounting Office (GAO) suggested that less than 10 percent of the eligible displaced workers received benefits under Title III of JTPA in the first three years of the program.[8] Another early evaluation of the program suggested that older workers and those with less education are less likely to be served by JTPA than would be expected by their representation in the population of displaced workers. These findings suggest that those individuals who are most in need of assistance are the ones least likely to receive it under JTPA programs for displaced workers.[9]

Economic Dislocation and Worker Adjustment Assistance Act

Two important developments relating to JTPA occurred in 1988. The Worker Adjustment and Retraining Notification Act (WARN), enacted in July 1988, requires certain firms to provide 60 days advance notice to workers prior to a mass layoff or plant closing. In addition, Congress enacted significant changes in Title III of the JTPA program under the Economic Dislocation and Worker Adjustment Assistance Act, which passed Congress as part of the Omnibus Trade and Competitiveness Act. These changes call for: (1) the creation and use of state rapid-response units; (2) states to pass on at least 60 percent of JTPA/EDWAA funds to sub-state areas; and (3) half of those sub-state funds to be spent on training rather than job search assistance and related activities.

Under JTPA/EDWAA, the federal government provides most of the program's funding, but benefits are distributed locally. This separation of responsibilities reflects recent evidence that locally provided programs are better suited for reaching targeted populations. On the other hand, it is difficult to measure JTPA/EDWAA's true effectiveness at helping workers adjust because only a small percentage of eligible workers participate in the program. The number of people who participated in JTPA between 1985 and 1989 represented only 18 percent of the number of dislocated workers during that period.[10] Although this program may be successful in assisting those workers who participate, it appears to be much too small to make any difference in addressing any overall adjustment pressures in the economy at large.

Trade Adjustment Assistance

The third major labor market program is the Trade Adjustment Assistance program (TAA). Created in 1962, TAA was an attempt to garner labor support for the Trade Expansion Act of 1962, authorizing US participation in the Kennedy Round GATT negotiations. Under TAA, workers identified as losing their jobs because of trade concessions could apply for income maintenance payments and training benefits. Strict interpretation of eligibility requirements prevented anyone from receiving benefits under the program from 1962 until 1969. Even after a more liberal reinterpretation of these requirements, only 46,000 workers received benefits over the following five years.

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[8] US General Accounting Office, Dislocated Workers: Local Programs and Outcomes Under the Job Training Partnership Act, GAO/HRD 87-41, Washington, D.C.: US General Accounting Office, March 1987.

[9] Margaret C. Simms, "The Effectiveness of Government Training Programs," paper prepared for the US Department of Labor, Commission on Workforce Quality and Labor Market Efficiency.

[10] See US Department of Labor, "Summary of Title III Program Performance for Program Year 1989," mimeo, and Herz, Diane, "Worker Displacement Still Common in the Late 1980's," in Monthly Labor Review, Vol. 114, No. 5, May 1991.

Congress made significant program changes in the Trade Act of 1974, once again as a means for gaining support for another round of trade negotiations, this time the Tokyo Round. Eligibility requirements were liberalized and the benefit package was enriched. Workers no longer had to prove that their job loss was due to a trade concession, but only that increased imports "contributed importantly" to their job loss. Income maintenance payments (Trade Readjustment Allowances, or TRA) were set at 70 percent of the worker's previous wage, but could not be more than the national average wage in manufacturing. TRA payments were made in addition to regular UI payments, although both benefits together were capped at 80 percent of the worker's previous wage. The eligibility period remained 52 weeks, with a possible 26 week extension for workers over 60 or enrolled in a training program. Workers could also be compensated for 80 percent of their job search and relocation costs, up to a maximum of $500.

Less restrictive eligibility requirements and a more than doubling of merchandise imports between 1974 and 1980 resulted in a significant increase in petitions for TAA benefits. The number of workers receiving TRA grew from 62,000 in 1976 to over half a million workers in 1980. Likewise, TRA outlays grew from $71 million in 1976 to $1.6 billion in 1980.[11] The number of workers receiving training under this program never went above 5 percent of the workers receiving TRA payments. Coupled with administrative problems, which resulted in many workers receiving lump-sum benefits after they had found new jobs or returned to their old jobs, TAA was not seen as contributing to long-run labor market adjustment.

This criticism, together with the administration's efforts at reducing non-military government expenditures, led President Reagan to recommend abolishing TAA in 1981. The administration argued against any rationale for maintaining a separate program for trade-impacted workers, and instead supported a revised, although smaller, economy-wide training program.[12] Congress accepted JTPA but also insisted on maintaining TAA, albeit with certain revisions. As a result of the Omnibus Budget Reconciliation Act of 1981, TRA payments were reduced and the emphasis of TAA shifted from providing income maintenance to training and other reemployment benefits. TRA payments were reduced to the same level as standard UI benefits, and payment could begin only after workers exhausted their UI benefits. UI and TRA payments were capped at 52 weeks, except if a worker was enrolled in training, in which case benefits could continue for another 26 weeks.

Following the 1981 changes there was a noticeable decline in the number of TAA petitions received and approved, and accordingly a decline in the amount of government outlays under the program.[13] Even so, the Reagan administration continued in its efforts to abolish the program and bring these workers under the umbrella of JTPA. Congress refused every attempt, although it agreed to several program changes. The Consolidated Omnibus Budget Reconciliation Act of 1985, which extended the life of TAA, required workers to be enrolled in a job search program as a condition for receiving TRA benefits.

Under the Omnibus Trade and Competitiveness Act of 1988, TAA was extended to September 30, 1993, and eligibility was expanded for a one-time inclusion of workers engaged in oil exploration and drilling. Injury determination criteria and the benefit package were left intact, although enrollment in training as a condition for receiving TRA payments was strengthened. In

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[11] Some critics claim that the Carter administration used TAA in an attempt to win union and other labor support in its 1980 reelection bid, resulting in a large increase in benefit outlays in that election year.

[12] See the previous discussion concerning the JTPA and its replacement of CETA.

[13] When the percentage of petitions certified for benefits fell below 10 percent in 1981, there were some charges that the Department of Labor was being more restrictive in its certification process. This criticism was never proven, and the percentage of petition approvals since 1983 has returned to their pre-1980 levels.

1993 the program was extended for another 5 years, with declines in funding to become effective in 1997.

The training component of TAA remains rather small, with expenditures equalling only one fifth of the amount allocated for TRA payments. Outlays for job search assistance and relocation benefits are even smaller. For the most part, TAA's primary function remains income maintenance, even after several attempts to change the program's focus.

Other Targeted Programs

The development of US labor market adjustment programs has simultaneously taken two paths. The federal government supports programs with broad eligibility criteria. These programs include the UI scheme and programs such as CETA, JTPA and EDWAA. At the same time, the government also supports smaller programs targeted at specific populations. The TAA program is the largest among these targeted programs. Other such programs include assisting workers adversely affected by the Clean Air Act, by defense conversion and by North American Free Trade Area agreement. Most of these programs follow the TAA model, which includes rather generous income support (cash benefits), limited training benefits and other employment services such as job search and relocation assistance.

Two reasons are traditionally given for these targeted programs. First it is argued that those workers covered under these programs face a more difficult adjustment process and thus deserve additional public assistance. For example, it has been argued that workers adversely affected by trade liberalization tend to be older and less skilled than other dislocated workers. In the case of defense conversion it has been argued that workers in defense-related industries tend to be geographically concentrated, thus placing them under a higher adjustment burden.

The second motivation for these targeted programs is more political. There is evidence that a willingness to assist those people adversely affected by government action (i.e. trade liberalization, regulation, defense cut-backs), makes it easier for politicians to vote in favor of the action itself. Thus these targeted programs are often used to "buy" votes in Congress.

One of the problems with the proliferation of smaller programs is that it has resulted in a maze of discriminatory government programs which workers must navigate themselves. This has proven to be particularly confusing during periods of higher general unemployment, when workers from the same firm, or even plant, may be eligible for different benefits. This confusion has contributed to calls for greater harmonization among government supported programs. The fact that the benefits offered under these programs differs widely are usually more generous in the targeted programs is a major impediment to efforts toward consolidation.

Workforce Development Act of 1995

A recent report by the General Accounting Office found that the US government is supporting 163 separate programs, across 15 federal agencies, and costing more than $20 billion a year to assist workers. This finding has led to calls for better coordination and consolidation of federal training and labor market adjustment programs. In addition, continuing a trend begun during the Reagan administration, Congress has been advocating transferring more responsibility for these programs to the states. The result of these two objectives, program consolidation and transferring more responsibilities to the states is the Workforce Development Act of 1995.

The legislation provides $7 billion per year in the form of block grants to the states over the period 1998 to 2001. This amounts to a 15 percent reduction from current spending levels on the programs in question. The block grants are to be made available based on the following formula: 60 percent of funds based on a state's percentage of the population aged 15 to 65 years; 10 percent of funds based on percentage share of individuals ages 18 to 64 who are at or below the poverty line; 10 percent based on the state's percentage share of the unemployment rate for the previous 2 years; and 20 percent based on each state's percentage share of adults receiving

Aid to Families with Dependent Children (AFDC). Of the total authorization, 93 percent will be distributed to the states and the remaining 7 percent will be reserved for national activities.

States must meet four conditions in using the block grant funds: (1) a minimum 25 percent of funds be used for workforce employment activities and 25 percent be used for workforce education activities; (2) job training centers must be based on the one-stop-shopping centers; (3) school-to-work activities must be supported; and (4) performance benchmarks must be developed.

Both the original House and Senate versions of the bill called for repealing the training component of TAA beginning July 1, 1998, while maintaining the program's cash benefits. The full Senate adopted an amendment maintaining the program at current funding levels as a separate initiative and not be consolidated with the other programs ($119 million was appropriated for TAA in FY 1995, and that would decrease to $92 million in FY 1999).

Under the legislation JTPA will be repealed as of July 1, 1998, along with the Adult Education Act, the Carl Perkins Vocational Education and Applied Technology Act, the School-to-Work Opportunities Act, the Wagner-Peyser Act, Title V of the Older Americans Act, and Title VII of the Stewart McKinney Homeless Assistance Act. According to the block grant formula, a minimum of 25 percent of funds would be devoted to work force employment activities. Training activities covered under the JTPA would be covered under the block grant. For FY 1996, Congress has appropriated $3.2 billion for JTPA, a reduction of $750 million from FY 1995 appropriation and a reduction of $2.3 billion from the administration's request. Final Congressional action on this consolidation proposal remains in doubt.

One-Stop Centers

In addition to the problems of eligibility and inadequate programs and funding, workers are also confronted with a maze of state and federal programs. Many of these programs, while aimed at addressing the same problem, actually work at cross purposes, and end up only serving to further confuse the worker in serious need of assistance. This cacophony of programs is particularly unfortunate during times of limited public funds for such efforts.

One idea that has been circulating is to use federal funding to encourage states to develop "one-stop" centers which bring together all government programs to one location, making it easier for workers seeking assistance. In order to establish such centers, state governors would be asked to submit a plan to the Secretary of Labor detailing how they intend to bring together (or have already brought together) the various resources available to unemployed workers. This could range from establishing actual centers housing representatives of all relevant state and federal program to creating a automatic bank teller-type system of providing written material on various programs to a phone-information system. This coordination effort would be jointly financed by the Pubic Employment Service (ES) and the JTPA/EDWAA funds. In those states where these centers already exist, the Labor Department would review their effectiveness and make recommendations of how they may be improved.

These "centers" would bring Unemployment Insurance (UI), ES and JTPA in-take services and program information and referral under the same roof. Most people who receive UI intend to return to work and they should have access to ES and JTPA services.

Employment Services would include skill assessment, job search assistance, including resume writing and interview skills and identification of employment. JTPA should focus on the need for and availability of training. In order to provide these services, these offices must have access to qualified counselors and the adequate information concerning potential jobs and training programs. Centers could choose to contract out for counseling services.

In addition to UI, ES and JTPA/EDWAA (which in some states are already combined), these "centers" would also bring together representatives from other worker-oriented programs, including EDWAA, TAA, all defense convergence programs and other targeted programs (Clean

Air and Spotted Owl, where applicable, and NAFTA, etc.) Initially, representatives from each of these programs would be on hand to provide information and possibly assist eligible workers to apply for benefits. Eventually, state counsellors would each become informed of these programs so that a worker need only speak with a single person to learn about all of the programs available to him.

In addition to traditional worker-related programs, representatives from other public assistance programs should eventually be brought into these "centers." This includes Aid to Families with Dependent Children (AFDC), Veteran's benefits, state economic development programs, etc. Centers could choose to provide information on each of these programs, or in some cases provide in-take services. Federal and state guidelines would be reviewed to encourage maximum coordination of benefits into a single package. States could choose to train individuals to represent several programs, in order to prevent having one person for each program at these centers. This would be particularly important in smaller localities.

States would also choose to house representatives from the school-to-work programs and National Service program at the centers. In addition, centers could also provide information and assistance to employers and employees on training programs for active workers.

Under the current JTPA program, Private Industry Councils (PICs) are responsible for developing the strategy and overseeing its implementation. Each Service Delivery Area (SDA) has a PIC, established by the lead elected official in that SDA, made up of representatives from private business, unions and public assistance agencies, including the ES, welfare, and education. The responsibilities of the PICs would be expanded to oversee the coordination of these various programs as well as setting priorities and managing these centers. Membership on the PICs would also be expanded to include at least one representative from each program participating in the centers.

In addition to bringing together all job-related services, these "one-stop centers" would also be conveniently located, accessible, and have hours which meet the needs of employed and unemployed workers.

States could include private service providers in the "centers." One primary candidate would be to contract out to private companies to provide career counselling services. These contracts would be competitively bid, based on some kind of outcomes-based performance record. A voucher system could be used to help measure customer preferences and outcomes.

As with all programs, adequate provision for proper evaluation should be written into any program changes. This should include short-term evaluation of response and appropriateness of services. In addition, attention should be given to evaluating the long-term effects of such programs. This means tracking workers through the program as well as how they are faring three or four years after. These evaluations are probably best performed by private consultants.

Private Efforts

Anecdotal evidence suggest that those firms which invest in their workers, primarily through training and the creation of "high performance workplaces," tend to outlast and outperform firms which do not. Unfortunately, it appears that only a minority of firms seriously invest in training. One of the by-products of this under-investment is a lack of credible data about how much training takes place, who does it, and what is the return.

The American Society for Training and Development estimates that US companies currently devote approximately $55 billion annually for formal training.[14] Although the private

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[14] Laurie Bassi. "Expenditures on Employer-Provided Training," American Society for Training and Development, mimeo, July 1996.

sector may spend more on worker training, less is know about these efforts -- both in terms of program design and participation and effectiveness. Averaged across the nation, US firms spend slightly more than one percent of payroll on training and most of this investment is concentrated among a handful of firms -- one-half of one percent of all employers spend 90 percent of the formal training dollars. (Graph 3 presents data comparing private training efforts in Japan and the United States).

Based on a 1991 Current Population Survey, the Bureau of Labor Statistics reports that only 16 percent of the workforce participate in some kind of employer-provided formal training. This includes on-the-job training (15 percent of workers), schooling (13 percent of workers), and other (7 percent or workers).

Training is highly concentrated by industry: Twenty-one percent of all training is performed in professional and related services, 20 percent is performed in manufacturing industries, 12 percent in finance, insurance and real estate, and 11 percent in transportation, communications and utility industry.

Almost two-thirds of those workers who receive some kind of employer-based formal training have had at least some college education. Thirty-eight percent of workers in receiving training are college graduates. An equal percent of workers receiving training have high school or less education. Thirty-one percent of the workers receiving training were between 35 and 44 years old and 29 percent were between 25 and 34 years old.

According to another study by the US Small Business Administration, there is a relationship between firm size and training. Firms with greater than 500 employees are more than twice as likely to provide formal training to new hires than are firms with less than 25 employees.

The key requirement is to induce more companies to devote considerably expanded resources to continual skills development. All firms need to participate, partly to obviate the concerns of those who already do that workers they train will go elsewhere. This "free rider" problem is used by some to argue in favor of broader government-sponsored training programs.

One proposal to foster increased training, made popular by candidate Bill Clinton in 1992, would require all firms with more than 50 employees to invest 1½ percent of payroll for training (for all employees, not just top managers as in many current cases). Such a requirement would represent a training guarantee, under which the firms either conduct the training themselves or contribute the equivalent to a national training fund ("play or pay").

Currently, only very weak incentives are in place to encourage individuals to undertake continuous retraining on their own. In fact, under existing tax law, individuals can only deduct from their taxable income expenses for training for their current job, and not for future jobs. The Clinton administration has suggested expanding this tax deduction to include any training expenses for a current or future job, but no final action has been taken yet. In addition, the United States is the only industrial nation without a formal system for developing and disseminating skill standards. There have been recent efforts to develop such standards, but proposed budget cut-backs could significantly curtail this exercise.

Concluding Thoughts

Training should be seen as a means towards an end, and not an end in and of itself. The primary objective should be to assist workers meet the challenges of productive work. To do so, workers must have access to good and timely information concerning employment opportunities, skill requirements, and availability of training programs.

On the other hand, training should not be solely for the purpose of getting a job. Recent evidence suggests that those firms willing to make serious investments in their workers are more likely to succeed in the globally competitive world market. While there are still many questions

concerning what constitutes a "high performance" workplace, one thing we do know is that there is a high return to firms which spend more than the national average on worker training.[15]

It is also difficult to measure the returns from investing in training. Contrary to most evaluations which compare a worker's salary immediately before and after training, in fact, the returns to individuals and the economy from investing in worker training must be seen over a longer period.

What should be the federal government's role in providing training and adjustment assistance? US workers are increasingly being asked to shoulder the burden of economic change in the economy. Technological change, defense conversion and trade liberalization, while each resulting in long-run benefits for the economy as a whole, also bring some concentrated costs in the short-run which threaten our willingness to accommodate these changes. The challenge to public policy is to minimize the short-run costs in order to preserve the long run benefits. Furthermore, government assistance is warranted in cases where dislocation may result from changes in government policies, like in the cases of defense conversion and trade liberalization.

The United States needs a comprehensive adjustment program which assists dislocated workers regardless of cause to encourage labor market flexibility and improve our nation's competitiveness. It is increasingly difficult to disentangle the actual causes of economic dislocation in our economy. Workers face pressures from the introduction of new labor-saving technologies, increased competition from foreign producers both at home and in third markets, and reductions in defense-related production. Any new program should be expansive enough to provide assistance to all workers, regardless of cause of dislocation, yet flexible enough to enable tailoring benefits to best suit an individual worker's needs. Benefits should be determined by a person's prospects for re-employment, not cause of unemployment and should include income maintenance during the period of transition, training and job search and relocation assistance.

Such a program should combine various aspects of existing programs. As in the current EDWAA program, all workers in need would be eligible for benefits. But the level of benefits should go beyond those provided under EDWAA, and be more similar to those provided by the TAA. The complete set of benefits would include job search assistance, skills assessment, counseling, referral services, adequate income support (covering at least 50 percent of lost wages), payments for retraining programs and extended income and benefit (including health care) payments through the training period.

The various worker training programs need to be coordinated at the local, state, and national levels in order to better serve our training needs. The United States needs to create a comprehensive network of one-stop centers for students, workers and firms which provide a full range of services: skills assessment, career counselling, training, job search assistance, job placement, recruitment and referral assistance. Training programs should also be flexible enough to meet the needs of individuals.

Most importantly, structural changes in the US economy require new thinking about how to preserve labor market flexibility. These changes are significant enough to require new thinking concerning adjustment policy and not just changes in existing programs. Current discussions seem to be primarily motivated by reducing budgetary expenditures rather than by what works. It is ironic that at a time when American workers are facing more pressure than ever before, due to changes in technology, globalization and corporate down-sizing, the current buzzword in Washington concerning training and labor market programs is "consolidation." If enacted, these efforts at consolidation could lead to <u>less</u> government resources for training, and possibly less effective programs, overtime.

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[15] For example, some departments within Motorola spend approximately 6 percent of payroll on training as compared to 1 percent of payroll for the majority of US companies. Motorola is certainly not sorry about its investment, on the contrary, other companies are trying to learn how to emulate their success.

A new model of labor market adjustment should be based on three pillars:

(1) Labor market policies must be viewed within the context of a system of lifetime learning. Training for active and dislocated workers should be able to be built upon a strong foundation of basic education and school-to-work transition.

(2) For too long American workers have shouldered most of the costs associated with labor market flexibility. These costs should be more evenly shared by the private sector and the government. Where appropriate, the government should finance labor market programs delivered to the workers by the private sector.

(3) Training must be linked to employment in order to be effective. The ultimate objective is for American workers to be gainfully employed in high skill, high wage jobs. Although labor market flexibility is important in order to respond to the current economic challenges, this flexibility should not come at the expense of earning an income through employment.

Labor market flexibility depends on training and climbing up the skill and wage ladder is especially difficult for workers who lack basic skills. In spite of the fact that the Clinton Administration and Congress often speak about the virtues of training, this attention has yet to be translated into adequate programs and funding for those programs. Any new program for dislocated workers should be an integral part of a strategy of lifetime learning which includes improved performance at the K-12 level, substantially increased resources devoted to the school-to-work transition, and access to continuous training for all active workers.

A more flexible labor market is crucial to meeting the current economic challenges in the international economy. The US government should follow a policy of encouraging this flexibility at the least cost to American workers. Existing US labor programs are too small, inadequate, and short-sighted to support this flexibility. Any serious adjustment program must provide adequate income maintenance to enable workers to undertake the kind of retraining they need to fully adjust to the changes currently taking place in the US labor market. Most importantly, the government's commitment to labor market adjustment must be backed up with secure and adequate funding if there is any hope for serious adjustment to take place.

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Table 1

Government Expenditures on Labor Market Programs

(Percent of GDP)

Country	Training	Unemployment Compensation	All Labor Market Programs
Canada	0.22	1.58	2.09
France	0.28	1.34	2.87
Germany	0.23	1.30	2.32
Japan	NA	0.36	0.52
United Kingdom	0.22	0.94	1.62
United States	0.10	0.38	0.62

Source: Organization for Economic Cooperation and Development, Labor Market Policies for the 1990s, Paris, 1990. Table 14. Data refer to the period 1988 to 1990. (US data include Perkins Act vocational training.)

Table 2

TRAINING PROGRAMS IN SELECTED INDUSTRIALIZED COUNTRIES

Country	Participation (Percent of Labor Force)	Average Duration (in Months)	Total Spending (Percent of GDP)	Expenditures per Participant	Expenditures per Participant as a Percent of Average Income
Canada	1.1	6	0.22	US $7,000	37
France	2.3	2.5	0.28	$4,600	27
Germany	1.5	8	0.25	$7,200	37
United Kingdom	1.4	NA	0.22	$5,000	31
United States	1.0	3.5	0.05	$1,800	9

Source: Organization for Economic Cooperation and Development, Labor Market Policies for the 1990s, Paris, 1990. Table 5. Data refer to the period 1988 to 1990.

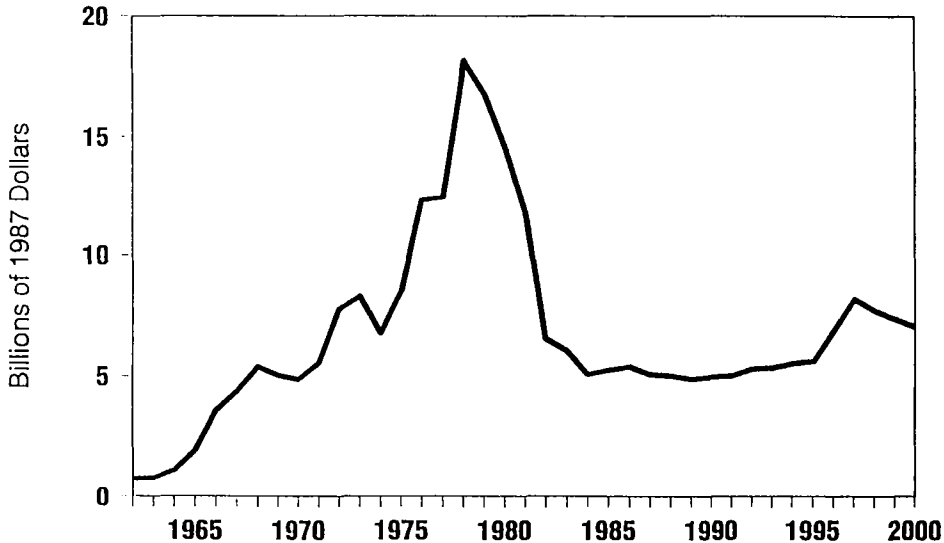
Table 3

US Labor Market Adjustment Programs

	Eligibility	Benefits	Financing
Job Training Partnership Act/ Economic Dislocation and Worker Adjustment Assistance	Dislocated worker defined as those who have little possibility of returning to their previous job.	Job search assistance, training and relocation benefits. Possibility of needs payments if enrolled in training. All benefits are determined and distributed at the state and local level.	Federal share is budgetary outlay by Congressional appropriation. 3/4 of funds are allocated to states based on matching formula, of which 60% must be further distributed to sub-state level. Half of all JTPA/EDWAA funds must be allocated for training. $1 billion in FY 1994 and $1.3 billion in FY 1995.
Trade Adjustment Assistance	Workers previously employed by firms which have been certified by USDOL as being hurt by imports. (Entitlement)	Income maintenance payments set at UI level for up to 52 weeks (inclusive of regular UI benefits) and may be extended for an additional 26 weeks. Payments conditioned on enrollment in training. Job search assistance, training and relocation benefits available.	Financed entirely through budgetary outlay by Congressional appropriation. $128 million for benefits and $99 million for training in FY 1994, $179 million for benefits and $98 million in training in FY 1995
Clean Air Act	Workers adversely affected by implementation of acid rain regulations.	Same as JTPA. Needs-related payments are conditioned on training.	$50 million additional Congressional appropriation to JTPA for FY 1990
Defense Conversion Act	Workers displaced by cut-backs in defense programs	Same as JTPA.	$150 million additional Congressional appropriation to JTPA for FY 1991
NAFTA Transition Adjustment Assistance	Workers adversely affected by NAFTA	Expanded TAA benefits	$2 million for benefits and $8 million for training in FY 1994, $33 million for benefits and $32 million for training in FY 1995

Graph 1

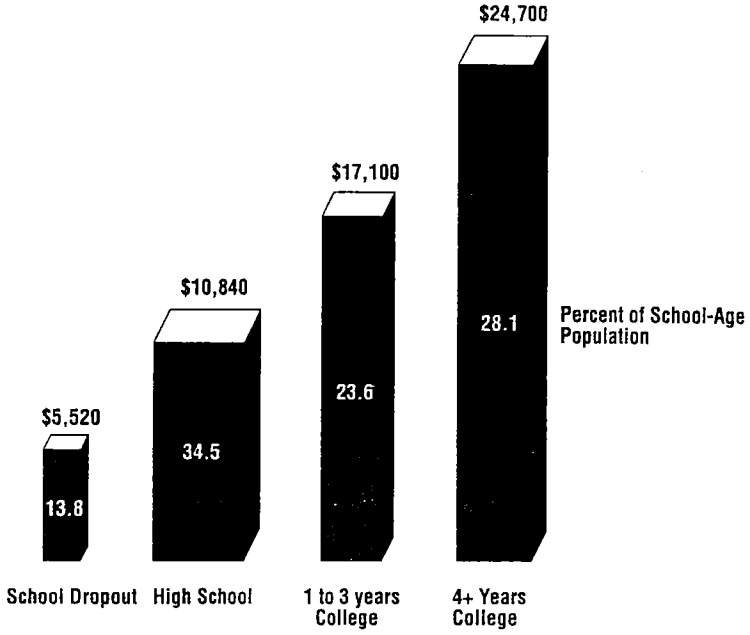
Federal Spending on Training and Employment



Source: Office of Management and Budget

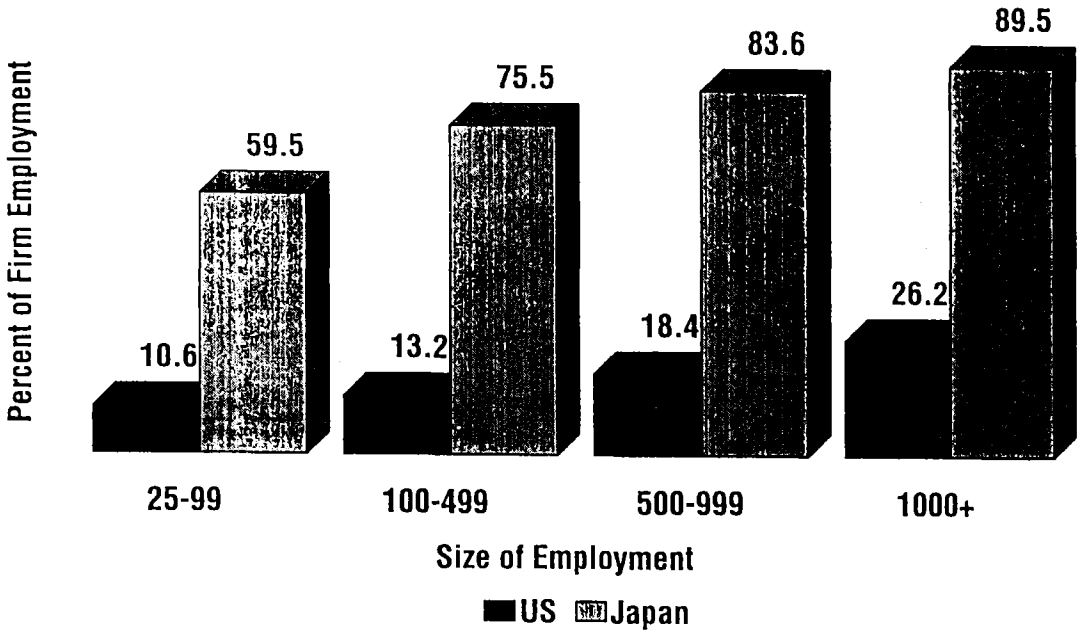
Graph 2

Public Spending Per Person Age 16 to 24 on Education and Training in 1988 Dollars



Source: US General Accounting Office and Department of Education

Private Sector Training



Source: OECD

Chairman CRANE. Thank you, Mr. Rosen.
Mr. Bailey.

STATEMENT OF THOMAS BAILEY, DIRECTOR, INSTITUTE ON EDUCATION AND THE ECONOMY, AND PROFESSOR, ECONOMICS AND EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, NEW YORK

Mr. BAILEY. Thank you, Mr. Chairman, and especially our Congressman, Mr. Rangel. I am also happy to see that we have another New York Congressman here, Congressman Houghton, being from New York myself.

I am very pleased to have been invited to speak to you today. I have devoted most of my professional career to looking at the relationship between education and economics, both in terms of individual well-being, as well as the economic strength of the country as a whole.

I, think it is certainly timely and very important that you conduct these hearings.

I would like to say that much of my research is funded by the Federal Government, through the National Center for Research and Vocational Education, which is in the Department of Education—a function in education for the Federal Government that I think is extremely important, and want to emphasize.

I am the director of the Institute on Education and Economy at Columbia, and we have done research in many areas having to do with how education can enhance work, as well as how we can better use educated workers on the job.

I want to emphasize today one aspect. We have been doing research on School-to-Work, transition, funded by the School-to-Work Opportunities Act, and I am enthusiastic about that program. One reason is because it does provide skills for workers and for young people.

But I am particularly enthusiastic because more and more I have come to believe that School-to-Work, especially if it is linked strongly to employers, has the potential to engage many students in academic learning, in ways that traditional approaches to education cannot.

We are talking about using the School-to-Work strategy to emphasize academic learning, not only vocational skills.

One thing we have learned, in the last 15 years, about employment and about work is that, in general, business was not really using the full potential of its work force.

Workers were expected to come to work, to leave their brains at the door, and to follow orders. Over the last 10 or 15 years, many businesses realized that. Through the use of teamwork, and other types of employee involvement, through development of what is called high performance work organizations. Businesses have tried to engage fully the creativity, energy and imagination of their workers, and I think this is an important reason why we have had solid gains in productivity, especially in manufacturing, over this period.

Now, what does that say about education? Well, I think parts of our educational system are indeed second to none in the world, but, in far too many cases, schools also fail to fully engage their stu-

dents in the activity of learning. Just as workers are not engaged in their work, students are not engaged in their work.

Many students find their schooling boring, and they fail to see the relevance or importance of what they are learning in school. They see no reason to work hard.

But this is a tremendous waste. Increasing education, which I think many people agree is necessary, by increasing the hours or days of schooling, is probably a good idea, but it is also tremendously expensive.

Increasing education by increasing the focus and engagement of our students, and the hours that they work, perhaps on their own, or with their parents, has much less of an impact on the taxpayers.

I think that is an unexploited resource that we need to focus on. Learning is a demanding activity, and we need to get our students to work more at that activity.

Now, how do we do this?

Several previous witnesses have presented several good examples of how we can do a much better job of connecting school and the school experience to the adult world, to the broader community and to the world of work.

Through this we can exploit students' interests and aspirations to enhance their academic learning. Why is it that in almost all cases, outlets for student interests and passions are found outside the classroom?

One of the key objectives of education reform is to try to take those interests, and incorporate them into a student's academic learning.

Of course, I want to stress that many students do not have the slightest idea what their interests are, or what their aspirations are, and I think we can do a lot more to help them think about that. I am not saying that students must make a decision about their futures at the age of 16.

None of us could probably have done that, but we must help students think systematically about what their interests and aspirations are. That is the only way that we can then use those interests, to engage them more in their education.

Another important finding from our research is that many young people who are engaged in internships find it useful and motivating to be treated like adults, and given responsibility.

It is an interesting thing about our society, that just when we are preparing our young people to enter the adult world, we isolate them from adults in a youth world. And I think one of the real advantages of internship programs is that they give an adult role to young people, but in a situation in which they can also receive guidance.

I agree with the previous speaker that much of our knowledge about successful education reforms is based on stories. Stories are useful, but they do not give us a rigorous measurement of the effectiveness of programs. At Columbia, we are carrying out a rigorous evaluation of career magnet schools in New York City, many of which have strong contacts with employers, including internships.

And just to highlight a few of our findings, we found that, 2 years after graduation, career magnet graduates were more likely

to have declared a college major, and earned more college credit, than their counterparts who went to regular area high schools.

What is particularly important is that we found that magnet schools had a positive effect on social behavior, including reduction in teen pregnancies, alcohol and drug and tobacco use.

We often ask what schools can do to enhance business, to enhance our competitiveness? We also have to ask, what is it that business can do to enhance education?

Schools and colleges can only be effective in preparing a skilled work force if they have a strong partnership with employers.

I will end here. I would be happy to talk about how I think that can be brought about.

Thank you.

[The prepared statement follows:]

Testimony to the House Committee on Ways and Means
Subcommittee on Trade
July 25, 1996

Thomas Bailey
Director of the Institute on Education and the Economy
and
Professor of Economics and Education
Teachers College, Columbia University

This statement is based on Bailey, Thomas and Donna Merritt (1996). *School-to-Work for the College Bound.* New York: Institute on Education and the Economy, Teachers College, Columbia University.

Mr. Chairman and distinguished members of the Committee, I thank you and your colleague, our Congressman Mr. Rangel, for inviting me to testify before you on the importance of education and training for our country's's competitiveness and economic growth. I have devoted most of my professional life to the study of the role of education for work and the economy, as a professor of economics and education at Teachers College, Columbia University and for the last four years as the Director of the Institute on Education and the Economy. I am also on the board of the National Center for Research in Vocational Education, a education research center funded by the Office of Vocational and Adult Education in the Department of Education. Much of my own research and the research of my colleagues at the Institute has been made possible by this funding from the Department of Education.

During the last few years, our Institute has been devoted primarily to looking at how skills and human resources can be more effectively used to promote productivity and competitiveness and how schools and employers can more effectively teach those skills and abilities to the country's young people. I can only mention a few of the things that we are doing, but I think that our research on initiatives funded by the School-to-Work Opportunities Act of 1994 might be particularly relevant to your interests. The school-to-work strategy combines high standards with career guidance and exploration, and stronger links between schools and the community, especially employers. I have become increasingly enthusiastic about this approach, not only because students learn useful skills, but even more because I believe that school-to-work has the potential to engage many students in **academic** learning in ways that more traditional approaches to education cannot. And I believe that the problem of student engagement in learning is a crucial educational issue, especially as it relates to competitiveness and growth.

While economists disagree about many things, all agree on the importance of education for economic productivity and for individual economic well being. Thousands of studies have shown that individual earnings rise with education. Studies of macro economic growth show that as much as 60 percent of the growth in per capita output can be attributed to increases in education. Studies that we have done at the Institute have shown how the increasing pace of technological change is increasing the importance of flexible skills in both service and manufacturing industries.

One of the most important lessons that businesses have learned over the last 15 years is that in general they do not use the potential of their employees. Many employees were asked to come to work, "check their brains at the door," and follow orders. Recently through the use of teamwork, modern human resource strategies, and so-called "high performance work organizations" many employers have tried to engage fully the creativity, energy, and imagination of their workers. This is an important reason why we have had important productivity gains over the last decade at least in manufacturing.

In far too many cases, schools also fail to engage their students in the activity of learning. Many students find their school boring, and they fail to see the relevance or importance of what they are learning in school. They see no reason to work hard. But this is a tremendous waste. Increasing education by increasing the hours or days of schooling is expensive, but increasing

education by increasing the focus and engagement of students, and the hours that they work on their own or with their parents, has much less impact on taxpayers. Our job as policy makers is to make those more modest investments needed to promote the greater engagement and motivation of our students.

How do we do that? One important way is to hold all students to high academic standards. This has already received a great deal of attention.

Case studies that we are carrying out in schools and workplaces are beginning to suggest that we can also do a better job of connecting school and the school experience to the adult world, to the broader community, and to the world of work. Through this we can exploit student interests and aspirations to enhance their academic learning. Why is it in almost all cases, outlets for student interests and passions are found outside the classroom on the athletic field, in extracurricular activities, or in activities with their friends. A key objective of education in general, and the school-to-work approach in particular, should be to try to connect those interests to academic learning.

Of course, many students have not the slightest idea what their interests or aspirations are. Certainly if we are going to try to connect student interests to learning we also have to help them think about where they are going and what might interest them. Students with a coherent plan and goals do have higher academic achievement.

When we talk to high school students who are involved in internships, we often find that they get a tremendous amount out of the opportunity to take responsibility and to be treated like an adult. In our society we prepare students for adult life by isolating them in youth enclaves, and often by giving them little to compete with a youth culture that does not value academic achievement.

Coherent-education, well connected to the adult world can have many benefits. We are conducting a rigorous evaluation of career magnet schools in New York City, many of which have significant similarities to the school-to-work model outlined in the legislation. We found several important effects. Among other findings, the project concluded that two years after graduation, career magnet graduates were more likely to have declared a college major and earned more college credits when they went to college than their counterparts at area comprehensive high schools with no career focus or exposure. Attendance at a magnet school also had positive effects on social behavior including reductions in teen pregnancy and alcohol, drug, and tobacco use.

Increasing productivity and improving education are closely linked, but a key to both is to engage the energy, imagination, creativity, and commitment of both workers and students. By failing to do so, we waste human resources on the job and prevent their full development in school. A growing body of research, including our own, suggests that the school-to-work model and other types of education reforms can improve that crucial motivation and commitment of students. But this is an extremely difficult task because we are asking that the entire community be involved in education.

Mr. Chairman and Congressman Rangel, thank you again for this opportunity to discuss this important issue, I would be happy to elaborate on any of the points that I have raised or to discuss the role the Congress could play in the types of changes that I think are necessary.

Chairman CRANE. Thank you, Mr. Bailey.
Mr. Samuel.

STATEMENT OF HOWARD D. SAMUEL, SENIOR FELLOW, COUNCIL ON COMPETITIVENESS, WASHINGTON, DC

Mr. SAMUEL. Mr. Chairman, my name is Howard Samuel, and, since my retirement in 1992 as president of the Industrial Union Department of the AFL/CIO, I have served as a senior fellow at the Council on Competitiveness.

The Council on Competitiveness, unlike the Competitiveness Policy Council—we are two different groups—is a private, nonpartisan organization, consisting of business leaders, labor leaders, and leaders from the field of higher education, which is dedicated to improving our ability to raise the standard of living, at the same time meeting the demands of the global marketplace.

Mr. Chairman, as the final witness in a day which has been distinguished by outstanding witnesses, I have been looking for ways in which to earn your approval, and I thought perhaps the best thing to do is really not to look very carefully at my testimony, which will appear in your record, I understand, but to summarize very briefly two or three points that have not been raised.

Second, and perhaps more important, to be brief.

Let me raise these issues first. The issue of training and the worker in the work force must be regarded much more holistically than we have.

One term which has not been heard today is low birth weight babies, and I suggest to you that the problem of low birth weight babies has an impact on our educational system, and therefore on the ability of our work force to meet the challenges of the global marketplace.

In short, what I am suggesting is that we have got to look at the problem of the worker, holistically, as part of a continuum, starting with the mother's prenatal care, moving through the early health issues, obviously through early education, and then into the workplace.

We have got to look not only at training, but at the climate within which training occurs. One of the things we have learned, and I think this has been agreed upon by both the business organizations, such as the NAM and the NAB, and by the AFL/CIO that is that training is far more effective when it is undertaken in a climate of cooperation and partnership, when workers feel that they are able to participate in the decisionmaking process, where there is possibly some system of gain sharing, when workers have a sense of security on a job.

Training, by itself, is not as effective as when it is done under that kind of a climate.

The second issue is an issue which has been touched on here, but which I would hope this Subcommittee would look at more carefully, and that is the role which technology, learning technologies, will play in the spread of training and education in the years ahead.

Computer based training, the Internet, electronic distance learning, interactive systems, and and electronic performance support

systems, these are the terms of art which I think are going to rule the world of training and education in the years ahead.

They hold the promise of making training faster, cheaper, and more accessible to even the smallest companies. The small and medium sized companies are the furthest behind in undertaking training activities.

The Council on Competitiveness has initiated a major research project on training, with an emphasis on the development of learning technologies, with the belief that they may be the key to improving the ability of the work force to meet the challenges of the future.

Finally, let me mention the role of the government, which has been touched on briefly today. The government has a role to play, obviously, in the creation of a capable work force. There is an effort in Congress and the administration to rationalize government training programs, which would surely be of benefit to dislocated workers.

The Goals 2000 Program, which was initiated by a Republican administration, and endorsed by a Democratic, should continue to serve as a guidepost for improving our educational systems.

The National Skills Standards Initiative, and the School-to-Work Transition Program, both of which were endorsed by our Council in 1993, should be maintained at a level which will assure their effectiveness.

The Manufacturing Extension Partnership, in the National Institute of Standards and Technology, is the only institution today which is systematically reaching out to small and medium sized firms, and should continue to be supported.

And finally, an area which we have not touched on at all—perhaps this Subcommittee would be interested in studying it further in the future—the training experience of numerous government agencies should be shared with the private sector.

This applies particularly to the Department of Defense, where training for readiness is a major budget element, and which has been in the forefront of developing new learning technologies.

At the Council we are now working with several of these government agencies, and with a number of business, labor and professional organizations, to bring about a closer association. I would urge the Subcommittee to develop this issue further.

[The prepared statement follows:]

TESTIMONY OF
HOWARD D. SAMUEL

SENIOR FELLOW, COUNCIL ON COMPETITIVENESS

BEFORE THE

COMMITTEE ON WAYS AND MEANS

JULY 25, 1996

Mr. Chairman and Members of this Committee:

My name is Howard D. Samuel, and since my retirement in 1992 as president of the Industrial Union Department of the AFL-CIO, I have served as a senior fellow of the Council on Competitiveness. The Council, which was founded ten years ago, is a non-profit, non-partisan organization of chief executives from business, labor and higher education dedicated to improving the nation's ability to build a rising standard of living while meeting the demands of the global marketplace.

The Council has formed a Task Force to benchmark best practices in on -the-job training, with a special focus on the deployment of learning technologies to improve workers' skills. Chairing the Task Force are Richard Notebaert, chairman and CEO of Ameritech, George Becker, president of the United Steelworkers of America, and Harold Raveché, president of Stevens Institute of Technology.

It has become clear to the leadership of the Council--as it has to much of the nation--that growing global competition and rapid technological change would require major changes in the American workplace if the nation were to maintain and enhance its standard of living. Indeed, it has become apparent that in today's world, when capital and technology move easily from continent to continent, the structure of the workplace and the ability of the workforce to meet changing conditions may be one of the principal determinants of industrial survival and success.

The company of yesterday usually based its workplace on the principles espoused by Frederick Taylor and Henry Ford at the beginning of the century: "tight divisions of labor and narrowly designed jobs," in the words of MIT Professor Paul Osterman. The auto worker was classified as an installer of front seats or rear seats and didn't switch from one to the other. This eased the responsibility of the supervisor, and gave a certain job security to the relatively unskilled and untrained worker--but it is a far cry from what is required in today's rapidly changing industrial scene.

Today's challenges are different, and tomorrow's will be more so. These challenges include constantly changing technologies and an increasingly demanding customer base, which can shop the world for quality products at a good price. A successful company today must build a flexible work organization, capable of meeting changing customer requirements and taking advantage of changing processes.

A key factor in achieving such a workplace is a well-trained workforce, motivated to commit itself to continuous learning.

The creation of a motivated worker doesn't start at the factory door. A secure family, an effective educational experience in earlier years, and a program which eases the transition from school to work all play vital roles in producing a worker capable of meeting today's challenges. On the job, skill training may not be enough to produce a commitment to

continuous learning. Numerous studies have demonstrated that providing workers the right to participate in the decision-making process is a key element in the high performance workplace. Other practices which bolster the training function may include organizing work through teams in place of the assembly line; a system of gain-sharing or skill-based pay; an assurance of job security; and a reduction of layers of supervision.

Although every company must meet its own special competitive circumstances, there seems to be little controversy over many of these workplace practices. A number of studies, by the U.S. Department of Labor, by numerous scholars at a number of universities appear to demonstrate conclusively that the introduction of high performance practices in the organization of work produces improved productivity and financial returns. Statements by the National Alliance of Business, which is focussed on workplace practices, by the American Society for Training and Development (ASTD), the chief professional organization, and by the AFL-CIO all endorse the need for workers and management to be "partners in change" (NAB) in the high performance workplace.

In addition, numerous case studies have called attention to the success of individual firms which have adopted some or all of these practices. Such companies as Motorola, Xerox, Corning Inc, Hewlett Packard, AT&T and several of the regional Bells, Johnson & Johnson, Eastman Kodak, Magma Copper have been studied and cited as examples of companies which have reaped the rewards of workplace practices which have resulted in a workforce committed to continuous learning. These and other companies which have organized workforces have usually found that their trade union relationships have eased the transition.

But there is another side to this story--a record of companies which have failed to recognize the challenges of today and have not instituted the practices, including training, which underlie business success in our modern age. According to a study by the ASTD in part based on a recently released study by the Bureau of Labor Statistics, in 1983 the U.S. private sector spent $47 billion (in 1995 dollars) for formal, employer-provided training. In 1995, the amount was $55.3 . The ASTD points out that with adjustments for inflation, the amount employers spent on training rose a bit less that 20 percent, while the BLS reports that the workforce has risen by 24 percent.

Business in general appears to be increasing its investment in training, but the increase is slower than the growth of the workforce.

The decline has occurred not so much among large firms, but among small and medium-size business. Firms with 50-100 employees spend about a third less per employee than larger firms. The same studies disclose that workers with less education and fewer skills, as in the past, receive less training. In other words, employer-provided training appears to continue to be focussed more on management and supervision--usually employees with a college education--than on hourly workers on the shop floor.

The BLS/ASTD report occasioned little surprise. Six years ago, the Commission on the Skills of the American Workforce, co-chaired by two former Secretaries of Labor (Bill Brock and Ray Marshall) undertook an exhaustive study which demonstrated the failure of most firms to adopt training and other high performance practices. That study has been substantiated by a number of other studies by numerous university scholars, all testifying that although a growing number of firms have awakened to the need to adopt best workforce practices, there still remain a shockingly large number of companies which have not adopted them at all, or have done so minimally that they are off the charts.

An international comparison, published last year by the Council in its Human Resources Competitiveness Profile, substantiated the problem. The U.S. government spends a far lower proportion of its GDP on job training than many other industrialized countries. In Japan, the percent of workers who receive training is almost 3-5 times higher than it is in the U.S. In Japan, training starts when a worker is hired and continues through his career; in the U.S. training starts later and only increases with a worker's tenure.

Finally, high school graduates receive much less training in the U.S. that they do in France, Germany and Japan.

What of the future? What will be the challenges of the years ahead, when more nations will enter the global economic fray, when technology change will increase its pace, and when both phenomena will be complicated by a U.S. workforce which will probably include more groups--minorities, immigrants--whose disadvantaged background will challenge management? Let me summarize a few of the problems and opportunities that will face all of us in the period ahead:

1. There is ample evidence, statistical and anecdotal, that the educational preparation of our population does not meet the needs of the modern workplace. As a result many companies have difficulty in recruiting adequately educated workers, and more and more companies are obliged to sponsor remedial training programs. There is some evidence that this situation is improving, through the efforts of both the public and private sectors, a partnership that should be encouraged.

2. The changing demography of the workforce could add a burden on American business. A growing number of immigrants will have language problems. Members of minority racial and ethnic groups often face major educational handicaps, and their numbers are increasing. Women have now become a major part of the workforce in virtually every industry, but many women still face the conflicting demands of work and family.

3. Much of American industry, in every major sector, has felt it necessary to impose sharp reductions on its workforce in order to cut costs. At the same time, wages and salaries have remained stagnant for most workers for a number of years. And finally, more and more companies are substituting part-time or temporary workers to fill what used to be full-time permanent positions. Downsizing, stagnant pay envelopes and contingent workforces have had and will continue to have an impact on the ability of managers to maintain morale among their workers and make it more difficult to maintain an environment which encourages a commitment to quality and continuous learning.

4. There is a growing awareness that training and skills are no longer static. New technologies require new skills; training must develop the ability to acquire them. And the effectiveness of training must be measured not by the amount of inputs (hours or money spent), but by the performance improvements of those trained.

5. A factor which will surely have a substantial effect on education and training will be the development of learning technologies. Computer-based training and the Internet, electronic distance learning, interactive systems and performance support systems are the terms of art of the future. They hold the promise of making training faster, cheaper and more effective, and bringing it within the reach of even the smallest companies. As I indicated earlier, the Council of Competitiveness has initiated a major research project into training best practices, with an emphasis on the development of learning technologies, in the belief that they may be the key to improving the capability of the workforce.

I suggested above that some of these challenges can best be met by a partnership of the private and public sectors. Government has an important role to play in assuring that our workforce is equipped to meet the challenges of the future.

For example, there is an effort in Congress and the Administration to rationalize government training programs, which would surely be of benefit to dislocated workers. The Goals 2000 program, which was initiated by a Republican Administration and endorsed by a Democratic, should continue to serve as a guidepost for improving our educational systems. The National Skills Standards initiative and the school-to-work transition program--both of which were endorsed by the Council in 1993--should be maintained at a level which will assure their effectiveness. The Manufacturing Extension Partnership, in the National Institute of Standards and Technology, is the only institution systematically reaching out to small and medium size firms, and should continue to be supported.

Finally, the training experience of numerous government agencies should be shared with the private sector. This applies particularly to the Department of Defense, where training for readiness is a major budget element, and which has been in the forefront of developing new learning technologies. The Council is now working with several agencies and with a number of business, labor and professional organizations to help bring this about.

Chairman CRANE. Thank you, Mr. Samuel.

Mr. Rosen, Motorola has its corporate headquarters located in my district, and they are currently investing about 6 percent of its payroll in training employees, and that, I have been told, is one of the highest levels in the entire country.

What would you suggest to encourage other companies to follow that kind of an example? I mean, I have heard nothing but high compliments back home on what Motorola has been doing.

Mr. ROSEN. Yes, Mr. Chairman, I note that example in my written testimony, in the context of the term high performance workplaces. This is a term of art which has been used over the last 2 years, and I am reminded of the Supreme Court Justice, who said, when asked about pornography, "I do not know how to define it, but I know it when I see it." Well, that is a "high performance workplace." There are many explanations of what it really is, but Motorola just puts its money where its mouth is, and trains its workers. And it pays off, the company is better because of it.

Now, the key question, as you ask, is, by now everyone should know that story, so why are not other companies following Motorola's example? And in part, I think it goes to a bigger set of issues, which is that not all corporations share Motorola's, committment to investing in their workers, and their long-term vision for the company. It takes a lot to try to change that, and I do not know who is responsible for changing that kind of thinking. It really should come from within the company.

But again, I would have to say we need to keep getting that message out there, and bringing out the success stories. You have provided an opportunity to do that today. I applaud you for having these hearings today but I do not think we have heard anything new. The key is we have to get this message out to the people. Maybe what needs to be done, as an example, is for the Business Round Table to devote one of its meetings to this issue, and Mr. Weill to tell his story. Then another CEO may ask himself why don't I do that? And he calls his aide over and he says, "look into that, I want to do that—I want to be like that guy."

Unfortunately, there are not many people here today to hear Mr. Weill's story, and to congratulate him for his efforts. There are no TV camera crews, and he will not get recognition, outside this room. Please do not misunderstand me. I applaud the Subcommittee for what you are doing—and we need to have more of this kind of meeting.

And like I said, the Motorola example is clearly documented. It is there, we know it works, and it is something that I would think every businessman who is interested in the future of their company should want to emulate.

Chairman CRANE. Thank you.

Mr. Rangel.

Mr. RANGEL. Mr. Rosen, I do not know at what point of the hearings you arrived, but in the opening statement, and throughout the hearings, I have been trying to stress that the chairman has agreed to have these hearings as exploratory hearings, not only to hear what is happening out there, but to see how we can have them all come together, to hear what each other is doing, and what way, if

any, the Federal Government policymakers can be of more assistance to them.

And also to make certain that they have a forum to applaud what is working, and to share with us any of there own accomplishments.

This is really a beginning. We are going to have the opportunity to get together with educators, as well as producers in the private sector, and if I said it a million and one times, it is that I am convinced that it will be the voice of the private sector that will be far more effective than those of us who have to be concerned about 2-year terms, and whether this vote appears to be fair for all of our constituents, as opposed to, what does our Nation specifically need, and how can we provide that service.

Mr. ROSEN. Mr. Rangel, I would like to offer all of the resources of the Council to help you in your efforts, in the meetings that you want to hold in the fall.

We are certainly prepared, because this is exactly what we are all about.

Mr. RANGEL. Accepted.

Mr. ROSEN. And anything we can do to help you, we would be more than happy to.

Mr. RANGEL. Accepted.

Mr. ROSEN. But if you were to ask me what the government should do, I would say "be consistent." The problem has been that the government steps in and then steps out, in and then out. For example, we heard a big cry about a "Nation At Risk" in 1984. Nothing has really changed since that report was published, and yet the policy has gone back and forth since then.

Mr. RANGEL. Mr. Rosen, you are the only person here that is more excited than I am. I am not concerned about what we have tried to do and have failed, because you and I are agreeing that we are doing a political thing.

What I want is for businesspeople—I mean, it is just like with research and development—I want it to be that important that when you plan what you have got to be there for you.

But I would want—I am a politician, so I want all of the voices in business to be saying this, and not just you and not me.

Mr. ROSEN. Right.

Mr. RANGEL. And I am convinced that when they know it is not only good for their balance sheet, good for their company, good for the industry, but good for the country, that we will find what you are talking about—consistency—because their voices will not only be in the education community, and talking with administrators, it will be here, where tax and economic policy is set.

So, I welcome——

Mr. ROSEN. But my point is that they are not getting a consistent message. Right now we are being told that the economy is doing well, and we do not have any problems. So why would we need to do anything if we do not have any problems? The message keeps changing. The challenge of raising living standards is a continuous challenge. It is not something that will go away tomorrow, so we have to keep working at it, and always keep improving ourselves. That is the message we should be sending out.

Mr. RANGEL. Well, we are not sending any messages out today, we are just trying to find a solution to a very serious problem, and I hope you would at least recognize that those Members who are here do recognize there is a problem, and you will be hearing from us.

Mr. Bailey, in your research—Columbia is not only in an empowerment zone, but has contributed a great deal to make certain that our proposal was in shape in order to be designated—in your research in bringing the public school system closer in line with the needs of industry, have you been able to fold in the tax incentives that are involved in empowerment zones?

Mr. BAILEY. Well, the research that we have done has not so far, analytically, included that.

Mr. RANGEL. Well, whom can I get from Columbia who is a partner to include that, to see if it works in empowerment zones, whether or not it could work in other communities.

Mr. BAILEY. Sure. Some of the schools that we are looking at are involved in the empowerment zone, and that is an ongoing aspect of the research.

Mr. RANGEL. Would you know any of those schools that would be in my congressional district?

Mr. BAILEY. I am not sure which ones, exactly, are in your district.

Mr. RANGEL. Could you find out.

Mr. BAILEY. I could find out, absolutely. Yes.

Mr. RANGEL. Good.

Mr. BAILEY. That is no problem.

Mr. RANGEL. And I want Columbia to be working very closely with us, not just in studies, but in implementing what we are going to come out here with. I would like for Columbia to play a big role in this.

Mr. Samuel—and I will need your organization, because you transcend the whole thing. You have problems—I mean, you are dealing with policy, but you are also dealing with policymakers.

And we hope to have such an impact that we are going to be included as policy makers, because you are going to have the largest firms in the world, the largest bureaucracy in the world, and a Congress, at least this Subcommittee, we are going to have to work together, all of us.

So that is the good news. But if you have not done any work on it, would you consider how unions would be able to—we will be able to give assistance to unions, and union leaders, to get whatever training and support they need, when they know that their primary job is to protect the workers who have paid dues to them to protect those jobs.

Now, there comes a time when everyone will know that, not only have those jobs been exported through sound treaties, but that low-skill jobs are just not going to exist.

And of course, a lawyer has to know when to tell the client that he has done the best he can for the client. And we have to politically be able to tell the labor leaders that there is no turnaround with the direction in which the world and this country is going.

But that does not mean that you should just give up on your job, or your clients, or your members, because we are going to do something to make certain that you can continue to be productive.

Mr. Samuel, I do not know what that something is, but in the course of your work and study, has that question ever come up?

Mr. SAMUEL. Mr. Rangel, I spent 45 years in the labor movement before I retired in 1992, and I can tell you that even by that time, much less by this time, I do not believe there is a single responsible trade union leader in the country who is not fully aware that global competition and technological advances have changed the workplace forever.

My own union—it used to be called the Amalgamated Clothing Workers, and it is now called UNITE, Union of Needletraders, Industrial, and Textile Employees—in 1975 started a program with Professor John Dunlop of Harvard University, to improve the technologies in the apparel industry, which for years had been considered to be immune to technological change.

And the leadership of my union understood that if we did not bring technology into that industry, even though we knew it would cost jobs, that eventually there would be no jobs at all, there would be no industry.

That is true in every single major industry today, whether it is a service industry or a manufacturing industry. You will find in many of the major ones, like communications and auto and machinists and others, that there are joint training programs undertaken to ease the change of workers from an old fashioned system—the old Taylor, scientific management, assembly line system—to the system of today and tomorrow, which involves organization of work into teams, employee involvement, employee information.

That is happening throughout the labor movement, and incidentally, has been endorsed by the AFL/CIO itself—I think it was back in 1991.

Mr. RANGEL. I am going to staple you to some of these trade bills, because my mother was a member of International Ladies Garment Union, which united with your union, which became UNITE, and it was a door for all immigrants. It is a low-skill job, it provided to hope—you could send your kids to CCNY, and now those low-skill jobs are not there.

What would you tell Jay Mazur today?

Mr. SAMUEL. What could I tell whom?

Mr. RANGEL. The president of UNITE. The question is, that the jobs are going to go, and it is a question of time, in competing with the Caribbean and China and the rest of the countries, can we not offer a cushion, a transition or something, so that those who are working, and young, can be trained to do something else?

Mr. SAMUEL. Oh, by all means, and I think you will find——

Mr. RANGEL. What should we do?

Mr. SAMUEL. As you well know, the labor movement has been in these halls of Congress for many years, urging the strengthening of our unemployment insurance system, of our dislocated training programs, and trade adjustment assistance; urging the strengthening even of such laws as the minimum wage, which just took place here.

So, I think there are a number of ameliorating factors which can take place. And as a matter of fact, in looking at trade, although this meeting does not deal with trade, we have also made suggestions regarding allowing the industries to adjust to major changes in trade, a major loss of internal markets.

And we have also urged very strongly that we take stronger action to open up foreign markets, which are closed to our products, to improve exports.

Mr. RANGEL. My time has expired. Are you in New York or in Washington?

Mr. SAMUEL. Most of the time I was in New York; I came here 20 years ago.

Mr. RANGEL. I mean, where—you live in Washington?

Mr. SAMUEL. Yes, I live in Washington now.

Mr. RANGEL. OK. I would like to make an appointment with you, because I am going to need your advice. If I am going to be as aggressive in promoting world trade, I know that we are going to lose a lot of jobs in the transition, as the newly created jobs are there.

And you having thought it out from the union's point of view, and now from the Nation's point of view, I am going to need the benefit of your thinking as to how we can best do that.

Mr. SAMUEL. Well, I will not spend too much time at this point. I would suggest to you that the Congressman who is sitting next to you and I have been—we used to be associated for many years in an organization called LICIT, the Labor Industry Coalition for International Trade, and one of the things LICIT has looked at are various ways in which the effects of trade can be cushioned, so that average workers can ease in the transition.

I remember years ago, when they were calling it the Massachusetts miracle, forgetting about the fact that when the Massachusetts miracle took place, there had been about 25 years during which time there was no Massachusetts miracle, between the time the textile and the shoe companies had left Massachusetts, and the high tech companies came in. They were 25 years of misery.

We have been doing better recently, and I think we can do better in the future.

Mr. RANGEL. Great panel. Thank you for your contributions.

And thank you, Mr. Chairman.

Mr. HOUGHTON [presiding]. Thanks very much, Mr. Rangel.

Mr. Coyne.

Mr. COYNE. Nothing.

Mr. HOUGHTON. Nothing.

Look, I have got a lot of questions, but I will get them to you gentlemen later.

[The questions and answers were not available at the time of printing.]

Thank you so much for what you have done. I mean, I think this question that you brought up, Mr. Rosen, if training is so good why do we do so little? gets to the heart of this whole thing.

Who does it, how do we get it done, and how do we incite?

Thanks very much.

Mr. ROSEN. Thank you.

Mr. BAILEY. Thank you.

Mr. SAMUEL. Thank you, Congressman.

[Whereupon, at 3:04 p.m., the hearing was adjourned.]

[Submissions for the record follow:]

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WRITTEN TESTIMONY OF **STEVEN CORD**
BEFORE THE
SUBCOMMITTEE ON TRADE OF THE COMMITTEE ON WAYS & MEANS
7/25/96, 11 A.M., 1100 LONGWORTH BLDG.

STEVEN CORD has no clients and is appearing on his own behalf and that of the Center for the Study of Economics.

The global trade competitiveness of the U.S. work force will be much improved if the price of American exports is not increased by taxes. That is clear enough, but if taxes on producers are reduced, how then shall the federal government support itself? By taxing more something of value which is not humanly produced - i.e., the locational value of land.

In fact, if land values are taxed more, land owners will be encouraged to develop their land-sites more, thereby providing new jobs and economic growth. Here, then, is a revenue source which promotes not hinders economic growth! It is **tax-free** economic development (tax-free because only a tax shift from produced goods and services is shifted to something which is not produced).

Why would land owners be encouraged to develop their land-sites more efficiently? Because that is the only way they could get enough income to pay the higher land value tax (plus a profit for the enhanced improvement).

It is possible for the federal government to levy such a tax to replace taxes on producers, and it is also possible for state and local governments to levy a land value tax. But implementation problems are best handled by contacting this organization directly; we have closely studied the problems of the philosophy and implementation of land value taxation for many years.

If we truly want U.S. workers to be more productive and if we truly want to enhance U.S. trade competitiveness, then we shouldn't tax production. We should tax the locational value of land instead. So also say seven recent American Nobel Prize winners in economics (see attachment).

November 1991

Incentive Taxation

Seven Nobel Prize Winners Endorse Land Value Taxation

The headline is correct. If we had eight, would you be more impressed, and even more important, moved to action?

Milton Friedman: "I share your view that taxes would be best placed on the land, and not on improvements."

Herbert Simon: "Assuming that a tax increase is necessary, it is clearly preferable to impose the additional cost on land by increasing the land tax, rather than to increase the wage tax - the two alternatives open to the City (of Pittsburgh). It is the use and occupancy of property that creates the need for the municipal services that appear as the largest item in the budget - fire and police protection, waste removal, and public works. The average increase in tax bills of city residents will be about twice as great with wage tax increase than with a land tax increase."

Paul Samuelson: "Pure land rent is in the nature of a 'surplus' which can be taxed heavily without distorting production incentives or efficiency." A land value tax can be called "the useful tax on measured land surplus."

James Tobin: "I think in principle it's a good idea to tax unimproved land, and particularly capital gains (windfalls) on it. Theory says we should try to tax items with zero or low elasticity, and those include sites."

James Buchanan: "The landowner who withdraws land from productive use to a purely private use should be required to pay higher, not lower, taxes."

Franco Modigliani: "It is important that the rent of land be retained as a source of government revenue. Some persons who could make excellent use of land would be unable to raise money for the purchase price. Collecting rent annually provides access to land for persons with limited access to credit."

Robert Solow: "Users of land should not be allowed to acquire rights of indefinite duration for single payments. For efficiency, for adequate revenue and for justice, every user of land should be required to make an annual payment to the local government equal to the current rental value of the land that he or she prevents others from using."

The current president-elect of the American Economics Association, **William Vickrey**, also endorses land value taxation: "It guarantees that no one dispossesses fellow citizens by obtaining a disproportionate share of what nature provides for humanity."

The endorsements from the last three economists named above were taken from a letter dated November 7, 1990 to Mikhail Gorbachev signed by 30 prominent U.S. economists.

STATEMENT OF
DR. EMMETT C. MURPHY, Ph.D.
E.C. MURPHY, LTD.

Please accept the following written statement in support of the U.S. Trade Competitiveness and Workforce Education and Training hearing which was conducted on July 25, 1996.

This testimony is submitted on behalf of the proceedings of the Subcommittee on Trade of the Committee on Ways and Means for inclusion into the printed record of the above-mentioned hearing. Dr. Emmett C. Murphy, Ph.D. forwards this document as formal exhibit material on behalf of E.C. Murphy, Ltd., an international healthcare research, management consulting, and educational services firm specializing in the quality improvement and work-redesign of organizations.

* * * * *

During the course of E.C. Murphy, Ltd's (hereafter referred to as E.C. Murphy) 25-year history, the company has worked with more than 400 hospitals and healthcare organizations throughout Canada, the United States, and Europe. E.C. Murphy has established a prestigious reputation built on the scientific inquiry and investigation of the nature of leadership and organizational productivity, particularly in the healthcare field.

Perhaps the greatest challenge facing today's leaders -- regardless of what happens with the various budgetary reductions in the near future -- is the need to continuously improve and restructure business operations to keep their organizations competitive for the long-term.

To maintain or improve their organization's competitive position, today's leaders must improve the efficiency and cost effectiveness of their organization's operations by educating their employees. This requires preparing the organization for change, assessing the organization's current operations, diagnosing concrete opportunities for improvement, retooling their managers to implement change, taking action, evaluating the results and continuously improving the integrity of the work-redesign process.

Two major studies undertaken by E.C. Murphy and their findings are detailed in this report, as well as supporting commentary on how the results of those analyses are being benchmarked to identify further opportunities to improve the competitive nature of the American workforce. These studies have gained national attention and exposure in *USA Today*, *Modern Healthcare* and *Congressional Proceedings on Healthcare Reform*.

Dr. Murphy, an organizational psychologist by training, has spearheaded the development of an extensive database which contains input from more than 280,000 workers from a variety of U.S. and foreign organizations. Through data-driven research, E.C. Murphy has developed state-of-the-art management and technologies that provide leaders with concrete answers about work-redesign, operational restructuring and cost reduction.

Dr. Murphy has provided management development, executive selection, labor relations, crisis management, and operational reengineering advice to such Fortune 500 companies as IBM, General Motors, AT&T, Sears, Xerox, Johnson & Johnson, and McDonald's. He has also been retained by a number of financial institutions (e.g., Chase Manhattan Bank and Chemical Bank), and has consulted utilities (e.g., Bell Telephone, Illinois Bell), transportation companies (e.g., American Airlines, Amtrak), federal, state, and municipal government (e.g., Defense Intelligence Agency, U.S. Centers for Disease Control, City of New York), insurance agencies (e.g., Massachusetts General Life), professional organizations (e.g., The American Management Association), and institutions of higher learning (e.g., M.I.T., Syracuse University, and George Washington University).

* * * * *

To gain an understanding of how American businesses, and in particular the healthcare industry, can become more cost-efficient and competitive globally, while advancing levels of quality and productivity, E.C. Murphy first analyzed the inherent work inefficiencies of several hundred organizations through statistical analysis. It then developed tools to correct those work problems and finally, implemented a solution that involved a continuous improvement strategy.

The results of an October 1993 study conducted by E.C. Murphy indicate that hospital downsizing may increase patient mortality. Although these findings are not unusual, the subsequent analysis found that hospitals that downsized their staffs without redesigning the *work functions* of employees actually had the potential to increase patient mortality and morbidity (emphasis added).

The study compared the staffing structures of 281 general acute care hospitals nationwide with Medicare mortality and morbidity data from the Health Care Financing Administration for 1990. Staffing levels (using the standard industry measure of full-time equivalent employees per adjusted occupied bed {FTEs} and the methodology used in downsizing, if any) were identified through interviews with 502 financial and operational executives in these hospitals.

The study determined that hospitals that made across-the-board staff reductions of 7.75 percent or more in response to financial pressures - 9.5 percent of the sample size - were 400 percent more likely to experience an increase in patient mortality and morbidity than other hospitals.

A second part of the study examined the work practices of 72,250 healthcare workers to evaluate the relationship between the organization of work and the consequences of restructuring.

This research clearly demonstrated that healthcare work systems are extremely complex and wasteful. In comparison with a control group of more than 1,300 workers and managers from business and industry, virtually every healthcare work role - from the CEO to the floor nurse - was found to be 100 to 800 percent more complicated, either in terms of the scope of resources to be managed or the work activities to be performed.

The complexity of healthcare operations creates a great potential for waste and confusion, considering that the average healthcare worker reported that 31 percent of their time was wasted through paperwork, rework, duplicate work, or inappropriate work. This consumed more than $65 billion of the $384 billion spent for healthcare in hospitals alone, and this total today is much higher.

Taken together, these results suggest a strong relationship between the organization of work and increased mortality and morbidity. When staff size is reduced without redesigning the work, waste is merely compacted, not eliminated. Fewer people are left to grapple with the same inefficient procedures and complexity, which leaves even less time for patient-focused activities.

When E.C. Murphy completed its next study in March 1995, it clearly indicated that hospitals that used used "data-driven work-redesign" methods to reduce staff levels experienced sustained cost-savings, no increases in patient mortality and morbidity rates, improved perceptions of the quality of care by patients and physicians, and produced higher rates of leadership retention.

The study examined more than 300 organizations, including 117 general acute care hospitals, with total employment in excess of 170,000 healthcare workers. There were 23 hospitals in this group that reduced their annual operating costs by 4 percent to 10 percent in a single year. The question: is it possible to cut costs and preserve -- or actually improve -- the quality of patient care?

Across-the-board cuts eliminate a given number of positions to save money, leaving fewer people to do the same volume of work. On the other hand, work-redesign changes the skills mix in an organization or department, placing people with certain levels of training and pay to perform work at corresponding levels.

Organizations which make across-the-board staff cuts not only put their patients at risk, but their leaders as well. In fact, 48 percent of the CEOs in the March 1995 study who implemented an across-the-board downsizing strategy were no longer employed by their organization 18 to 24 months after cutbacks.

In contrast, the turnover rate for CEOs that initiated a process of work-redesign was 11 percent, and half of this turnover was the result of CEOs who were promoted or moved on to other favorable positions.

All of the organizations examined in the March 1995 study analyzed work processes across all lines and levels, and produced data that was benchmarked against nationwide best practices. This comparison identified specific role, cost center and organization-wide work-redesign, or staff reduction, opportunities.

A year after completing this second study, 90 percent of the hospitals kept the costs out, while 70 percent were able to remove additional costs in the range of 3 percent to 8 percent of annual operating costs. Perhaps equally important, 80 percent of all of the hospitals in the study reported an improvement in the assessment of quality by patients and physicians, and more than 70 percent said their employee's perceptions also improved.

While sustained cost savings are attainable using work-redesign methods, this research shows that across-the-board staff cutting actually prevents long-term cost savings and impedes worker productivity and efficiency.

Savings generated by across-the-board cuts seem to be lost within 12 to 18 months, because there is a "backfill effect" that occurs as managers and workers - including unions - fight back and challenge the judgment of senior managers, especially if leadership has employed heavy-handed outside consultants.

The research study in March 1995 has shown that leaders who followed a data-driven process to restructure their operations to become more efficient and cost-competitive were seen as more credible and obtained a much higher buy-in from their staff. These leaders were praised for insight, responsibility and toughness. By fostering a thorough analysis of their organizations, these leaders were seen as more courageous and more willing to face the challenge than those described as "cut and run types."

The findings of the October 1993 and March 1995 research studies suggest that business and healthcare organizations under fiscal pressure and budgetary constraints must be cautious of using any method of workforce downsizing that does not leave an organization with the right people, doing the right job, at the right time.

To build and maintain a cost-competitive and dedicated workforce requires a specific set of tools and a thorough understanding of the actual work performed by American workers.

Using the above strategy, American businesses can become more cost-efficient and competitive internationally. This approach is a collaborative one, designed to empower business with concrete tools and techniques to become in-house experts in work redesign and change management.

In addition to evaluating the organization's cost structure, service delivery, and worker productivity, training employees to become agents of change is the key to the success of any business becoming more competitive. The most effective means to accomplish this task is through the application of a moral compass and sound leadership ability.

As an outgrowth of the vast body of knowledge it has accumulated in helping hundreds of organizations successfully restructure to reduce costs and improve productivity, E.C. Murphy has also conducted the most comprehensive empirical study of leadership. Published in his third book, *Leadership IQ*, Dr. Murphy reports the results of a five-year research study to determine the common characteristics of the world's most accomplished leaders.

Analyzing the beliefs and practices of more than 18,000 managers at 562 large and small organizations in the United States and around the world, the study identified 1,029 individuals who demonstrated exceptional leadership abilities and then isolated the qualities that made those leaders great.

Those leaders that are considered superior in the eyes of their colleagues and that produce superior levels of customer satisfaction, productivity and financial performance are those that approach work very differently than average leaders. They master a core set of competencies including pragmatism, optimism, commitment, responsibility, humility, and an understanding of the importance of individual competence.

It was also found in this five-year substudy, that average leaders, by contrast, tend to believe their achievements lay beyond their control, rely on others to lead them to success, and have a difficult time breaking free from the bureaucracy of their organizational structures to focus on problem solving and instilling pride in their employees.

To maintain the competitive edge it has in many areas (e.g., technology, communication and transportation) and to gain it in others, American business must continue to retool and restructure to meet ever-increasing competition from abroad. Increasingly, they must also restructure their workers, especially their leaders. A key in each of these areas is a clear understanding of work at the individual, group and corporate levels. E.C. Murphy's work with hundreds of businesses of every size and stripe has given it some unique insights in this regard.

Statement by
Stephen E. Lamar*

Before the House Ways and Means Trade Subcommittee

in response to its request for comments on

US Trade Competitiveness and
Workforce and Education Training

Thank you for providing an opportunity to submit a statement on the relationship between US Trade Competitiveness and Workforce and Education Training.

Clearly, workforce training programs play an integral role in maintaining and enhancing US skills to meet international competitive pressures. Whether supported by the federal government, by individual states, or by private companies, education and training programs serve as a tangible investment in human capital that is often among the most important investments made. When properly administered, training programs serve as a catalyst for entrepreneurship and provide the flexibility necessary to help firms and individuals adapt to the marketplace.

Unfortunately, a lopsided provision of US trade law --- the Trade Adjustment Assistance (TAA) program, which provides training for workers displaced by trade -- actually undermines US competitiveness by distorting the public understanding of the benefits of free trade. If left unbalanced, this provision could upset the trade agenda for years to come.

To understand why, the TAA has this effect, one has to look at the character of the trade debate in recent years. Assessments on the North American Free Trade Agreement (NAFTA) and the renewed debate over China's most-favored nation (MFN) trading status have focused considerable attention on the relationship between trade liberalization and the creation of American jobs. Although this relationship has long been accepted as the basis of a bipartisan trade agenda, it has also been soundly criticized by those who disagree with the notion that free trade is in the US national interest.

During the past year, for example, NAFTA critics led by Pat Buchanan and Ross Perot, have angrily denounced that trade agreement by pointing to job losses, factory shut downs, and Mexico's growing trade surplus with the United States. NAFTA proponents have countered by making equally anecdotal claims of jobs that NAFTA has saved or created, factory openings, and Mexico's irreversible commitment to market-oriented economic reform.

Both sides have often backed up their claims with a well-used Reagan-era equation which holds that $1 billion in new exports generates roughly 20,000 US jobs. NAFTA proponents look at in increase of roughly $5 billion in exports to Mexico since NAFTA took effect and see 100,000 new American jobs. Applying the statistic in reverse, which is not entirely accurate since Mexico's exports to the United States can displace imports from other countries as well as domestic production, NAFTA opponents look at an increase of $22 billion worth of imports from Mexico during that same period and see 440,000 lost American jobs.

Fair enough. But NAFTA critics have been able to employ another statistic with surprising effect. The NAFTA implementing legislation contains a

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mechanism -- known as NAFTA trade adjustment assistance (TAA) -- under which the Federal Government actually certifies the number of jobs lost or in danger of being lost because of increased imports from Mexico (but not necessarily as a result of NAFTA). The provision is based on a similar TAA program that applies to imports from all over the world.

To be balanced, these TAA provisions are intended to provide job retraining assistance and other benefits for individuals who lose their jobs when the economy reorients itself to the disciplines of trade liberalization. Some in Congress have proposed abolishing this assistance as a way to save money. Such programs may be necessary, however, both to soften the blow that trade liberalization may hold for some highly-protected industries and to gain some political support for a pro-free trade agenda from organized labor interests.

Unfortunately, a side effect is that these programs disproportionately highlight the job-destroying effects. Because US workers and employers have an obvious incentive in reporting such job disruption to the Federal Government -- the displaced worker receives federal aid from the Government, in addition to unemployment insurance, to help locate a new job -- the TAA programs are used as a barometer of the kind and number of jobs lost through the effects of free trade.

As a result, NAFTA critics can announce with stunning precision that imports from Mexico have resulted in 71,125 job losses from January 1994 to May 1996. While NAFTA proponents can downplay the relevance and size of this statistic, they cannot avoid the fact that, with each passing month, the Labor Department is busily certifying more and more US workers as being threatened by US imports from Mexico. To make matters worse, no similar mechanism exists to certify the job-creating effects of NAFTA's trade liberalization. This means that, according to official US Government certifications, NAFTA will always trigger a net loss of US jobs.

What's needed is a program to balance the TAA statistics and certify the job-creating effects of trade liberalization. By developing an incentive to report the creation of new export-related jobs, the government can more accurately record trade-related employment statistics -- both the losses and the gains -- nationwide. Without such a mechanism, free trade proponents will find themselves at a disadvantage as they seek to defend US trading relationships -- be they with Mexico, China, or other markets -- for many years to come.

One idea is to allow for US-based firms to receive a nominal tax credit for each export-related job it has created in the United States during the previous year. While it may be difficult to structure such a program to conform to our obligations under international trading regimes, which prevent most export-related subsidies, this kind of program would provide a clear incentive for US firms to report their export-related job growth.

Similarly, the Government could initiate a TAA-comparable program to provide training directly to employees who have recently been hired because of increased exports. In this way, we can help employees sharpen their skills to remain competitive and keep their jobs as they respond to inevitable changes in the world marketplace.

Another possibility might be to establish a block grant program that can be used to support the export promotional or job training efforts of states that can certify trade-related job growth. Under such a scheme, a state government would receive federal export or job training dollars based on the number of new export-related jobs that were created in the state during the previous 12 months. Such a program may make budgetary sense as well since it would channel export promotional and educational dollars to the states most able to use this assistance.

Whatever the program, it is clear we need to fundamentally alter the way we view trade agreements. Current Congressional budgeting rules already overstate the fiscal cost of trade legislation. It is truly a shame that job retraining laws understate the employment benefits of trade initiatives as well.