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THE HIGHER EDUCATION ACT AND THE WORKFORCE: ISSUES FOR REAUTHORIZATION

HEARING

OF THE

COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

ON

EXAMINING ISSUES FOR REAUTHORIZATION OF THE HIGHER EDUCATION ACT, FOCUSING ON A KNOWLEDGE-BASED ECONOMY, THE RELATIONSHIP BETWEEN POSTSECONDARY EDUCATION AND THE WORKFORCE, AND FINANCIAL AID

MARCH 4, 2004

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THE HIGHER EDUCATION ACT AND THE WORKFORCE: ISSUES FOR REAUTHORIZATION

THURSDAY, MARCH 4, 2004

U.S. SENATE,
COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:03 a.m., in room SD–430, Dirksen Senate Office Building, Senator Enzi, presiding.

Present: Senators Enzi, Alexander, Jeffords, Murray, and Clinton.

OPENING STATEMENT OF SENATOR ENZI

Senator ENZI. I will call the hearing to order. I will give a brief statement. Senator Murray will be here in a while and she will give a statement.

The rules are that we will ask questions in order of arrival, assuming other Senators will show up. We do ask the presenters to condense their statements to five minutes. Everything that you sent, which I have looked at and is excellent, will be a part of the record. But if you can condense it so that we get the best five minutes of it, that will allow us to do some questions.

The record will also remain open for an additional 2 weeks so that questions can be submitted and hopefully we will get timely answers so those can also be a part of the record, and that will give you a chance to expand even more.

I am really pleased with the knowledge that has been assembled here for our help today and I do want to thank Senator Gregg for giving us the opportunity today to discuss how higher education can help students develop the skills this Nation needs to compete and succeed in the global economy.

For generations, the skills and ingenuity of the American workforce have fueled the greatest economy in the world. Our ability to equip our workforce with the skills needed for jobs in the ever-changing, increasingly global economy will determine the prosperity of generations to come.

What this hearing is really about is keeping the American dream alive for workers of today and tomorrow. Some might say the American dream begins with a good job. I say the American dream begins before that. It begins in our schools and in our institutions of higher education where the skills needed to perform the jobs are sowed. For me and for my friends when I was growing up, the American dream was the belief that we could be anything we want-

ed to be if we were willing to study hard enough and work hard enough in our chosen field.

The Higher Education Act plays a critical role in preparing the 21st century workforce for 21st century jobs. According to the Department of Labor, over 80 percent of the fastest-growing jobs in the country require some college education. As the need for advanced skills continues to grow, it seems clear that our institutions of higher education must step up to fill that need.

Indeed, the proportion of workforce made up of those with some college education has continued to grow. Unfortunately, as Chairman Alan Greenspan has noted, we appear nonetheless to be graduating too few skilled workers to address the apparent imbalance between the supply of such workers and the burgeoning demand for them. High-skilled jobs in this country remain unfilled because employers can't find qualified workers. Workforce demographics suggest that the gap between the demand for high-skilled workers and the supply will only widen. Our postsecondary schools must do a better job of supplying the 21st century workforce for the 21st century jobs.

Some institutions are ahead of the curve in designing curriculum and partnering with the businesses in their communities to design programs that will help students enter high-growth and high-wage job sectors. Two of the witnesses here today, Dr. Charles Bohlen, President of the Laramie County Community College, and Dr. James Votruba, President of the Northern Kentucky University, represent institutions with strong track records in identifying local community workforce needs and designing their curriculum to meet those needs. These institutions are placing their graduates in high-growth sectors. As a result, the students leaving these institutions are on their way to achieving economic security and stability. They are on their way to achieving the American dream for themselves and for their families.

Community colleges have been at the center of the workforce development and economic development in Wyoming and elsewhere. In fact, workforce development and economic development go hand in hand. You need businesses to provide jobs. You also need a skilled workforce to attract business to an area. It follows that skills training can be a tool for economic development as well as for improving the quality of life for workers.

A critical part of helping these students achieve the American dream is to provide them with sufficient support to see they complete their program of study. According to the Department of Education's National Center for Education Statistics, roughly half of all students who begin a 4-year undergraduate degree program finish that program within 6 years. This is an issue that Congress must address. These students are beginning the road to stability and security, yet half of them aren't finishing the journey.

Along with the Workforce Investment Act, the Higher Education Act is part of a comprehensive approach to improving the lives of our workers and increasing the strength of businesses and communities. I was pleased to work with Senators Kennedy and Murray and other members of the HELP Committee on crafting the Workforce Investment Act Amendments. This bill was truly a bipartisan

effort. It passed the committee unanimously and it passed the Senate by unanimous consent last November.

I am urging everybody to ask for a conference committee to get that job finished. When it passes unanimously, you can't do better than that. There is no reason why we shouldn't be getting a conference committee busy on that, so I hope everybody will push for that.

We should all be concerned about the loss of American jobs offshore. In the evolving global economy, the cause is complex. However, the call for education and skills training is loud and clear. That is what that Workforce Investment Act is, incidentally. It trains about 900,000 people a year for the kinds of skills that are needed in the workforce.

The path to the American dream for our people and the economic prosperity for our Nation is paved by the skills of our workforce. Borrowing Chairman Greenspan's words again, "what will ultimately determine the standard of living in this country is the skill of the people." Our institutions of higher education are a beacon, calling for innovation and prosperity for our workers and our businesses to our shores. Skills training is a critical part of that process.

I would like to thank the witnesses again for the testimony they are going to present today and the discussion that we will have.

[The prepared statements of Senators Enzi and Dodd follow:]

PREPARED STATEMENT OF SENATOR ENZI

Today we will explore the relationship between higher education and our Nation's ability to compete—and succeed—in the new economy. For generations, the skills and ingenuity of the American workforce have fueled the greatest economy in the world. Our ability to equip our workforce with the skills needed for jobs in the ever-changing, increasingly global economy will determine the prosperity of generations to come.

What this hearing is really about is keeping the American Dream alive for workers of today and tomorrow. Some might say that the American Dream begins with a good job. I say that the American Dream begins before that. It begins in our schools and in our institutions of higher education where the skills needed to perform these jobs are sowed. For me, and for my friends when I was growing up, the American Dream was the belief that we could be anything we wanted to be if we were willing to study hard enough and work hard enough in our chosen field.

Our economy is a lot more complicated now than it was when I was growing up. Higher education is more important than ever in providing American workers with the job skills they need to succeed—now and in the future. The Higher Education Act plays a critical role in preparing the 21st century workforce for 21st century jobs.

We should all be concerned about the loss of American jobs offshore. In the evolving global economy, the cause is complex. However the call for education and skills training is loud and clear. Ingenuity and skills are a beacon for jobs. Therefore, we must keep the beacon of innovation shining brightly on our shores.

As Chairman of the Federal Reserve Board, Alan Greenspan, said last month in a speech to the Greater Omaha Chamber of Commerce, "we need to ensure that education in the United States, formal or otherwise, is supplying skills adequate for the effective functioning of our economy." According to the Department of Labor, over 80 percent of the fastest growing jobs in the Country require some college education. As the need for advanced skills continues to grow, it seems clear that our institutions of higher education must step up to fill that need.

Indeed, the proportion of our workforce made up of those with some college education has continued to grow. Unfortunately, as Chairman Greenspan noted, "we appear, nonetheless, to be graduating too few skilled workers to address the apparent imbalance between the supply of such workers and the burgeoning demand for them." High-skilled jobs in this Country remain unfilled because employers can't find qualified workers. Workforce demographics suggest that the gap between the demand for high-skilled workers and the supply will only widen. Our postsecondary schools must do a better job of supplying the 21st century workforce for 21st century jobs.

Higher education in this country has traditionally been synonymous with skills training. Since it was enacted in 1965, the Higher Education Act has been the tool that has paired students with the highest level of training they need for entry into the workforce in the highest wage sectors. Almost 40 years later, the make up of our students—and the demands on our workforce—have dramatically changed. Many postsecondary school students are no longer entering college directly out of high school. Many skills that were needed when a student entered postsecondary education are no longer relevant by the time they graduate. The Higher Education Act must keep pace with the rapidly changing and increasingly global economy as well as with the changing student body.

Some institutions are ahead of the curve in designing curriculum and partnering with the businesses in their communities to design programs that will help students enter high-growth and high-wage job sectors. Two of the witnesses here today—Dr. Charles Bohlen, President of Laramie County Community College, and Dr. James Votruba, President of Northern Kentucky University—represent institutions with strong track records in identifying local community workforce needs and designing their curriculum to match those needs. These institutions are placing their graduates into high-growth sectors. As a result, the students leaving these institutions are on their way to achieving economic security and stability. They are on their way to achieving the American Dream for themselves and their families.

Community Colleges have been at the center of workforce development and economic development in Wyoming and elsewhere. In fact, workforce development and economic development go hand-in-hand. You need businesses to provide skilled jobs. You also need a skilled workforce to attract business to an area. Most employers, when asked, say the most important thing to their long-term success is the presence of a skilled workforce. It follows that skills training can be a tool for economic development, as well as for improving the quality of life for workers.

The new Lowe's Home Improvement Distribution Center in Cheyenne, Wyoming proves that workforce development is a powerful economic development tool. Lowe's was looking at a number of sites to open a regional distribution center. Laramie County Community College partnered with State and local economic development and workforce development agencies to provide job training to meet Lowe's needs. This was a primary reason Lowe's selected Cheyenne. One hundred eighty-five graduates of this training program found jobs at Lowe's or other distribution centers in the area. This is a huge number of jobs for Wyoming and a real economic boost to Cheyenne.

A critical part of helping these students achieve the American Dream is to provide them with sufficient support to see that they complete their program of study. According to the Department of Education's National Center for Education Statistics, roughly half of all students who begin a 4-year undergraduate degree program finish that program within 6 years. This is an issue that Congress must address. These students are beginning the road to stability and security, yet half of them are not finishing the journey. Institutions are part of the solution, as is the business community, and Congress has an important role to play as well. Getting these students in the door to postsecondary education is only the first hurdle. Making sure they leave with the skills they need to compete for good jobs is the ultimate goal.

Along with the Workforce Investment Act, the Higher Education Act is part of a comprehensive approach to improving the lives of our workers, and increasing the strength of our businesses and communities. I was pleased to work with Senators Kennedy and Murray and other Members of the HELP Committee on crafting the Workforce Investment Act Amendments. This bill, which was a truly bipartisan effort, passed the Senate by Unanimous Consent last November. I urge my Colleagues to allow this important legislation to proceed to conference.

This committee must build on our previous efforts to keep the United States and its workers at their competitive best by working cooperatively to reauthorize the Higher Education Act, as we did—and I hope we can continue to do—with the Workforce Investment Act.

The path to the American Dream for our people and to economic prosperity for our Nation is paved by the skills of our workforce. Borrowing Chairman Greenspan's words again, this time from the Banking Committee hearing last month where he testified, "what will ultimately determine the standard of living of this country is the skill of the people." Our institutions of higher education have a difficult task ahead. We can—and must—help them succeed. These institutions of higher education are a beacon calling innovation and prosperity for our workers and our businesses to our shores.

PREPARED STATEMENT OF SENATOR DODD

Good morning and thank you all for joining us. I would like to thank you, Senator Enzi, for convening this important forum on a topic that we will be spending the better part of next year on, the reauthorization of the Higher Education Act.

The Higher Education Act authorizes the Federal Government's major activities as they relate to financial assistance for college. It provides aid to institutions of higher education, services to help students complete high school and enter and succeed in postsecondary education, and provides mechanisms to improve the training provided to members of one of our most important professions—teaching.

When I think of the Higher Education Act, naturally, I first find myself thinking about financial aid. How can we make college financially accessible? I also think about the nation's workforce. How can we ensure that universities are providing us with the intellectual capital America needs to compete in the 21st Century?

Today's students, like today's workforce, look very different than they did even 20 years ago. The student population is more diverse and is overwhelmingly composed of "nontraditional students." What are nontraditional students? Students that did not graduate from high school, go immediately to college and depend on their parents for financial support. More than half of all of today's undergraduates are financially independent, almost half delayed college enrollment immediately after high school, 39 percent are 25 years of age or older, 48 percent attend part-time, 22 percent have dependents, 13 percent are single parents and 39 percent work full-time. According to some, roughly 1/3 of nontraditional students enroll to obtain additional education that is required by their jobs.

Today's working students are balancing their studies with their families and careers. They can not interrupt their work day for classwork leaving limited time for additional education and retraining. Yet, they look to higher education to upgrade their skills, increase their earning potential, and in some cases, change careers.

Not only are today's students different, employers have different needs. As one of our panelists will testify to, 60 percent of corporations are now prevented from upgrading technology because of a lack of properly trained workers. Four out of every future five jobs will require some higher education and 75 percent of today's workforce will need to be retrained over the coming years just to keep their current jobs. 60 percent of future jobs will require training that only 20 percent of today's workforce possess, and 40 percent of future jobs do not currently exist. When you consider that business productivity and profitability depends on the quality of our workforce, it becomes clear that the American economy depends on our ability to educate American students to the American economy's needs.

Rest assured, this is not just a corporate issue, it is an individual quality of life issue. Compared to a high school degree, an associates degree is worth nearly half a million dollars in extra income and a bachelor's degree is worth an additional $1 million. A master's degree is worth an additional $1.1 million and a doctoral degree is worth $3.2 million more. Over the last year, the unemployment rate of those without a high school diploma was 8.8 percent, those with a high school diploma was 4.9 percent and those with a bachelors degree or higher was 2.9 percent. Clearly, college has become an essential component of a middle-class lifestyle.

What can we do to get students the training and retraining they need to secure good paying jobs while supplying business with the

human capital that they need to remain competitive and profitable? Today we are going to hear from a panel of experts in both higher education and business to see what it is that they think we can do to help. I want to thank all of our witnesses for joining us this morning. I look forward to hearing their suggestions for how we can simultaneously provide students with the skills they need to earn livable incomes and provide business with the human resources—the knowledge, skills and intellectual capital needed—to retain America's competitiveness in a global economy.

Senator ENZI. Senator Jeffords, do you have a statement?

OPENING STATEMENT OF SENATOR JEFFORDS

Senator JEFFORDS. Thank you very much. I just want to echo your comments that it is terrible that we have not been able to get to conference on the bill. Those of us that worked so hard on it and I think came up with an excellent piece of legislation are really very frustrated by the lack of cooperation with the House on this.

I will ask some questions, Mr. Chairman, but that is it for now.

Senator ENZI. Thank you very much.

Senator Alexander?

OPENING STATEMENT OF SENATOR ALEXANDER

Senator ALEXANDER. Thank you, Mr. Chairman. I am here to learn today. I am really proud of the work Chairman Enzi has done on workforce and higher education. Senator Jeffords has been involved with this area for a long time and I am grateful for that.

There is a lot of talk about jobs today and a lot of reasons for that talk, but I learned a long time ago that in our country, we are constantly losing jobs and we are constantly creating jobs. The focus needs to be on how can we create an environment in which we can create the largest number of good-paying new jobs to replace the jobs that are always being lost to international competition.

The single best way to do that is by helping men and women go from one job to the next with better skills and better education, and our community colleges and some of our higher education institutions have been our secret weapons in the production of better job skills and new jobs and I look forward to learning more about how we can encourage that.

Senator ENZI. Thank you.

The five witnesses on the panel today represent a broad perspective on the Higher Education Act reauthorization. Dr. Charles Bohlen, the President of Laramie County Community College, will testify from the perspective of a 2-year institution of higher education. He will also describe a partnership between his institution and a regional Lowe's distribution center in Cheyenne and the workforce training programs that the college implemented to prepare its students for work at the Lowe's facility.

Dr. James Votruba, the President of Northern Kentucky University, has taken an extensive interest in partnering his academic programs with the local business community. He will describe his institution's focus on developing intellectual capital and how his institution has worked with local firms to train and place students

in high-growth job sectors after graduation. He will describe the iNET and METS program, two particular programs that train students for work in the local business community.

Dr. Beth Buehlmann, the Vice President and Executive Director of the Center for Workforce Preparation of the U.S. Chamber of Commerce testified before the House Education and Workforce Committee last year on the Workforce Investment Act and has extensive understanding of the Higher Education Act. She will describe the need for highly educated, highly skilled workers in the modern economy and how the Higher Education Act would work in conjunction with other Federal programs to train workers.

Dr. Diana Oblinger, the Executive Director of Higher Education, Microsoft, will present an employer's perspective on the Higher Education Act and its success in training workers with adequate skills. She has written a book on how well higher education is succeeding in preparing graduates for the workforce. She will provide a broad perspective on the needs of the high-growth job sectors and what changes might be made to the Higher Education Act.

Ellen O'Brien Saunders, the Executive Director of the Washington State Workforce Training and Education Coordinating Board, is the minority witness and will discuss broad concepts relating to both workforce development and higher education.

I appreciate all of you being here today and look forward to your testimony. We will start with Dr. Bohlen.

STATEMENT OF CHARLES H. BOHLEN, PRESIDENT, LARAMIE COUNTY COMMUNITY COLLEGE; JAMES C. VOTRUBA, PRESIDENT, UNIVERSITY OF NORTHERN KENTUCKY; BETH B. BUEHLMANN, VICE PRESIDENT AND EXECUTIVE DIRECTOR, CENTER FOR WORKFORCE PREPARATION, UNITED STATES CHAMBER OF COMMERCE; DIANA G. OBLINGER, PH.D., EXECUTIVE DIRECTOR OF HIGHER EDUCATION, MICROSOFT CORPORATION; ELLEN O'BRIEN SAUNDERS, EXECUTIVE DIRECTOR, WASHINGTON STATE WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD

Mr. BOHLEN. Thank you, Senator. Good morning. My name is Dr. Charles Bohlen and I am President of the Laramie County Community College in Cheyenne, Wyoming, and I am pleased to be with you to offer this testimony on behalf of my colleagues as well as the American Association of Community Colleges, AACC, on the Higher Education Act and its relation to providing the Nation with a skilled workforce. AACC represents 1,173 regionally accredited institutions and serves as the voice for community colleges.

Wyoming's and the Nation's community colleges are a confluence where Federal funds through the HEA and WEA and other Federal programs merge with State and local support to provide education and training programs to prepare America's workforce.

Futurist Ed Barlow predicts that America's community colleges will become the finishing schools for gold collar positions. In other words, a growing number of bachelor's and higher degree holders will attend community colleges after completing their baccalaureate degrees to obtain technical skills needed in the emerging knowledge-based industries.

Our community colleges are committed to access and thus have a primary mission, that is, assisting the disenfranchised and the unempowered to acquire the necessary skills to procure jobs that provide livable income. In Wyoming and the rest of the United States, community colleges are the primary providers of a technically skilled workforce.

AACC strongly supports the current programs and the basic structure of HEA and does not believe that the Act is flawed in any fundamental way. Rather, reauthorization provides an opportunity to make a system that is working well function even better.

We do ask that you retain the current definitions of higher education institution. Much to the distress of community colleges across the country, the leadership of the House Committee on Education and the Workforce is currently supporting legislation that would undermine key support for community colleges. We expect that the HELP Committee will be asked to support this same single definition of institution of higher education, which would make for-profit institutions eligible for programs such as Title III(a). In addition, scores of non-HEA programs whose eligibility is key to HEA definitions would suddenly be open to proprietary schools, including the Carl D. Perkins Vocational and Technical Education Act and the National Science Foundation Programs.

Community colleges strongly oppose this change and ask the committee to reject such a change. Here is why. For-profit institutions are necessarily concerned with delivering profits to their shareholders or owners. Nonprofits are, by definition, dedicated to serving the public interest by keeping student costs low so that the least able or capable have access to the benefits provided by a higher education. If we cut those funds, those limited funds, even finer, there is not going to be enough to allow community colleges and other public institutions to provide access.

We also request that you retain the 90/10 rule. The so-called 90/10 rule was enacted in 1992 to prevent institutions from recruiting low-income students in order to profit from their eligibility for Federal aid. In 1992, the national student default rate was a whopping 22.4 percent. Today, after implementing the 90/10 rule, the rate is 5.4 percent, the lowest to date. We ask that you please retain the so-called 90/10 rule to continue to prevent abuse of Federal financial aid. We also support eliminating the 50% rule but maintaining an education role and distance education safeguards.

As you well know, distance education is a tremendous and exciting development in American higher education. Distance education is especially important in rural States, such as ours, Wyoming. Consequently, AACC supports repeal of the so-called 50% rule and most other differential treatment of on-campus and distance education. However, we believe that some safeguards must be put back in place.

The 50% rule was included in the 1992 HEA Amendments to address the fraudulent activities of many correspondence schools. These schools had high default rates and a disproportionate record of fraud of student aid funds.

The Internet has made delivery of postsecondary education, including now a growing amount of workforce training, more flexible and available. It reaches rural areas and offers new opportunities

for working adults. This is a boom for students unable to study on campus due to geographic conflicts or location.

It also means that unscrupulous institutions could easily reach millions of new students with little more than a pop-up advertisement. Any benefits from distance education would be overshadowed if prudent steps are not taken to prevent fraudulent providers from exploiting students and the Federal Government.

Consequently, we think the Education Department's Education Demonstration Program could serve as a model for a permanent program to allow individual schools to receive waivers of the 50% rule. This approach recognizes the importance and the increasing interest in distance education, but protects students and student aid programs from being taken advantage of by easily accessed and highly advertised programs that do not provide education.

Senator, during the question and answer period, I would be glad to give some detail on the Lowe partnership if you so desire. I wish to thank you and the committee for allowing me to be here this morning. It is indeed an honor.

Senator ENZI. Thank you very much.

[The prepared statement of Mr. Bohlen may be found in additional material.]

Senator ENZI. Dr. Votruba?

Mr. VOTRUBA. Thank you, Mr. Chairman. It is a pleasure, as well, to be here with you and with the committee. I must tell you that I have been known to speak for five minutes before I get to the verb, but I will work hard.

[Laughter.]

Northern Kentucky University is one of over 400 comprehensive universities located throughout the Nation. All universities teach students, where the major research universities tend to place a primary focus on the discovery of knowledge. We tend to focus very heavily on the application of knowledge to address the needs of the regions that we serve. In many respects, we could be described as stewards of place.

Our approach to workforce development focuses on fostering intellectual capital from childhood through adulthood. We know that the ability of our region, as well as every other region in this Nation, the ability to compete in a knowledge-based economy, will depend on our capacity to recruit and retain intellectual capital. This is where the game will be won or lost in our local community and in all of yours.

We also know that our greatest source of job creation will be small and medium-sized companies, which has implications for public policy and for HEA reauthorization.

Now, the corporate and community leaders in our region have made clear to us that they want us involved in fostering intellectual capital at four different levels, and I will hit them briefly.

First, they want us to seed intellectual capital by working with K–12 education. An example of that, last year, we had 2,000 students involved in math and science enrichment programs on our campus and more to follow.

Second, they want us to prepare intellectual capital, and by that they mean align your academic programs with the high-need job sectors that we have in our region. Today, I know that Kentucky

University produces more IT graduates than any other university in the Commonwealth, and that is intentional based on what we heard from our region.

Third, our region wants us to sustain intellectual capital. In today's world, the knowledge that a student possesses when they graduate from college often has a very short shelf life. Now, more than ever, the ability of a company to remain competitive depends on what we call "just in time" access to learning. Now, this is a very different education than what is offered on most campuses. It is education in a form, at a time, and in a place that is optimally convenient for both the worker and the employer. It is typically noncredit and nondegree education focused on very specific learning outcomes.

Five years ago, we created the Metropolitan Education and Training Services Center, or METS, in response to this need for just in time learning. METS has served over 250 companies and 13,000 employees. Most of the companies that we have served are small or medium-sized and with limited financial resources to support education and training.

This past year, we opened a 43,000 square foot corporate learning facility that supports METS. It is a state-of-the-art facility with over $4 million in instructional technology. Were it not for public support at the State level, that facility would not have been possible because the customers that we are serving, the clients that we are serving, do not have the capacity to sustain a facility like this financially.

Fourth, we provide intellectual capital in the form of faculty and student expertise in order to support company competitiveness. One example is useful. Last year, we created the Institute for New Economy Technologies, or what we refer to as iNET, in order to connect companies with our information science faculty and students who can assist in software development, systems applications, and computer structures. This service provides low-cost and high-quality expertise to companies while giving faculty and students a chance to address real world applications.

Along with the programs and services that I have just described, we have gone to great lengths in both our hiring practices and our incentive and reward systems to ensure that faculties see working with our local region as an important and valued dimension of their professional activity.

What we know is this. The 21st century university will be a very different place in terms of who it serves, how it serves them, when it serves them, and what it serves them.

Now, in closing, I want to mention two areas that I think have particular relevance for our conversation today. First, I will emphasize again that most of our clients cannot afford to pay the full cost of the programs or services that we provide. Whether it is small or medium-sized companies or individual workers, they require a financial subsidy which currently is borne by the university.

As a result, the work that I have just described is generally a cost center rather than revenue center for a university, and at times of budgetary challenge, all organizations, including universities, focus on expanding revenue centers and reducing cost centers, which puts the work that we are discussing here at risk.

Let me emphasize this point. By contrast, the Federal Government has, over the past 50 years, helped produce the most powerful university-based research enterprise in the world. It has done so through enormous resource streams that support both the researcher and the university itself. If fostering intellectual capital in the application of faculty expertise to support economic growth and competitiveness is to be a core campus mission, which I believe it should be, it will be necessary to have access to resource streams that support this work at both the State and Federal level.

At the State level, one example is useful. The Kentucky Council on Post-Secondary Education has recently created the Regional Stewardship Trust Fund that provides resources to comprehensive universities to support efforts to address local and regional needs. To my knowledge, no other State is going down this road and it might be something worth looking at at the Federal level.

Finally, it is important that Federal efforts to support workforce and intellectual capital development be aligned across Federal agencies and programs. In short, we need resource streams that support the learner across the lifespan, the institution in terms of program development, and they need to be coordinated across Federal and State agencies.

Thank you very much, and I would be glad to answer whatever questions you may have.

Senator ENZI. Thank you.

[The prepared statement of Mr. Votruba may be found in additional material.]

Senator ENZI. Dr. Buehlmann?

Ms. BUEHLMANN. Mr. Chairman and Members of the committee, I am pleased to be here today. The U.S. Chamber of Commerce is the world's largest business federation, representing more than three million businesses and organizations of every size and sector and region. The Center for Workforce Preparation, CWP, an affiliate of the U.S. Chamber of Commerce, focuses on workforce development and quality education issues. It helps businesses and Chambers in their communities find, use, and build resources to support productive workplaces and develop a skilled workforce.

I am going to discuss four points in my remarks. The first, that a skilled workforce is a bottom-line issue for employers to remain competitive. Three surveys that the CWP has conducted confirm that employers agree that a skilled workforce is essential to maintaining their competitiveness. They report difficulty, however, in finding qualified workers due to lack of skills and are not confident that the workers' skills will keep pace with future requirements.

Consider that in 1950, 80 percent of jobs were classified as unskilled. Now, an estimated 85 percent of all jobs are classified as skilled. The number of workers with education beyond high school grew 138 percent between 1980 and 2000, while between 2000 and 2020 this number is expected to grow only by 19 percent.

Second point, postsecondary education is a necessary factor to achieving a skilled workforce. Forty percent of job growth in this decade will be in jobs requiring postsecondary education, yet only two out of five adults in the workforce in 2000 had any postsecondary education, associate degree or higher. It is estimated that 60 percent of tomorrow's jobs are going to require skills that are pos-

sessed by only 20 percent of today's workforce, and as Senator Enzi said, four out of five jobs will require some form of postsecondary education or equivalent.

Severity of these current workforce development challenges clearly indicates that lifetime education and training is no longer an option, it is a necessity, and it is a necessity for individuals, for employers, and for our economy.

My third point is that traditional concepts of postsecondary education may need broadening, and that is because today, 73 percent of all postsecondary students are nontraditional students. They are working adults who are trying to balance careers, family responsibilities, financial and other personal obligations. They can't afford to reduce their hours on the job or lose valuable wages while incurring additional expenses, such as tuition and child care. Employers, especially small and medium-sized employers, where 75 percent of new job growth is expected to occur, cannot afford to interrupt their operations, and particularly for those employers who are attending classes during office hours or business hours.

As the need for workers with postsecondary education skills is growing, we must begin to address the needs of these nontraditional students. The global economy and advances in technology place increased demands on the American workforce and the current workforce has greater need to keep pace with future skill demands. It is imperative that we modify and expand the policies of postsecondary education to serve the needs of these nontraditional adult worker-students.

Finally, I would like to suggest some policy considerations for the reauthorization of the Higher Education Act to address these concerns. Financial aid reforms for less than half-time students. Working adults going to school less than half time do not receive the same assistance that a dependent living in the same household would receive. Modifications of financial aid eligibility to shorter-term and more flexible educational programs and greater utilization of distance learning, perhaps by eliminating the 50% rule, is an effective way to reach adult workers.

Incentives for institutions that develop programs and schedules for working adults. Consideration should be given to applying the competencies developed through certification programs toward traditional college credit. Many workers accumulate certificates with competencies and skills and those don't translate into college credit and, therefore, cannot allow them to achieve the degrees that they would like to.

Establish flexibility for new collaboratives to deliver services. Better online course work, access, classroom instruction schedules, and locations must be flexible enough to accommodate work schedules of employed adults.

And finally, examination of differences across institutions and what impact different treatment by Federal and State laws has on serving adult workers efficiently and effectively.

These are just a few broad recommendations to align postsecondary education with the needs of employers and adult workers to become more skilled and remain competitive.

Also attached to my testimony are two documents. One is additional policy recommendations adopted by the U.S. Chamber of

Commerce Board of Directors, and then recommendations from a partnership that the U.S. Chamber has formed with several proprietary institutions.

I want to thank the committee once again for this opportunity and I will be happy to answer any questions that you may have at the appropriate time. Thank you.

Senator ENZI. Thank you very much.

[The prepared statement of Ms. Buehlmann may be found in additional material.]

Senator ENZI. Ms. Oblinger?

Ms. OBLINGER. Mr. Chairman and Members of the committee, we believe that higher education is critical in preparing the workforce of today and of tomorrow. But before I talk about how we are doing, I would like to say a few words about what we should be doing.

I think there are three things that society is really asking higher education to provide. The first is a skilled workforce. Certainly students, parents, employers look to our colleges and universities to prepare them for life, not just for the first job but for a career path that may develop into disciplines that aren't even known today, things such as genomics or nanotechnology.

The second is to provide for social mobility. Our country long has had a tradition of using higher education to provide for social mobility. In essence, a college education is the ticket to the middle class. Predictions are that one to two million additional students will enter American higher education by the year 2015 and a large number of those will come from low-income families. Our schools and colleges must help them to be successful.

And third, I think we need to encourage an active, informed, and engaged citizenry. We can't forget about the Jeffersonian ideal. A democracy's success flows directly from the thoughtful participation of an informed citizenry, and colleges have an important role to play in preparing students to understand issues as well as the consequences of action or inaction.

I think these purposes illustrate that although the benefits of higher education accrue to individuals, higher education is ultimately not a private good. It is a social, cultural, and economic imperative for the Nation as a whole.

And if higher education is an imperative, then I think we have to ask four questions. The first question is, what does it mean to be prepared for the workforce? Certainly, we have all agreed that we need an ever more skilled workforce if our economy is to thrive. I would define a skilled workforce as educated people with mental agility and adaptability. Companies such as Microsoft have clear and evolving definitions of the competencies that are required in today's workplace. This list includes items such as agility, creativity, and ethics. These competencies are on top of the fundamental skills we already think of, and that certainly is a lot to ask of our educational system, but it is something that I think we must ask of them.

The second question is, can we out-think the rest of the world? Certainly, we all recognize that brain power is the primary source of national wealth. As other countries have improved their schools and colleges, as their college going rate and graduation rates have

increased, we must keep pace, as well. I think we have to ask ourself also the question of whether we have a long-term vision to ensure that our population is educated, not just once but whenever it is needed.

The third question is, are we doing all that we can to make students successful? Our success in graduating students from college is uneven at best. Only seven percent of low-income students who begin college immediately after high school graduate by the time they are 24 years old. Large numbers of students enter college unprepared. Nearly half of all college students need some form of remediation, and I think that is symptomatic of a high school preparation and oftentimes of low expectations of what these students can achieve.

Recently, we have come to embrace the understanding that all students can learn. Those who need remedial assistance are not incapable. All too often, it is that they have not been helped to find a path to successful learning. Studies have indicated, for example, that a strong high school curriculum can help shrink the college completion gap in half. Are we doing enough to make students successful?

And the final question is whether our students can achieve academically, get all "A"s if you will, and still flunk life. Our education is about more than just a job. It is about being active and engaged citizens. It is about being involved in our communities. It is about having the ethics and the will to do the right thing.

Certainly, a large part of higher education is about the workplace, but the workplace exists in a much larger context. It exists in the context of communities striving to improve the quality of life for all citizens. The workplace exists in the context of an increasingly diverse culture, and the workplace exists in a world that cannot turn back the clock on globalization.

Higher education is more critical than ever in preparing our workplace. It is a critical element in how we fare as individuals and as a society. We all share responsibility to be certain that higher education can help us actively compete with the rest of the world, ensure student success, and be prepared for a life of active and informed citizenship. A strong higher education system is critical if we are to be prepared for that future.

Senator ENZI. Thank you.

[The prepared statement of Ms. Oblinger may be found in additional material.]

Senator ENZI. Ms. Saunders?

Ms. SAUNDERS. Good morning, Mr. Chairman, Members of the committee. On behalf of the State of Washington, I want to thank you for inviting me to discuss the connections among higher education, workforce development, and economic vitality.

I am especially pleased to appear before this committee since this offers me an opportunity to extend our appreciation to you for the work that you have done on the Workforce Investment Act Amendments, and we will do everything we can to move the amendments to conference committee. You did a fine job on it and soon you will be taking up the Carl Perkins reauthorization and I will look forward to involvement in that discussion, as well.

Meeting the education and skill needs of employers is very key to our Nation's future and I want to speak specifically to Washington State and what has happened there. The employer community recognizes the critical importance of providing postsecondary education and training, as you heard from my colleagues down the table. Governor Gary Locke's Competitiveness Council, consisting of some of the top business leaders in our State, recently concluded that human capital is the key to economic competitiveness. Our surveys of employers support Ms. Buehlmann's surveys of employers, that employers even in a recession are having difficulty finding skilled worker, and so these themes you will hear obviously repeated.

We have an agreement in our State that a skilled workforce is critical. Within this context, how do higher education, workforce development, and economic development connect? Well, we are shifting from supply-driven to a demand-driven strategy. I will talk a little bit about that. We are targeting our resources and we are committed to accountability for results. We are depending a lot on partnerships to get the job done.

As we think about moving to a demand-driven strategy, one that thinks about the employer as the customer and thinking about connecting more closely education and training in the employer community, we have had to do some nontraditional thinking. We are recognizing and supporting in our State key industries following a cluster strategy, if you will. We are coordinating our investments across programs and agencies and targeting them to key economic sectors.

We are seeding local alliances of companies in an industry to organize their demand for training and education services. And finally, we are strengthening our public sector's ability to be relevant, to be helpful to employers as they try and meet their competitive needs. These are the actions we believe we must take to meet employer needs and to secure our economic future.

As you consider higher education's role in economic vitality, we encourage you to keep in mind the leadership potential that you have to encourage higher education institutions to connect not only to employers, which is critical, but also to other organizations in their communities to craft comprehensive approaches. Education and training networks are essential.

A powerful example for creative thinking through partnerships in meeting an industry's workforce needs in Washington State is health care. Almost every State is addressing this fundamental industry's critical shortages and we are, too. An aging workforce, an aging customer base, longer lives for all of us, and increasingly complex technologies all contribute to this crisis.

By bringing health care employers, unions, and higher education together to the table at the State level and in 12 panels around the State, we have targeted our Workforce Investment Act Section 503 incentive moneys to health care. We have created new programs at community and technical colleges. We have expanded existing programs at 2- and 4-year institutions. We have created new apprenticeships in record time. We have leveraged industry investments. We have captured Federal discretionary grants. And we have made

health care the place for State investments in higher education in a very tight budget year.

As I said, State budgets are tight. One tactic to our economic development cluster strategy is that we are investing scarce State higher education resources in high-demand fields. We define high demand as high demand by employers, not necessarily high demand by students. Health care, engineering, technical occupations are some of those.

Our precious higher education investments must truly contribute to economic growth and individual opportunity. As Governor Locke says, and I guess, I don't know, he said it before Alan Greenspan, we have thousands of unemployed people and we have thousands of jobs that are vacant. What is wrong with that picture? The picture is wrong because there is a mismatch of skills between the workers who are looking for work and employers who have vacancies.

Economic change is continuous and global competition and changing technology, as we know, can have serious downsides for workers. Washington State has one of the best sets of policies in the Nation for responding to worker dislocations while simultaneously increasing workers' skills. We have programs that are funded through the State to encourage postsecondary training. We have extended State additional benefits program to support people while they are in training, and we have an integrated structure of services with the Workforce Investment Act.

We estimate that about one-sixth of our community and technical college enrollments are dislocated workers, so it is a big issue in Washington State. It is not going away. So we are targeting our key sectors. We are investing in high-demand fields, including supporting dislocated workers so they can take advantage of these high demands. How do we know that our programs are working? How do we know that we are getting our best bang for the buck, if you will?

Accountability is a fundamental value for us. From our State budget process to the evaluation of an individual training program, we have rigorous evaluations and we can tell you that these investments are working. All workforce development programs are estimated to boost participants' lifetime earnings and public tax revenues by amounts exceeding program costs.

Employment rates among former program participants vary from 60 to 92 percent and have remained stable even during the last 2 years of recession. In programs serving adults, 68 to 92 percent of former participants reported that they were working in jobs connected to the skills they learned in their training, and placement in training-related jobs increased during the past 2 years for four of our ten programs. Earnings increased significantly during the last 2 years for almost all programs. And over 85 percent of employers reported that they were somewhat or very satisfied with the overall quality of work performed by former program participants.

Results for our 34 community and technical college programs are especially impressive, with very strong positive short-term net impacts on employment, wages, and earnings, and longer-term re-

turns to us of $16 for every public dollar spent. Results for private career schools are also positive and getting stronger.

We use rigorous information to help policy makers make decisions about investments and to help individuals make choices about education and training. Our consumer report system, which includes the eligible training provider list under the Workforce Investment Act, and its companion website, www.jobtrainingresults.org, show the actual results for programs. This is a terrific guide for students, parents, teachers, and employers in selecting programs.

As you proceed with reauthorization of the Higher Education Act, we encourage you to use the Act to add to the country's skill base, recognize the retraining and lifelong learning needs of our workforce and their employers, require accountability for outcomes, and encourage broad partnerships to meet our Nation's needs. Thank you very much.

Senator ENZI. Thank you.

[The prepared statement of Ms. Saunders may be found in additional material.]

Senator ENZI. I appreciate the oral testimony that all of you have given. I will encourage staff and Senators to look at the more detailed testimony that will be a part of the record. There are truly some outstanding suggestions and ideas and ways of phrasing things that all of you have put in your more detailed text.

The ranking member, Senator Murray, is here. Did you want to make a statement before we start the questioning?

OPENING STATEMENT OF SENATOR MURRAY

Senator MURRAY. Mr. Chairman, let me just thank you for having this hearing today. I appreciate all your work on WEA and all the legislation you work on. Your focus on this, I think is really important. The relationship between higher education and a skilled workforce is one that I think we really do need to talk about.

I want to welcome my two friends from Washington State who are here, Ellen O'Brien Saunders and Diana Oblinger, who bring great expertise to this.

I do want to just say one thing. I think it is really important that we look at the Higher Education Act and what we are doing in terms of workforce training, but when we debated the No Child Left Behind Act, we really focused on elementary school. We are now jumping to the Higher Education Act and we are missing one critical piece called our high schools, where I think we really need to have a good conversation at a national level on what we are doing in our high schools to make sure that our students are ready to go on to college or to go on to a career.

I have introduced a bill focused on this called the PASS Act that focuses on literacy skills, career counseling, and reforms in our schools, and hope we can have that kind of conversation here in the future. I want to thank Ellen Saunders, who is here, who has participated with me at home as we try to develop that kind of conversation, but I think it is a critical one that we need to have.

I am delighted we are talking about the workforce and higher education. We talked about elementary schools with No Child Left Behind. Let us also talk about high schools.

Thank you, Mr. Chairman.

Senator ENZI. Thank you.

To begin the questions, Dr. Bohlen, when you started your testimony, you talked about gold collar workers. Could you expound on that a little bit?

Mr. BOHLEN. This is a term that came from a futurist that has been working with our college as we have tried to develop our vision for the future, but he is talking about knowledge-based businesses that require knowledge-based workers and this knowledge changes over and over and over. For instance, some of the skills that were needed a few years ago are now going offshore, for instance I-tech consultants and so on. But there is going to be new emerging fields, for instance, nanotechnology. We have no idea where all of that is going to take us in the future.

So there is going to be a need for retraining and that retraining might not just be community college graduates. It very well could also be people that have advanced degrees, baccalaureate and even higher, but need short-term training to get their skill level back up for these gold collar positions. So he is typically talking about knowledge-based industries.

For instance, right now, my college is trying to get the funds for an integrated systems technology laboratory. That laboratory is for industrial maintenance people, but they are not people that go and twist old wrenches anymore. They have to know how the computer chip interacts then with the industrial controls, from pneumatics to hydraulics and programmable logic controllers and so on. So even the people that we once thought were very low skilled now require high skills that have a very large technical base. So that is one way we are going to be able, for instance, to help retain manufacturing jobs in our community, is if we can move more to automation but then have the gold collar type of people that can service and maintain that high tech equipment.

Senator ENZI. Thank you. All of you have expressed the importance of the cooperation between higher education and businesses, and there was some stress also on other organizations. Would any of you care to speak on how you envision Congress could play a role in getting those partnerships to work? Ms. Saunders?

Ms. SAUNDERS. I will take a crack at it. The Workforce Investment Act offers—I think of it frequently as having two parts. One is, if you will, a framework, an architecture for the collaboration among programs to deliver services, and it also has specific services that are funded through the Act.

The kind of thoughtful work that went into the Act that acknowledged that in a community, no matter what your funding source, no matter what your institution, the employers that you are working with are the same employers as the other program or the other institution. I mean, there is only one set of employers. They are the employers.

To the extent that you can suggest in the Act this recognition that collaboration where employers—in communities where employers actually hire, that will be very, very helpful, and I think that there probably are some examples of that at the table. There certainly are in Washington State, where the employer really does not care what organization you come from and what your source

of money is and what your limits are and what your administrative requirements are and your eligibility. Their full-time work is actually running the business, not learning the bureaucracy.

So to the extent that you can encourage people, and I would be happy to think some more about language, to set their program requirements aside and think about how they can partner so that everyone wins through the partnership will be extremely helpful.

Ms. BUEHLMANN. One of the things I was going to mention is that you have a unique opportunity right now with the Higher Education Act, the Workforce Investment Act, and the Vocational Technical Education Act to look across those three pieces of legislation, which really do run the gamut of high school, college, and beyond.

I think one necessary component is that we have to understand what the goal is, what ultimately we are looking toward and align those efforts toward that. I think Ms. Oblinger raised a couple of points that begin to craft that mission. But we also have to begin to look broader than silo issues and find out what the resources are across those programs. We have to establish leadership in communities where we can bring the right stakeholders together to give an appropriate role and acknowledge and respect the roles of those varieties of players and then build a system that works, and I think it takes both State leadership and leadership at the local level to bring those together.

I couldn't be sitting here if I didn't think that it was critically important to understand that the role of employers is more than just to stamp, you know, approve something and move on. They have a vested interest. They can help cross those silos because they don't pay attention necessarily to where the funding comes from and they have a vested interest in the economy and the growth of the community.

Senator ENZI. Dr. Bohlen?

Mr. BOHLEN. Senator, let me take a little whack at that also. An emerging number of our companies are small companies, and of course to remain competitive they do not have lots of money for training. In fact, I have run into some entrepreneurs and they believe that their job is to provide jobs. It is the public's job to help prepare people for those jobs.

I think there are several things that we could do. For instance, when we were working with Lowe's, we were very fortunate that we were already in the process of developing a relationship with the State of Georgia. If there was a national clearinghouse where curricula could be mentioned, a part—we were willing to pay for the curriculum, but we needed to respond very quickly with a very quality product and it was just very fortuitous that we were able to locate that in the State of Georgia. We didn't have the resources to ramp up for a company the size of Lowe's and be able to prepare a quality product.

In addition to that, we were very fortunate that there were State dollars. If there was greater flexibility with Title IV dollars, especially to serve what are being called the under-employed—these were working adults where it took probably two in a family to just barely make it. They needed higher wages in order to be able to have a little income for their family. We just were not able to work

within the context of what Title IV funding might look like to be able to establish that partnership. So as Dr. Buehlmann mentioned, we need greater flexibility with types of grants that come through Title IV.

Senator ENZI. Dr. Votruba?

Mr. VOTRUBA. Senator, if I might just add a thought, in terms of 4-year universities, workforce really has two dimensions. It is preparing people for work and then it is continuing to update folks on a regular basis. The latter, I think, sometimes gets overlooked. The large companies can afford to pay the full cost of that education, generally speaking. In fact, oftentimes, they will have their own educational divisions that do nothing but the ongoing education of their employees.

It is the small and medium-size companies that need support, and they will come to us in part because they can't afford the vendors. The vendors are in a for-profit mode. They are coming to us and saying, look, in order for us to go from small to medium and medium to large, we need some public support. And I think it is around that public support that anything that the Federal and State government can do to be helpful would be much appreciated by the employers.

Senator ENZI. Thank you. My time has expired, so Senator Jeffords?

Senator JEFFORDS. Thank you for some very discouraging news.

[Laughter.]

I feel more frustrated as time goes by at the status of this Nation and how far we are behind the rest of the world in trying to prepare our workers and all. So this is a very important meeting and hopefully we can do something to bring us into position to be not in a position of losing so many jobs overseas or having to bring in people from overseas that have the training because we can't train them.

As all of you know, we in Congress write education legislation in cycles. One year we work on higher education. Another year we work on elementary and secondary education. Often there is an unfortunate outcome of such a time frame, is that we fail to coordinate most Federal education initiatives.

We are just beginning the higher education review process and hopefully we will soon take up vocational education. Last fall, under the leadership of Senators Enzi, Murray, Kennedy, and Gregg, we were able to pass a Quality Workforce Investment Act bill. I would like to hear your suggestions as to how we can better coordinate all the Federal education proposals, particularly the elementary, secondary, higher education, and vocational education, etc.

I don't see any hands going up—

[Laughter.]

Ms. BUEHLMANN. I will jump into the fray.

Senator JEFFORDS. I knew you would come through, Beth.

[Laughter.]

Ms. BUEHLMANN. Yes. I am used to responding to your questions, Senator.

[Laughter.]

Ms. BUEHLMANN. In the State of Alabama, we have had the good fortune of working with Enterprise, Alabama, a very small community, on doing just that, trying to look across the resources in their community, trying to understand what the strengths and the value of all of those contributions can be toward the economic growth of that community.

We were so successful, in fact, that the mayor of Dothan, Alabama, right next door to Enterprise, began to be a spokesperson for that, not only in his region but at the State level, so recognized that it now has been moved to the State level to try to integrate and pull together economic development, various education, higher education, K–12 education, workforce investment issues, and look at it as a comprehensive leadership role from the State level, how to bring those agencies and organizations together, create the policy environment within which then the local communities can assess their resources, bring them together in a way that fits their needs in their community but contributes toward regional and State growth.

I suggested not only allowing States to begin to look across agencies and bring those agencies together through leadership, but then also creating a policy environment and a regulatory environment, if you want, so that the locals can then do the same kind of thing and reach across regionally as opposed to just through silo and turf issues.

I would also suggest that we at the Center for Workforce Preparation are working very hard with Chambers and communities to begin that conversation and that dialogue and to look across those various funding streams to create a better environment, economic environment in communities.

Senator JEFFORDS. Ms. Oblinger?

Ms. OBLINGER. Senator, let me just add another vote around the importance of community. I will give you a case in point in El Paso, Texas. The University of Texas at El Paso has done a beautiful job of taking leadership for a lot of activities in that community that reached from higher education down into the K–12 schools and they found that they were not retaining the students that graduated from the university. They were leaving for better jobs elsewhere. They had a lot of people who didn't even aspire to higher education because as they grew up, they were told that they couldn't do any better than be a hairdresser.

The university took a lot of leadership in that particular community, began working with religious organizations, community groups, schools, and helping people develop the idea that they could achieve more, being sure that the quality of the schools was improved. They have measured themselves ruthlessly on how well they are doing, where they have gaps, where they need to improve, and it has been a wonderful success, but it has taken time and it has taken breaking some rules so that they could change regulations around tuition and such so that they could do the right things for the community.

So I think we do have some very good examples. Maybe one of the big gaps we have is many of us don't know where some of those good examples are. So maybe a clearinghouse would be very helpful for all of us, not just on that question but on the previous one.

Senator JEFFORDS. That is an interesting thought. Yes, Dr. Bohlen?

Mr. BOHLEN. Senator, one of the things that would be helpful would be if Congress could help an alignment between these various Acts so that we have similar outcomes. We almost have to operate them as silos because the outcome standards are not consistent between WEA, Perkins, and the Higher Education Act, and that would help us a lot if you could create a matrix of where those types of standards and, therefore, the initiatives have to be consistent. They at times run at cross purposes.

In addition to that, I have been very intrigued in Colorado and Wyoming, where the Daniels Foundation has funded extensive intervention programs for high school students. They are run by colleges, but they are for high school students that are first generation and the parents have to be involved, and the goal is to help those students develop career goals and then to provide them a scholarship to attend the college of their choice. That is what the Daniels Foundation does. Now, with the college of choice, that doesn't mean a lot of students could be funded.

We are very fortunate in Wyoming right now where we do have a little bit of a budget surplus, so my institution this year, using our own funds, are going to try to replicate that and to have more students in that. But it is that involvement with a group of students, helping them determine—a cohort of first-generation students and first-generation parents developing a knowledge of what jobs can be, what futures can be, and the role of being successful while you are in high school so that you can then be successful.

We really need those probably in every community. That probably takes a lot of funding to do that. But right now, it is very difficult to work your way through the State bureaucracies, with Perkins funding, to be able to try to get that in place. So to me, there needs to be more time spent trying to address what can we do to help students and parents develop that support system and develop a look at the future.

Mr. VOTRUBA. Senator?

Senator JEFFORDS. Yes?

Mr. VOTRUBA. I think what you are hearing in one way or another from all of us is that place matters, and where this integration and collaboration has to occur is in local communities. I can give you an example of a P–16 or what many here would call K–16 model in our local region where the P–12 schools, the community college, the university, local business and industry all get together to create and support a seamless system of education with the understanding that some students after high school are going to go into the workplace. Others are going to go into some form of postsecondary education.

It is around those local collaborations, I think, that support has to occur. It may be possible to develop—it is partnership at the local level, but supported by State and supported by the Federal Government.

I wonder if it is possible to create some kind of beta testing sites where we try some approaches at the local level and see how they work. I think it is also possible to create State audits and local audits that allow us to look deeply at where these projects are taking

root, where innovation is occurring so we can learn from it and generalize it in the form of public policy.

Ms. BUEHLMANN. Can I make one more statement, though? I think we also have to talk about things differently. It isn't a choice whether somebody goes on to postsecondary education or whether they go into the workforce. I think what we are finding today is that we have got to integrate those and understand that if somebody goes into the workforce, they have every opportunity to go back to postsecondary education, to training, to proprietary schools, to other institutions to get the skills that they need to keep growing in the workforce.

So we have to not talk about this as if you have a choice when you are coming out of high school that you are only going to go to college or you are going to go into the workforce. It is now an integrated system that we have to understand that those resources are available to people throughout their life and we build a seamless system that serves every person, not just those that are coming out of high school directly and can go into college.

Mr. VOTRUBA. And that does mean that these traditional institutions behave differently.

Ms. SAUNDERS. Sir, I have been sitting here mulling because of the sequencing of the way that the Congress takes up legislation is sort of your world, not mine. We are trying to influence you in the sequence and then implement what you put in place.

But it does seem to me, with all respect, since you are the experts on this for sure, that this kind of hearing that you are having right now is the kind of hearing that can help this integration if the sequencing is the way you do business. So you take up things and then the next year you take up something else and you say, whoops, we missed something 2 years ago or 3 years ago.

It does make sense to me that as you are approaching the Higher Education Act, you would cast your mind back to the last couple of years, No Child Left Behind or the Workforce Investment Act, and say, are there issues that we wanted to address or should have addressed or have now thought of that we need to weave into our considerations of the Higher Education Act?

All I can say is that unless—and then the other option, of course, is some collaboration and conversation at the Federal level. There is a lot of talk about communities, but I firmly believe that policy matters. Smart people, good leaders, flexibility are very important, but policy plays a huge role in how people orient themselves to the job that needs to get done.

So I would be very interested in more of an active conversation at the Federal level, Federal, State, and across agencies, as well. I think that would be extremely helpful, so think about that.

Senator JEFFORDS. Thank you.

Senator ENZI. Senator Alexander?

Senator ALEXANDER. Thank you, Mr. Chairman. This is very interesting. I am not as discouraged or as disappointed as Senator Jeffords said he might be. I think you are doing probably the most successful work in education today, particularly at the community college level, at some 4-year colleges and workforce training.

My experience is that there is really nothing new about job loss in America. It has been going on my whole public life over the last

25 years. Our strength as an economy is not measured by how many jobs we lose, it is measured by how many good new jobs we create to replace those jobs and how well we train people to fill those jobs. And while we don't want to lose any jobs, we want to recognize the pain that goes with moving from one to the other. That is the way things have been for at least 25 years in our country and I think all we are seeing today is an acceleration of that trend.

So as we think about what the response should be, rather than go too far to create something new, maybe we should just accelerate our response, in other words, do more of what we have been doing. And as I look at what we have been doing, the wisdom of it is pretty simple and it is very different than what we do in K through 12. In higher education, we focus on really two principles. One is autonomy and the other is we allow generous amounts of government money to follow students to the schools of their choice. That creates lots of collaborations, lots of choices. It creates lots of flexibility, fast-moving institutions. It creates contracts with businesses. It creates short-term objectives which can rapidly change as circumstances change.

I notice, as all of you have thought of, interesting things that might be done. My reaction is the reaction of most of you to that opportunity is that, well, in the end, if we tried to—they could probably be best done by local collaborations and local decisions and local efforts.

I am welcoming the discussion and suggesting that maybe we just need to do more of what we have been doing, which is to be as generous as we can be with funding for students who find their way to institutions who create workforce training contracts and then let you figure out how to do that.

Now, there are some impediments. I want to ask you about a couple. Senator Murray raises an interesting question about high schools. I would like to talk more about that sometime with her and with others on the committee. But I wonder, in any of your cases, high school students go to your institutions, whether the high school dollars, $6,000 or $7,000 a year per student, that a State, local, and Federal Government spends on a high school student can simply be transferred to the community college for a program that is more interesting and more relevant for that student, and if that is not the case, shouldn't that be the case?

My second question is, do the limits on Pell Grants—and as I understand it, they can't be used year-round, you can only use them, say, two out of three semesters—does that interfere with training and do the limits on loans interfere with it? Would it be easier, rather than to have annual limits, just to say, here is an amount that someone may borrow for the whole educational period and pay it back? I am guessing the limit on Pell Grants might have more to do than loans with the students we are talking about.

So should there be a sort of Pell Grant for high school students, either with the State funds now spent for high school that could go to community colleges or new Federal dollars, and should there be some change that would make it possible for a Pell Grant recipient to use it all year long if that is the kind of training or course that student needed?

Mr. VOTRUBA. Senator, I think that there is a need for greater flexibility. What we are experiencing right now, I believe, is a major transformation in postsecondary education in this country. And what the Federal Government has done for years—and there is no greater example of this than the post-World War II investment in federally-funded research—what the Federal Government has done is influence institutional behavior.

And when you are in a time of transformation of the type that we are in now, and I mean fundamental—universities like mine are thinking anew about who we serve, where we serve them, how we serve them, when we serve them, what we serve them. We are gathering interaction from employers, not just employers, but from parents and from local leaders, politically, everybody else, the boundaries are becoming far more seamless and universities are much more permeable in terms of their willingness to receive and act on what they hear from the world that they serve.

It is clear, for example, going to your last point, that the semester system is dying. The semester system is dying. We are what I would call a de-commodified industry at this point. We no longer have a monopoly on postsecondary education. What that means is that we are serving people where and when they want to be served. And to the extent that the Pell Grants can be more flexible in being able to allow students to study where and when and how they choose, it seems to me everyone is served.

But I would encourage the committee and the Congress to think about—to start with the question of what kind of behavior do we want to encourage on the part of postsecondary education and then how do we encourage it, because—and I agree with you. I have never been more optimistic. In 28 years in this career, I have never been more optimistic about the ability, the willingness and capacity of these postsecondary institutions to serve the public interest, never. It is an exciting time.

Mr. BOHLEN. Senator, I am intrigued with your thinking about high school students. An awful lot of States already have concurrent enrollment programs where students do that. I would—this is just my opinion right now—would hate to see us further dilute the moneys that we have available for Pell Grants, for instance, to make them available for high school students. I think that we have already got systems in place, and we don't want to move students too fast. There is a maturity that we need to do and I think we need to beef up what we are doing in our high schools and not be wasting senior years and so on. Then we can give them advanced—start them at a higher point once they are in collect. But we do do a lot of concurrent enrollment.

I also want to add to this greater flexibility with our Pell Grant system, for instance. My college is also eroding its semester system. It is going to be a thing of our past. It is within our vision to become a 24/7 college.

We have a new dental hygiene program that instead of a 2-year program, it is 16 months. To be real honest, we have had a booger of a time trying to fit the aid for those students into the semester system. So we, in essence, had them start at one time and then the semester that they are loaded in happens to be whichever one is

most convenient. Is that unethical? I don't know. It is legal, I guess, but it does serve the student.

So in 16 months, we can get a student out there in the job market starting at $45,000 to $60,000. That is not too bad for 16 months of training. Now, those students have spent maybe two to 3 years getting ready for the preparatory courses they have to have, but then they emerge as dental hygienists. Many of these are single-parent moms. To be able to see them going from dependence on our system to independence and buying that car for their family, buying that first home, it is very gratifying, and so we need that greater flexibility.

Ms. BUEHLMANN. I think what you are hearing, I have two comments. One, I served on the panel for looking at the high school senior year a couple of years ago. One of the things that we found is that as we establish standards for the K–12 system and assessment of whether or not student performance meets those standards, those are not aligned and have no relationship whatsoever to what institutions of higher education are asking as enrollment requirements for students to enroll in postsecondary education. We need to better align those kinds of efforts.

Second, I think what you are hearing is we have now what we referred to previously as nontraditional students becoming much more the traditional or the student that is being served through our institutions of higher education across public-private, profit-nonprofit, and that we need to think about how the policies that we craft at the Federal level are serving those adult workers and those nontraditional students, not to do away with what we have done for the more traditional student, but to think about how we can better align across what we used to think of as nontraditional students as well as the traditional student.

Senator ENZI. Senator Murray?

Senator MURRAY. Thank you, Mr. Chairman. I am intrigued by Senator Alexander's comments, too. Actually, a number of States do have programs. We have one in Washington State called Running Start that allows students in high schools to take college credit. Actually, when I was in the State legislature—it is a long time ago—I opposed it to begin with. I thought that would not be a good way to go. It has actually been a very successful program and I am impressed with what they have done.

I would be very concerned about diluting Pell Grants. I think that the demands on Pell Grants is really difficult today. If we created a different fund that would help students in nontraditional roles in other ways, I think I would be interested in talking to you about that.

What I am most concerned about for our high school students is that not a lot of—or there are too many of them today who reach juniors in high school and go, "Oh, I didn't know I needed 4 years of math, now I can't go to college," and they give up. I know I have had this conversation with Ms. Saunders and would love to hear your comments on it, because you have a great pamphlet you put out called "Where Are You Going" to high school students once they get out to give them some options, but I would love to hear your comments on what kind of changes you think we need within our high school system so that students have choices when they get out

and haven't limited themselves when they are juniors in high school.

Ms. SAUNDERS. I would love to share some thoughts about that. I mean, my board has spent actually quite a bit of time in the last year grappling, and I hope this doesn't further depress Senator Jeffords—

[Laughter.]

Ms. SAUNDERS. —but grappling with our State's dropout rate and what needs to be done to help students see a reason to stay in school, to apply themselves so that they can take advantage of the one absolutely, for them, free opportunity to increase their own human capital and then to actually emerge from high school with a plan for the future.

We are concluding that the earlier we reach young people, the better, and that we need to make sure that students thinking about posthigh school planning now, that we reach students in middle school. We need to find a way to work with students and their parents so that the consequences of the course-taking choices that they make are very clear.

This "aha" that happens in the 11th grade or 12th grade is one that is totally within our control to fix. I mean, this is not rocket science to connect with students and their parents in middle school, and we have a couple of examples in Washington State where the schools have essentially redesigned their guidance function so that they help students understand why they are at school, what are the opportunities in the future, and to make a plan for their future that includes both staying in school and engagement in rigorous education.

As the parents learn what is out there in terms of occupational choices, when they learn what a series of course selections over the course of 4 years really means for their children's future, they become very alert to the choices that the kids are making. And, in fact, in Franklin Pierce High School, the parents select the series of courses that the students take. The parents sign the form.

This seems so simple, that parents would be choosing the courses of study for their students, but, in fact, in most high schools, kids choose their courses. They work with somebody and they choose their courses and word goes through the school what is easy, what is an easy A, who really requires homework. They have a network. When parents are involved and they have hopes and dreams for their children, then the ratcheting up of the courses is very clear. So that is one thing, grab them early.

The other one is to integrate the academic learning—math, science, English—with how it is actually used in the real world, application. Now, in the Perkins Act, there is a requirement that over on the vocational side, that academics be integrated into the vocational programs. But it is not always the case that the same burden of application is placed over on the academic side, which is the "aha" that the kid can say, oh, algebra, oh, here is how it is used. And many, many young people, I mean, all of us have different learning styles, and it is the same of kids, they need ways of applying academics so that they make sense to them.

Guidance is critical. Guidance is critical, and guidance that is knowledgeable about postsecondary opportunities, what they really

require in terms of skills and course taking and where they will lead in the future. Our guidance system is overwhelmed with—it is overwhelmed with crises, children's crises, and it is understaffed. But our view is that every teacher can be a guidance counselor, if you will, a guidance officer, and that we need to spread this responsibility for children and their future throughout the building and out into the community.

Senator MURRAY. Ms. Oblinger?

Ms. OBLINGER. Let me second two things that you have heard. One is expectations, and there are some wonderful models out there. High school may be too late for setting expectations of students and there are a number of programs that go back, particularly into middle schools, and try to raise the expectations of students, but it is also raising the expectations of parents and helping them be prepared.

But the parents don't work in all cases. I think we have seen a number of very nice examples of where using online mentors, either professionals or other college students who are able to reach many of these at-risk students and help them aspire and know what they actually need for college preparation, what they need in terms of extracurricular activities and so on, and those, many times, stem a big gap that we currently have in the system.

The second point that I would emphasize is making learning relevant. One of the reasons that we lose a lot of students from post-secondary education well before they arrive is because they simply don't see relevance. There are some federally-funded programs that are working very hard to drive increasing relevance back into high schools and middle schools. One, for example, from the National Science Foundation is called the National Science Digital Library Project. They are working with creating archives of real material that students can use and manipulate and find very useful. They also provide support tools for teachers.

So I think there are some good examples there of where the technology can actually be used to help improve expectations and also improve the relevance all the way back into the elementary and high schools.

Senator MURRAY. I know my time is out. Let me just say, Mr. Chairman, I think this is a topic we really need to focus on. I really would encourage you to look at the bill I have introduced, the PASS Act, because one of the things we do is look at putting literacy coaches into high schools because we are doing so much remedial education at colleges today, especially community colleges, where we miss these kids when they are in high school and then we pay for it in college and we rob our institutions of the ability to provide other classes because they are doing remedial work.

And the second thing we do is look at academic counselors for these schools very early on, middle school, so they know what classes they need to take so they don't end up being a high school senior without enough classes to get into a university.

But I think your comments on parents is critical. I think involving parents is important. We do that in my bill, as well. I would just end by saying language barriers are critical here. We need to recognize cultural differences, as well. I talked to an eighth grader not very long ago whose parents spoke Spanish only who told me

he didn't want his parents to be able to learn English because he controlled what his family, by only speaking English, and I thought, wow—

[Laughter.]

Senator MURRAY. —when you send that stuff home with your kid and you expect the parents to know it. So we need to have real attention paid to the ability to get all parents involved, as well, and I know others wanted to comment. Unfortunately, my time is out. But I really do encourage this committee to look at that issue. I think it is really important.

Senator ENZI. This has been an excellent hearing.

Senator JEFFORDS. Very stimulating.

Senator ENZI. There have been a lot of good ideas. I started with about a dozen questions. I didn't get to ask many of those. Now I have written about another 15.

[Laughter.]

Senator ENZI. I have made several pages of notes here on great ideas that you have mentioned or stimulated. You have given us a lot to work on, so we will be sending some additional questions to you. I didn't even get to get into the very specific ones.

For instance, I wanted to learn more about Northern Kentucky University's emphasis on teaching students about starting their own business, entrepreneurship. I have done an inventor's conference and I keep the entrepreneurship merit badge pamphlet featured on my conference table. Everybody asks about it. Sri Lanka just translated that into Sri Lankan because they thought it was such an excellent book.

There are a lot of things we haven't had an opportunity to touch on, but I can tell that we have an outstanding panel and we will look forward to some additional information from you. I can't thank you enough for taking the time to be a part of this. Thank you very much.

The record will remain open for another 2 weeks. The committee is adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

PREPARED STATEMENT OF CHARLES H. BOHLEN

Good morning. My name is Dr. Charles Bohlen and I am President of Laramie County Community College (LCCC) in Cheyenne, Wyoming. I am pleased to be with you to offer this testimony on behalf of my college as well as the American Association of Community Colleges (AACC) on the Higher Education Act (HEA) and its relation to providing the nation with a skilled workforce. AACC represents 1,173 public and private, associate degree-granting, regionally accredited institutions, and serves as the national voice for community colleges.

Community colleges enroll 44 percent of all U.S. undergraduates (measured in terms of head count) and 45 percent of first-time freshmen. Almost two-thirds, 63 percent, are enrolled on a part-time basis of fewer than 12 credit hours. The average age of our students is 29 years. Community colleges enroll 46 percent of all African-American undergraduate students, 55 percent of all Hispanic students, and 46 percent of Asian/Pacific Islander students in higher education. Thus, we pride ourselves on being the "Ellis Island" of higher education.

To a large degree, the growth that is commonly referred to as the community college movement occurred in large part because of the HEA. In the fall of 2003, community colleges had credit enrollments of about 6.3 million students, and another 5 million non-credit students. These numbers have surged over the last few years, and the growth shows no signs of abating. This jump in enrollments is due in part to the fact that community colleges are usually the first choice for workers challenged by a soft economy. Most of our colleges report that the recent spike in enrollments, which has placed them under enormous pressure, has been due to both the baby boom echo of traditional college-aged students, as well as older individuals who are under-employed or are recently unemployed. Indeed, the largest category of growth last year (2002–03) in eligible applicants for the Pell Grant program was for independent students with children—a staggering 13.6 percent increase.

Wyoming is a very rural State that is served by seven community colleges and one public university. The colleges operate outreach centers in any community with 500 people or more. To reach students in isolated areas and those whose time demands do not allow them to receive their education through on-campus instruction, the colleges provide online instruction. To meet the needs of their local communities, Wyoming's community colleges offer short-term workforce training, and certificates and associate degrees in vocational/technical areas. Likewise, Wyoming community colleges serve as major gateways to the University of Wyoming by offering the first 2 years of baccalaureate studies. The community colleges and the university are highly collaborative, resulting in Wyoming being one of the first States where all higher education institutions use the same course descriptions and course numbers for freshmen and sophomore transfer courses.

Wyoming's and the nation's community colleges are a confluence where Federal funds provided through the HEA, WIA, and other programs merge with State and local support to provide education and training programs to prepare America's workforce. Futurist Ed Barlow predicts that America's community colleges will become the finishing schools for gold collar positions. In other words, a growing number of bachelor's and higher degree holders will attend community colleges after completing their baccalaureate degrees, to obtain technical skills needed in the emerging knowledge-based industries. Our community colleges are committed to access and have as a primary mission assisting the disenfranchised and un-empowered to acquire the necessary skills to procure jobs that provide livable incomes. In Wyoming and the rest of the United States, community colleges are the primary providers of a technically skilled workforce.

The training conducted by Laramie County Community College for Lowe's Company Inc. is a case study of the confluence of Federal and State roles in serving a business and a community. In 2001, the Lowe's Company Inc., home improvement retailer, chose Cheyenne as a site for a distribution warehouse to serve over 100 of its stores. Quickly Laramie County Community College convened the local economic development organization, Cheyenne LEADS, the Wyoming Business Council, the Wyoming Department of Workforce Services, and the Wyoming Community College Commission to develop a cooperative approach with Lowe's to provide pre-employment training. The Business Council assisted the college in procuring the license to use the Georgia Department of Technical and Adult Education's Quick Start Certified Warehousing and Distribution Specialist training program.

Even though Lowe's had never partnered with a community or technical college for pre-employment training, they were so impressed with the college's quick response and the quality of the Certified Warehousing and Distribution Specialist cur-

riculum, that they agreed to interview all graduates of the 150 hour training program and to pay a higher salary for employees with the warehousing certification. Two hundred seventeen graduated from the program, with 185 employed at Lowe's or other distribution centers in the Cheyenne Area. Lowe's management said the following about their experience with their start up in Cheyenne,

Training and experience are two of the largest concerns of any company. The Certified Warehousing and Distribution Training not only provides core skills, but a general understanding of the industry and environment. Those qualifications in a workforce are invaluable to industries moving into a new market and this is one of the greatest commitments to the community, industry, and its citizens that I have ever seen.

At Laramie County Community College, Federal funds, largely provided through the HEA, WIA, and Carl D. Perkins Vocational and Technical Education Act, allow the college to provide access to higher education, to provide support services for those who typically could not be academically successful, and to provide state-of-the-art equipment for students in vocational/technical studies.

HOW CONGRESS CAN HELP COLLEGE STUDENTS ACHIEVE THEIR ASPIRATIONS

As Congress gets set to reauthorize the HEA, it deserves thanks for having done so much to make college possible for those who otherwise would not have had the chance to improve their lives through higher education. The college continuation rate for recent high school graduates has risen from 47 percent in 1973 (just as the central student aid programs of the HEA were being implemented) to 62 percent in 2001. The genius of creating a student-focused system in which aid is delivered to the individual, for use at the college of his or her choosing, has repeatedly proven itself. But this investment is one that not only accrues to the individual; our economy would be incalculably weaker if not for the increased education and training fostered by the Title IV programs.

Student aid works. AACC strongly supports the current programs and basic structure of the HEA, and does not believe that the Act is flawed in any fundamental way. Rather, reauthorization provides an opportunity to make a system that is working well function even better. Our colleges view themselves as having a pact with the Federal Government. Community colleges strive to keep tuition as low as possible, but for those who cannot meet the cost of education, the need-based programs in Title IV of the HEA are there to fill the gap. And there is a consensus that the HEA has proven extremely efficient and effective in providing financing to students and families who need resources to attend college.

Federal student aid represents close to 70 percent of all the student aid made available across the country (most of the rest consists of institutional grants from private colleges). American higher education would be radically different without this aid. Furthermore, the student financial aid programs are well targeted those who need financial assistance the most are generally those who receive it. More than 90 percent of all Pell Grant funds are awarded to students with family incomes of less than $40,000.

Unfortunately, the job of promoting equal access to post-secondary education is not yet complete. Access to college remains highly stratified by income. Over the last 25 years, a rising tide has lifted the college participation rates of students across the income spectrum fairly equally, with the largest gains occurring in the second lowest income quartile. This is a remarkable achievement. Unfortunately, over that same period the persistence gap between less affluent and more affluent students has widened. And, despite the gains in overall college access, the gaps in college participation across the various income bands have remained fairly consistent. We believe these gaps can be eliminated, but it will take a far greater financial commitment than that which has been made so far by Congress.

Community colleges are particularly dependent on the Pell Grant program. This disproportionate reliance stems from that fact that community college students tend to be less affluent than students in other sectors, and our low tuition help mitigate the need for borrowing. In the current award year, the Department of Education estimates that 1.9 million community college students will receive a Pell Grant, compared to a total fall enrollment of about 6.3 million.

COMMUNITY COLLEGES AND THE WORKFORCE

A first principle of community colleges is to provide their local communities with skilled workers. A correlate goal is to provide individuals with the means to attain economic independence. In the last 25 years, the percentage of workers with an associate degree, certificate, or some college has more than doubled from 12 percent to 27 percent of the workforce. According to the Department of Labor, occupations

requiring a postsecondary vocational award or an academic degree, which accounted for 29 percent of all jobs in 2000, will account for 42 percent of total job growth from 2000 to 2010. The array of occupational programs offered by community colleges is truly mind-boggling, and permeates every sector of the economy. Our colleges pride themselves on their entrepreneurial nature, and their ability to add, or terminate, programs in response to market demand.

In all of the fields in which high-profile labor shortages exist, such as teaching, nursing, information technology, and first responders, community colleges are on the front lines, offering programs designed to address these pressing needs. For example, 48 percent of all applicants taking the national registered nurse examination to become licensed professional registered nurses were graduates of associate degree programs, and these graduates pass that examination at the same rate as those who have attended 4-year colleges. Sixty-five percent of new health care workers get their training at community colleges. Community colleges also train and credential 85 percent of the nation's first responders; police, firefighters, and emergency medical technicians.

Of late, much attention has been focused on the disappearance of millions of jobs in this country. This job loss is naturally of great concern to policymakers. However, it should not obscure the fact that our nation still has a desperate shortage of skilled workers; just ask some of our most prominent business leaders. Under any plausible scenario, the current shortage of skilled workers will increase in the years to come, as the economy continues to grow and the baby boom generation retires. Shortages in management and technical support fields will be particularly pressing. In January of 2003, the unemployment rate of those without a high school diploma was 8.8 percent; those with a high school diploma had a 4.9 percent unemployment rate, but those with a bachelor's degree or higher had only a 2.9 percent unemployment rate. These rates reflect economic reality and pose a daunting challenge for policymakers.

States consciously use community colleges in their economic development strategy, through programs that are designed in part to attract and keep businesses. A recent survey by the Education Commission of the States showed that at least 21 States provide special funding to community colleges to train workers for high-demand occupations. Thirty-two States provide funding to support customized training for employers.

Community colleges do not receive adequate recognition for their role in educating the nation's teachers. It is estimated that at least 25 percent, perhaps as much as 50 percent of the graduates of bachelors' degree programs in teacher training began their post-secondary education at community colleges. Community colleges provide this initial teacher preparation, but are also heavily engaged in professional development for K–12 teachers; post-baccalaureate certification for undergraduate majors in non-teaching fields; encouraging high school students to enter the teaching field, and training the paraprofessionals whose skills must be enhanced as a result of the No Child Left Behind law. Consequently, AACC is proposing that a small new program in the HEA be created to help community colleges further their activity in this critical area. We seek a national competitive grant program of $25 million. We are happy to provide the committee with further details on this proposal.

THE ROLE OF THE HEA IN WORKFORCE PREPARATION

Although it is not commonly thought of as such, the HEA is a powerful tool for workforce preparation. In fact, it is the Federal Government's largest workforce training program. Roughly half of the almost two million community college students who receive Pell Grants are enrolled in occupational education programs, and the overwhelming majority of proprietary school recipients are enrolled in programs designed to prepare them for specific jobs. Also, most of the millions of American students who are enrolled in general education programs correctly assume that their studies will ultimately lead to greater earnings. Surveys indicate that the primary reason people attend college is because they believe it will help increase their employment opportunities. As the committee is well aware, the spread in earnings between those who have just a high school diploma and those who have attained college degrees continues to grow. College has become an essential component of a middle-income lifestyle. Given the essential and irreplaceable role that Congress plays in making college available to less affluent individuals, it has an awesome responsibility to maintain a vital portfolio of student aid programs.

As the committee is aware, the student aid programs give individuals the choice to attend the institution that suits them best, and, given this, the HEA cannot be directly structured to meet workforce goals. However, given the intensely competitive nature of the nation's postsecondary education system, we firmly believe that

the HEA's system of providing individuals with the option to receive the education and training that suits them best ultimately serves the nation's economy well.

PROTECTING THE FEDERAL INVESTMENT IN COMMUNITY COLLEGES

The HEA also plays selected roles in helping institutions offer high quality workforce and other programs. Much to the distress of community colleges across the country, the leadership of the House Committee on Education and the Workforce is currently supporting legislation that would undermine key sources of support for community colleges. We expect that the HELP Committee will be asked to support this same "single definition" of institution of higher education, which would make for-profit institutions eligible for programs such as Title III-A, Strengthening Institutions, Hispanic Serving Institutions, International Education, etc. In addition, scores of non-HEA programs whose eligibility is keyed to HEA definitions would suddenly be opened to proprietary schools, including the Carl D. Perkins Vocational and Technical Education Act, National Science Foundation programs, and many others. Community colleges strongly oppose this change and ask the committee to reject such a change. However, we continue to support giving students the option of using student aid funds at the institution of their choice. And student aid comprises more than 95 percent of all HEA spending.

The single definition will substantially reduce funding for nonprofit colleges, many of whom are struggling financially. This is particularly so for the Hispanic Serving-Institutions (HSI) program, where grant funds are relatively accessible once an institution qualifies as an HSI. According to Department of Education data, the single definition would allow 107 for-profit institutions to become eligible for the program. Currently, 243 colleges participate. The effect on Title III-A, the Strengthening Institutions program, would be equally dramatic for community colleges, many small, struggling 4-year colleges, and other financially constrained institutions.

Using a single definition would greatly expand the pool of eligible candidates for HEA institutional grants and many other grants. This does not create parity between institutions, as has been asserted, because the institutions to which these funds would be awarded are not the same. For-profit institutions are necessarily concerned with delivering profits to their shareholders or owners. Non-profits are, by definition, dedicated to serving the public interest. We commend the entrepreneurial nature of profit-making institutions. However, granting for-profit colleges access to non-Title IV programs will simply increase corporate earnings. It is one thing to give a student the choice of attending a for-profit institution, and quite another to channel Federal funds directly to support for-profit businesses and thus reduce the funds needed by our institutions that, by charter, provide access for our nation's neediest people. We note that the average community college tuition is $1,905. The average tuition at a 2-year degree-granting proprietary school is more than five times that, at $10,500.

ELIMINATING THE "50% RULE" BUT MAINTAINING AN ED ROLE IN DISTANCE EDUCATION SAFEGUARDS

Distance education is tremendous and exciting development in American higher education. According to the NCES, More than three million students attending colleges and universities are now taking distance education courses. Distance education is especially important in rural States such as Wyoming. Consequently, AACC supports repeal of the so-called 50% rule, and most other differential treatment of on-campus and distance education. However, AACC believes that the rule must be replaced with an additional limited safeguard against program abuse.

The 50% rule was included in the 1992 HEA amendments to address the fraudulent activities of many correspondence schools. These schools had high default rates and a disproportionate record of fraud and abuse of student aid funds. In general, the 50% rule denies Title IV eligibility to schools that offer more than 50 percent of their courses by correspondence, or have 50 percent of their students enrolled in such courses.

Despite the widespread impression that the 50% rule has outlived its relevance, it generally has not prevented the expansion of distance education at schools that also offer classroom programs. This is because telecommunications courses (primarily those offered by television, audio, or computer) are not considered correspondence courses for degree programs if the number of telecommunications and correspondence courses do not equal at least 50 percent of the courses offered by the institution. Some of the colleges that are deeply involved in distance education and are pursuing a 100 percent distance education program have been included in the Department of Education's Distance Education Demonstration Project, created in the 1998 HEA amendments.

The Internet has made the delivery of post-secondary education more flexible and available. It reaches rural areas and offers new opportunities for working adults. Students can read school advertisements, enroll and take courses, and even apply for financial aid without leaving home. This is a boon for students unable to study on campus due to geographic location or conflicting responsibilities. It also means that the unscrupulous can easily reach millions of new students with little more than a pop-up advertisement. Any benefits from distance education could be overshadowed if prudent steps are not taken to prevent fraudulent providers from exploiting students and the Federal Government.

Consequently, we think that ED's Distance Education Demonstration Program should serve as the model for a permanent program to allow individual schools to receive waivers of the 50% rule. This approach recognizes the importance of and increasing interest in distance education, but protects students and student aid programs from being taken advantage of by easily accessed and highly advertised programs that do not provide quality education.

Finally, we firmly support the role of accreditation in assuring quality education. But if institutions that offer most or all of its programs by distance gain eligibility for Federal student aid programs, the need for additional oversight extends beyond accreditation. Ensuring program integrity is clearly a responsibility of the Federal Government, on behalf of American taxpayers. Opening distance education with no limitations, or without additional oversight by the Department of Education, is an invitation for increased fraud and increased loan defaults. We hope that the committee will look favorably upon our modest proposal to provide an additional safeguard in this rapidly evolving area.

PUTTING REAL FACES ON THE VALUE OF THE HIGHER EDUCATION ACT

Desiree

Desiree came to Laramie County Community College's TRIO program in fall 2002. She was a divorced mother of four young children. She received no support from her ex-husband. She was surviving on public assistance, food stamps, Section VIII housing, and financial aid that did not cover her full need. She was enrolled full-time in the LCCC Radiography program. Her cumulative credit hours earned were 105, nine credits over the limit allowed by Federal financial aid guidelines to complete a 2-year degree. Her GPA was 3.163, not bad for a full-time student and mother enrolled in a very demanding academic program.

But Desiree was struggling. Worries about finances, grades, children, and the continual jumping through hoops for her public assistance dollars were taking a toll. She sought assistance from TRIO for more effective study skill strategies, motivation, career exploration, budgeting, and financial aid/scholarship assistance.

During monthly appointments with her TRIO advisor, Desiree developed effective study strategies which gave her more quality time with her children. Without funds to pay for extra day care she brought her children with her to TRIO sponsored academic workshop so she would not miss out on valuable information that ultimately helped her succeed in her educational goals. Through TRIO Desiree learned to carefully budget her limited financial aid dollars, cutting her living expenses to the bare bones. She learned to make wise decisions regarding school loans, and she was successful with scholarship applications. Despite the scholarships, PELL grant, and loans, Desiree still had a $1,000 unmet financial need to attend LCCC. LCCC's TRIO granted her a Federal TRIO grant aid award of $500 in February 2003.

External motivation was soon replaced with self-motivation as Desiree grew confident in her abilities to be a good student, a good mother, and a good financial planner. She continued to work with TRIO to develop a resume, plan job search strategies, and develop effective interviewing skills. Desiree could see the light at the end of the tunnel. Graduation was within her grasp, and the promise a well-paying position was in the near future.

Desiree's drive to succeed despite her challenges, and her willingness to work regularly with her TRIO Advisor, helped her achieve her educational goal. She graduated in August 2003, passed her National Board Exam for Radiography, and took a radiography technician job in Nebraska. Desiree reports that she is doing fine, loves her work, and is proud to support her children without public assistance.

Pamela

In August, 2002, Pamela, a 31 year old single mother of three young children, ages 6, 4, and 3, came to LCCC seeking financial and emotional assistance to become a Certified Nursing Assistant. She had been referred by the Safe House Sexual Assault Center for battered women in Cheyenne, Wyoming, to the Transitional Services Program at LCCC. She came through the doors broken, terrified, wounded

and still had black and blue bruising around her eyes and cheek. Pamela bravely entered our doors and asked for help. She and her children were living at the safe house and her husband of 7 years was incarcerated for domestic violence. Pamela didn't know how long he would be in jail and she knew that time was of the essence. It was time for her to gain her independence and find a way to support her family. She saw education as the pathway to that independence.

From the time she was a small child growing up in Alaska she dreamed of becoming a nurse. Instead she married a man from Wyoming, moved here and they began their own family business. Pamela's primary job was stay-at-home mother. Sadly, over the years, she became a victim of her husband's rage and frequent beatings. Although she never stopped dreaming of becoming a nurse, her life now was a matter of survival for Pamela and her children. Through a series of events and the support of family and friends, Pamela was able to report her abuse and receive the help she so desperately needed.

Through the help of Cheyenne Housing Authority, Pamela and her children moved out of the shelter and moved into a mobile home. Because it was too late to apply for financial aid, the Transitional Services Program, funded in part through Carl D. Perkins Vocational and Technical Act, 1998, paid her tuition, and bought her books, CNA uniform, stethoscope, CPR certification, and provided mileage reimbursement for her to attend classes at LCCC.

By the end of fall semester 2002, Pamela successfully completed her CNA classes and the Transitional Services Program paid for her to take her State nursing board examination. She passed the exam and found gainful employment at a local nursing home caring for the elderly. Pamela reports that she is the happiest she has been in her adult life. She loves her work, she is financially independent, and her family is continuing to heal from the wounds of domestic violence. Pamela is continuing to take classes at LCCC. Her ultimate goal is to become a Registered Nurse—a childhood dream come true!

Thank you for your consideration of these views. I would be pleased to answer any questions that you might have.

RESPONSE TO QUESTIONS OF THE HELP COMMITTEE FROM CHARLES BOHLEN

Question 1. I want to highlight something from your written testimony that I think is incredibly important. You point out that this nation has a desperate shortage of skilled workers, and I tend to agree. Unemployment decreases significantly as an individual's level of education increases. Can partnerships between local businesses and institutions of higher education help to address this shortage of skilled labor, and what can Congress do to facilitate the development of those partnerships?

Answer 1. Local business and institutions of higher education partnerships are vital for the economic well-being of our communities and thus our States and our nation. Higher education institutions must be responsible, adaptable, and willing to tailor their education and training to match the skill competency needs of these businesses. At the local level, community colleges are best positioned to meet these needs. At the State and regional level, universities must be ready to respond to the higher level research and skills development needs of their respective areas of service.

Small companies typically are cash strapped because of the demands of competing in a global economy. This means then that small businesses do not have funds to adequately prepare and maintain a technical work force. In addition, many small business owners believe that since their role is to provide jobs, it is government's role to develop a skilled and ready workforce.

Congress can facilitate the development of these partnerships through a number of strategies. Community colleges should be recognized as primary providers of skills training for businesses needing employees with less than baccalaureate level skills. A big step would be the passage of President Bush's Community-Based Job Training Grants. I suggest that these grants be allocated to States and targeted to business/community college partnerships. In addition, funds such as WIA need to be easier to access. The profile of qualified recipients is too limiting and funds are not typically available to those I call the under-employed; i.e., working adults who are not in jobs with livable incomes. My college, Laramie County Community College (LCCC) in Cheyenne, Wyoming, is a college of about 5,000 students serving an area of about 100,000 people in our two-college area. Only 20 people are attending the college on WIA funding. These figures support my argument that WIA funds are too restricted.

Many companies need workers with moderate technical skills that can be acquired through shorter-term training that is less that a 1-year certificate or associate's degree. For instance, LCCC helped prepare a technical labor pool for Lowe's and other

distribution centers by offering a Certified Warehousing Specialist Program of 150 clock hours or 10 credit hours. Pell, Carl Perkins, and Workforce Investment Act rules are almost impossible to fit to these types of training that are not degree-oriented but do prepare people for a job that provides a livable income.

Question 2. In your testimony you highlight the enormously successful partnership between the Lowe's regional distribution center and LCCC. You point out that Lowe's may have had some reservations initially, as they had never participated in a similar program with other institutions of higher education. What do you think encouraged them to buy into the partnership with the local community college, and can that type of partnership be replicated in other communities?

Answer 2. According to Lowe's representatives, they elected to enter into a partnership with LCCC because of the quality of the curriculum that we offer and because of the college's customer-driven rapid response to the skill development needs of Lowe's, and the ready availability of State of Wyoming Training Funds. The curriculum, Quick Start Certified Warehousing and Distribution Specialist, was licensed to the Wyoming Business Council through an agreement with the State of Georgia's Department of Technical and Adult Education Department. I do wish to note that currently the State of Wyoming Training Fund has run out of funds until July 1, 2004, and thus if another company such as Lowe's wished to form such a partnership, LCCC would not be able to respond since Federal Funds do not have the flexibility needed. Possibly a small number of citizens who meet WIA eligibility could be funded.

In Wyoming the community colleges share training curricula but there is not a national clearinghouse for training curricula. LCCC is even willing to pay for training curricula but there is not a single-source clearing house. Congress could consider funding and establishing such a clearing house in cooperation with a national entity such as the American Association of Community College (AACC).

In summary, community colleges and even many regional universities are prepared to develop training partnerships with businesses. Federal funds are not available to pay for the training that would come out of these partnerships.

Question 3. You mention in your written testimony that Community Colleges are dependent on the Pell Grant program. Much discussion around the current reauthorization of the Higher Education Act has centered on increasing available loan limits to undergraduate students. Can you think of an argument, from the community college perspective, against raising loan limits?

Answer 3. First of all, community colleges' primary emphasis is on access, and we would never want to do anything that threatens access. This would not be in the long-term best interest of our nation. For the overwhelming majority of our students, current maximums are sufficient.

In terms of loans, community colleges are primarily concerned about potential over-borrowing and the tremendous consequences that follow for years when students default. Typically community colleges, through their vocational/technical or career programs, prepare people for technician level knowledge-based positions. While these jobs provide livable incomes, the earning levels are not such to allow the repayment of high levels of debt.

Community colleges believe that even if loan maximums are not raised, but most definitely if they are, community colleges must be given more flexibility to lower loan maximums for entire classes of students, such as first-time students who need large amounts of remediation. There is current limited authority in this area and it has proven to be insufficient.

Question 4. You point out in your testimony that access to college is a challenge for many students, despite efforts from the Federal Government to provide assistance to attend college. I agree that access is a challenge and one that I anticipate working closely with my colleagues to address. On the other hand, I believe retention and persistence toward graduation are every bit as essential as the opportunity to enroll. Can you comment on how Congress could help improve the retention and persistence of undergraduate students?

Answer 4. I have a great concern about the Federal Government regulating retention and persistence. One size just does not fit all. Many students at my community college are not attending necessarily to graduate. Many are attending to develop the skills necessary to acquire a livable-income job. In addition, a growing number are seeking a specialized certification, such as the various Microsoft network certifications. Other students take credit courses that are part of a short-term training program such as the Quick Start Certified Warehousing and Distribution Specialist mentioned in response number 2. All of these students will have completed their

goals without pursuing a degree. What then would be the definition of successful retention and persistence of these students?

At LCCC, we found that tough economic times for us during the 90's forced us to look at the bottom line and thus at efficiencies. It became very apparent that quality instruction and retention efforts were the best ways to keep classes full and thus increase our efficiencies.

I do understand that this is an important issue and that far too many degree-seeking students are not completing their degrees. One thing that Congress can do to improve post-secondary educational outcomes is to ensure that high school students take and succeed at a rigorous curriculum and enter colleges ready to do collegiate work.

Another idea is to provide greater grant assistance, particularly for Pell Grants. One of the primary factors mitigating against graduation is the fact that community college students have to work to finance their college and other obligations. While I believe that students receiving financial aid should support their education through work, I also know that students should work no more that 15 hours per week if they are going to be academically successful. Thirty percent of all full-time community college students also work full-time. These students clearly need more resources. Another unfortunate reality is that part-time students, who are a majority of community college students, have a harder time making it to graduation and even those that do graduate, have to "stop-out" numerous times before completion. The graduate who "stops-out" and then returns would not be seen as a success with a one-size fits all definition of retention and persistence.

Question 5. You bring up an issue that I have followed closely for several years. You recommend repeal of the "50% rule" as it applies to e-learning, or online distance education. I believe access to higher education is synonymous with flexible attendance, and distance learning holds great promise to open the doors of higher education to the most remote of communities. While I agree that distance learning programs should be eased into Title IV eligibility gradually, I am concerned that we not create two separate standards for e-learning programs and traditional schools. Can you comment on your efforts to develop distance learning programs and the successes and challenges you've encountered, as well as briefly comment on AACC's proposal for distance learning?

Answer 5. LCCC was a pioneer in online instruction. We have developed a large selection of online instruction courses by offering our faculty incentives to develop online courses and to teach online. Frankly, part of our motivation to move into distance education was fear of losing enrollment to Western Governors University (WGU). Our faculty responded to our call to develop online courses and soon LCCC had more online students than WGU. We find that most of our distance education students are from our service area or became familiar with LCCC while they were stationed at F. E. Warren Air Force Base.

LCCC has closely monitored quality, retention, and pass rates by comparing on-campus courses to the same courses taught online. We find no quality differences. Faculty are now even blending online course delivery with campus-based courses by using the online materials to supplement the campus-based courses. Currently ten percent of LCCC enrollment is online. This is far from fifty percent.

I believe AACC's proposal has merit. LCCC is being held to a high standard for distance education courses by our regional accrediting agency, the Higher Learning Commission (HLC) of the North Central Association. We will not be able to offer degrees solely online until we get approval from the HLC. We currently are seeking that approval by demonstrating that we have courses equivalent in quality to our on-campus courses and that we provide adequate support services to distance education students.

Not all distance education providers are accredited by a regional accreditation organization, and thus review and approval by the Department of Education would be a way of assuring quality to the consumer and to reduce the risk of abuse by unscrupulous providers.

Question 6. You point out that degree programs provided from traditional institutions can avoid the restrictions in place as a result of the 50% rule as long as the institution does not offer more than 50 percent of its courses through this method of learning. According to a recently released GAO study, the number of institutions, both traditional and online only, that will reach this threshold in the next few years is only the tip of the iceberg. Does the 50% rule limit future enrollment in LCCC or other institutions that would like to expand their distance learning programs, especially in Wyoming, where distance is a major issue for student access to higher education?

Answer 6. LCCC and all Wyoming higher education providers are a long way from the 50% rule and thus the rule is not an issue for us. With respect to other providers that may wish to serve Wyoming, the AACC proposal for having the Department of Education review and approve these organizations would reduce the exposure of Wyoming residents to inferior distance education programs.

Question 7. You mention the story of two students that illustrate perfectly my feelings about higher education. These two students took advantage of available resources and, together with a commitment from their institution to help them succeed, left the college with a degree and skills to succeed independently of public assistance. Both of these students would be described as "nontraditional." In your view, is Congress doing enough to help nontraditional students, and if not, what could we do better?

Answer 7. In my opinion there are a number of hurdles that are currently limiting higher education for the "non-traditional student." These hurdles could be lowered through Congressional action. It is almost impossible for people receiving Temporary Aid for Needy Families (TANF) to attend college to develop the necessary skills to escape from low wage jobs. TANF needs to be restructured so that it has a stronger "Education First" basis.

As I mentioned earlier, Workforce Investment Act (WIA) funds typically are not available for under-employed individuals.

There is a need for more funding for supplemental/support programs such as TRiO so that more colleges could have these programs that assist non-traditional students to overcome the barriers that block degree completion. Both people I gave as examples are typical non-traditional students. It took just a little supplemental support, mentoring, and financial aid, to move them to completion.

Regarding Title IV of HEA, there is a need for greater flexibility. Non-traditional students need the opportunity to receive aid in the fall, spring, and summers. The old traditional semester system does not serve the non-traditional student who needs to finish her/his degree in as short a period of time as possible. Because of family requirements, it is important that these people get into the workforce as soon as possible.

Some other things that Congress could do would be to:

- provide more funds for child care services;
- change the income protection allowances in the "need analysis" formula to provide greater assistance to these students; and
- change the HOPE Scholarship tax credit to allow the credit to cover books, fees, supplies, and equipment. Also, changing the Lifetime Learning tax credit to cover more of non-credit students' educational costs would help. Currently the credit only covers twenty percent.

PREPARED STATEMENT JAMES C. VOTRUBA

Mr. Chairman and Members of the Committee, thank you for inviting me to share my thoughts on workforce development and how it interacts with Federal higher education policy.

I represent Northern Kentucky University, a 14,000 student campus located in the Northern Kentucky/Greater Cincinnati region with a population of nearly two million people. We offer a broad array of undergraduate and masters level programs as well as law. Last year, in a national study sponsored by the American Association of State Colleges and Universities, Northern Kentucky University was recognized, along with five other comprehensive universities, for its cutting-edge work related to community engagement. Where the major research-intensive universities place a major focus on the discovery of knowledge, comprehensive universities focus on the application of knowledge to address the needs of the geographic regions that they serve. A defining quality of comprehensive universities is their focus on what we call the "stewardship of place".

Our region is comprised of several very large multi-national companies including Procter & Gamble, Ashland Inc, and Toyota Motor Manufacturing North America. However, as we chart our economic future, we, like most other regions in the nation, look to growth in small and medium sized companies for the bulk of our new job creation. The University's approach to workforce development is built on this assumption.

It is now well understood that the ability of a region such as ours to compete on a national and global scale depends on our capacity to recruit and retain intellectual capital. Indeed, our corporate and community leaders recognize that competition in this century will be for intellectual capital, particularly in the knowledge-intensive

employment sectors. Knowledge workers at every level will determine whether a region has the capacity to compete.

Six years ago, the University conducted a strategic planning process called Vision, Values, and Voices. Through small group conversations with over 300 corporate and community leaders from throughout the region, we analyzed the major challenges confronting the region and the role of our University in helping to address them. At the top of everyone's list was the workforce challenge described in four dimensions. First, leaders emphasized the need for more people prepared to fill jobs in the highest demand employment sectors. Second, they emphasized the need for convenient access to continuous education and training for those currently employed. Third, they emphasized the need for access to faculty expertise in support of company needs. Finally, they encouraged us to work with P–12 education to enhance workforce readiness. Based on these conversations, we have organized our workforce development efforts in the following ways.

1. Seeding Intellectual Capital

We have made a major institution-wide commitment to programs and services designed to enrich K–12 education, particularly in science and mathematics. Last year, we had over 2,000 elementary, middle, and high school students enrolled in some form of math or science enrichment. Our goal is to increase this number to 3,000 within the next few years. Several years ago, I asked a Nobel Laureate in chemistry when he decided that he wanted to be a scientist. Without hesitation, he said that it was somewhere around the fourth or fifth grade and that this was true for most of his colleagues. Without "seeding" at an early age, too few workers will be prepared to assume knowledge-based jobs at the other end of the educational pipeline.

2. Preparing Intellectual Capital

We have taken steps to insure that we are preparing graduates in fields where the job demand is strong. In 2001, we hired the National Center for Higher Education Management Systems (NCHEMS) to undertake a study of our regional workforce needs. NCHEMS reviewed current employment statistics and interviewed dozens of representatives from the full range of employment sectors. Based on what we learned, we made a major investment in expanding our information science programs including computer science, information systems, and information technology at both the undergraduate and graduate levels. Today, we produce more information science graduates than any other university in Kentucky. At the same time, our Fifth Third Bank Entrepreneurship Institute is infusing entrepreneurial principles across the University's curriculum. Students from any major may earn a minor in entrepreneurship studies and enrollments are strong.

3. Sustaining Intellectual Capital

While preparing our students for high demand careers is one element of workforce development, we know that the knowledge that a college graduate takes into the workplace often has a very short shelf life. Now, more than ever, the ability of a company to remain competitive requires "just in time" access to training and education at every level in order to support economic competitiveness. This is a very different education than is typically found on a university campus. It is education in a form, at a time, and in a place that is optimally convenient for the worker and the company. While this type of education may sometimes involve earning a degree, more often it involves one or a series of non-credit education programs targeted at a specific company learning need. For example, a company may ask for a single program designed to improve their supply chain efficiency or a series of programs designed to prepare technical employees to become project managers.

In 1999, we created the Metropolitan Education and Training Services (METS) Center to address these "just in time" corporate learning needs. In its first 4 years of operation, the METS Center has served more than 13,000 employees, mostly at the mid to upper levels, representing over 250 organizations. The METS professional staff work with area companies to identify corporate learning needs, design a program to address those needs, and then broker intellectual capital anywhere in the world on behalf of those needs. This last point is very important. On most campuses, units like METS exist to market the university's faculty expertise. If the company's needs do not match up with campus expertise, the company must look elsewhere. In contrast, the METS staff will use the expertise of our faculty when it's appropriate but, when what is needed is beyond the scope of our faculty, the METS staff will go anywhere in the world to broker the expertise necessary to meet the need.

In 2003, we constructed a 43,000 square foot advanced corporate learning facility to house the METS Center. Located near the Cincinnati/Northern Kentucky Inter-

national Airport and containing over $4M in instructional technology, this new state-of-the-art corporate learning facility is described as one of the finest in the nation. The facility was made possible by a combination of State funds to support the annual facility lease and Federal earmark funds to help support the technology. Because of these subsidies, we are able to serve small and medium sized companies that often cannot afford the full cost of the programs.

What we are seeing today is the dawn of continuous learning as a key element in overall corporate and business strategy. Companies are finding that they must have strategies to insure that their employees, particularly those in knowledge-intensive areas, have access to continuous learning in support of their work. Where public policy becomes important is that, absent revenue streams to subsidize this form of workforce education, colleges and universities will tend towards serving larger companies that can afford to pay the full program costs and avoid the smaller and emerging companies that require the same access but are not able to pay the full cost.

4. Providing Intellectual Capital to Support Economic Growth

Universities have intellectual capital in the form of faculty expertise that can support economic growth. Through our Small Business Development Center, individuals can get advice on starting a business and developing a business plan. Through our recently created Institute for New Economy Technologies (iNET), we connect companies with the expertise of our information science faculty and students who can assist in software development, systems applications, and computing structures. Not only does iNET serve companies with high quality and low cost expertise but the work also allows our faculty and students to address "real world" business challenges and, in the process, deepen their insights and understanding. Within the next 2 years, we will construct a new corporate/university partnership facility adjacent to the University to enable knowledge-intensive companies easy access to our faculty and student resources. At the same time, we are expanding student involvement in cooperative education and internship opportunities as a way of preparing them for their careers after graduation.

The Small Business Development Center and the iNET are but two examples of what we call "boundary spanning" units designed to make the expertise of our faculty and students available to support economic development. In both our hiring practices and our incentive and reward systems, we are working to insure that our faculty sees working with local companies as an important element of their overall professional activity.

THE PUBLIC POLICY CHALLENGE

What is described above are four dimensions of workforce development that are essential for the growth of our knowledge-based economy. They are roles that sometimes overlap but more often complement the work of both community colleges and major research universities. All four dimensions involve serving individuals and organizations who cannot afford to pay the full cost of the programs. Unlike traditional forms of instruction and research, each of which have both Federal and State resource streams to support them, this work is a cost center for most universities. It is rarely acknowledged at either the State or Federal level as an essential element of institutional productivity. Consequently there is no public accountability for such work and there are generally no government resource streams to support it.

In contrast, the Federal Government has, over the past 50 years, generated the most powerful university-based research enterprise in the world by providing major resource streams that support both the individual faculty member engaged in the research and the institution where they are located. If universities are to be seen as a prime vehicle for fostering intellectual capital in ways that I have described above, it will require resource streams to support this work.

In difficult financial times, the tendency is for organizations to concentrate on their revenue centers and reduce those programs and services that represent a cost. From a public policy perspective, this suggests that, when a university is under financial stress, their efforts to seed, develop, sustain, and provide intellectual capital for workforce development may be compromised. In my view, the work described above related to workforce development is essential for the nation's economic future and should be supported by the public policy process.

At the State level, the Kentucky Council on Postsecondary Education has created a Regional Stewardship Trust Fund, which would provide funds annually to each comprehensive university to address challenges important to the regions that they serve. This initiative in Kentucky is a creative response to insure that universities are motivated and supported to focus their attention on local challenges including

workforce development and the fostering of intellectual capital. A similar Federal initiative should be considered.

It is important that Federal efforts to support workforce and intellectual capital development be aligned across agencies and programs. Also the Federal role in coordination is important. Northern Kentucky University's service area crosses State boundaries, and as such, our activities must be coordinated with several local workforce investments boards and two different State boards. Because our region crosses State boundaries our efforts become a matter of interstate commerce and an appropriate place for Federal leadership. This is just one example related to the Workforce Investment Act, but similar coordination challenges exist across Federal agencies and programs. Any effort that Congress can make to better align Federal programs will ultimately improve their collective efficacy.

During the Higher Education Act reauthorization Congress should consider policies that support ongoing efforts to seed, develop, sustain, and provide intellectual capital for workforce development. One specific area of concern is the ever-increasing reliance on loans in the financing of higher education. The fear of debt and the burden of existing student debt can be serious impediments for adult learners seeking to continue their education.

The American Association of State Colleges and Universities (AASCU), of which I am a member, supports several changes to existing student loan policy. Below are two recommendations that I wish to bring to the committee's attention at this time. I am submitting AASCU's May 2003 letter to Chairman Gregg and Ranking Member Kennedy for the record.

The two key adjustments to Federal loan policies that will be most beneficial to adult learners are:

1. Promoting realistic and manageable student loan borrowing while recognizing the need to increase subsidized Stafford loan program annual limits up to $5,500 in each of the first 2 years, AASCU proposes to maintain the existing aggregate undergraduate loan limit. In addition, AASCU proposes to offset the first and second year loan level increases by giving institutions the authority to establish their own lower limits, as appropriate. This policy recognizes the wide variation in tuition and fees charged among the nation's institutions of higher education.

2. Requiring extensive loan counseling before a student begins borrowing. Such counseling should include: regional data on starting salaries in all major fields; details on the amount of annual and aggregate debt needed to complete the student's academic program; sample payments for that amount of debt; the impact of forbearance and capitalization of interest on unsubsidized loans and forbearance; and detailed descriptions of repayment options.

Thank you for the opportunity to appear before you today, and I look forward to your questions.

RESPONSE TO QUESTIONS OF THE HELP COMMITTEE FROM JAMES C. VOTRUBA

Question 1. I find your discussion of intellectual capital extremely relevant. You've captured the essence of this hearing in a single phrase. As Dr. Bohlen stated in his testimony, skilled workers are the most important resource in our modern economy. Can you comment on the successes of your iNET and METS programs in preparing students with the skills they need to enter a high-skilled workforce and succeed?

Answer 1. In my March 5 testimony to the Senate Committee on Health, Education, Labor and Pensions, I described four aspects of workforce development:

(1) *Seeding Intellectual Capital*, which means reaching students long before they are ready for college, to ensure they have the necessary academic preparation and motivation to acquire the high-level skills needed for today's (and tomorrow's) knowledge-based economy;

(2) *Preparing Intellectual Capital*, which requires post-secondary institutions to prepare graduates for those fields where the job demand is currently strong and will remain strong in the future;

(3) *Sustaining Intellectual Capital*, which means providing continuing education and training in a form, at a time, and in a place that is optimally convenient for today's workers and their employers; and

(4) *Providing Intellectual Capital to Support Economic Growth*, which requires us to identify and supply (broker) the best intellectual talent to meet the specific needs of workers and their employers.

The Institute for New Economy Technologies (iNET), and **the Fifth Third Entrepreneurship Institute** of which it is a part, focus on numbers 2 and 4: **Preparing** and **Providing**. The Metropolitan Education and Training Services (METS) and the METS Center are involved in numbers 3 and 4: **Sustaining** and **Provid-**

ing. Obviously each of the four aspects of workforce development is also addressed by a variety of other units within the University.

As stated on its web site, iNET serves as a link between high-tech companies and the university's human, physical, and academic resources. iNET focuses on providing emerging high-technology companies with qualified interns and co-op students, relationships with academic scholars, and close proximity to university research. iNET is a very young unit, having been in operation for less than a year. Yet, in its short history, it has developed very strong working relationships with about a dozen partners and is currently cultivating numerous additional partners. As one would assume, each partnership has unique characteristics and requirements, and iNET carefully matches the partner's needs with the university's resources.

A brief description of six initiatives provides an idea of the diversity of projects that iNET is promoting. Each of these projects includes the use of our students, some employing undergraduate students and some graduate students.

Belcan Partners, LLC

Working under the direction of Dr. Rebecca White, Belcan has engaged two graduate level students in a for-credit research project to conduct research for its EduNet24 K–12 education start-up initiative. Dr. White and the students are working on this project along with Dr. Linda Johnson, President of the Center for Information Technology Enterprise, an affiliate of Western Kentucky University. Drs. White and Johnson have worked closely together throughout the process, which is a win-win for the students and for the company.

PeopleStrategy, LLC

PeopleStrategy has set up an office at the Madison E-Zone (a high tech incubator located a short drive from the university), where it employs three student interns per semester and will continue to do so for at least the next 2 years. The NKU interns are working under the direction of Bryan Everly, a software industry veteran, focusing on product enhancement to the HR@TheDesktop human resources system. The company was recently awarded an R&D Voucher Grant for $200,000; the Voucher Grant program is funded by the Commonwealth of Kentucky to stimulate economic development. Half of this money will be paid to NKU through our partnership with PeopleStrategy. Dr. Jasbir Dhaliwal from NKU's Department of Information Systems has been instrumental in making arrangements for this program.

Dirigo

Dirigo, a software development company based in Cincinnati, approached the University about hiring student interns from our IT program to assist with the development of software products for their IBM and Microsoft contracts. They have recently hired the first two interns. As the business grows, Dirigo will look to significantly expand its relationship with NKU in the areas of both software development and product support.

dbaDirect

We have recently opened a Marketing and Customer Service Center located in one of our classroom buildings. The Center will serve as the hub for dbaDirect business-to-business marketing efforts and will initially employ at least six to eight NKU students. These students will work and attend classes all on one campus and receive very high-level training as a part of their co-op work experience. dbaDirectis a rapidly growing database management firm currently located in Florence, Kentucky, which is not far from the university.

Biology Contract Lab

iNET is working with the Department of Biology to determine the potential for commercializing some of the excess capacity of our state-of-the-art Environmental Scanning Electron Microscope located in the New Science Building. Students in a graduate entrepreneurship class are studying the opportunity and creating a feasibility study for this project.

Tri-ED student Internship

We currently have an MPA student with an entrepreneurship specialization working as an intern in the Tri County Economic Development offices. He is learning about public policy and entrepreneurship and the role of both in building and marketing a region.

In addition to the partnerships described here, iNET has placed student interns at a variety of other local companies. Companies employing student interns benefit not only from the work of the interns, but also from the knowledge and experience of the faculty who supervise the interns.

The Fifth Third Entrepreneurship Institute (EI), of which iNET is a part, is heavily involved in **Preparing Intellectual Capital**. Through the EI, we offer an undergraduate minor in Entrepreneurship; more than half of the graduates have been non-business majors. Often these students are majoring in the arts and humanities, and they want later to apply this academic interest to the development of small businesses. Currently, there are 121 enrollments in this program.

Beginning next year, we will offer the Entrepreneurship minor via the web which will greatly expand opportunities for persons who do not live close to a university or who cannot attend classes during typical class times. The Entrepreneurship Institute also offers a specialization in Entrepreneurship as part of their graduate-level business program, and they will soon be teaching entrepreneurship to high school students and to students enrolled at the local community college.

The Metropolitan Education and Training Services' (METS) and **the METS Center** are involved in **Sustaining and Providing** intellectual capital. All or almost all of those served by METS are already in the workforce and succeeding to a certain extent. METS, therefore, can be thought of as operating in the skill enhancement niche, improving the knowledge, skills or other characteristics of workers who are already employed. In general, this aspect of workforce development is financed by the employing organizations, but not surprisingly, the smaller businesses are less able to afford this. As a result, we recognize the importance of METS providing some of its programs without cost to the employer.

In the four and a half years since the inception of METS, its services have impacted more than 13,000 employees from more than 250 employers. The majority of the programs were designed to meet the needs of a single employer, impacted only employees from that company, and were paid for by the company. However, in recognition of the fact that smaller employers are less able to afford training, especially training that is tailor-made for their employees, METS also provided programs that were open to employees from throughout the region; many of these programs were offered at no cost. One example of a free program is the monthly presentations, each featuring a different speaker, covering a topic of interest to those in the business community. Average attendance at these 7:30 a.m. talks is 100 persons.

METS selects the best intellectual capital for all programs and services they broker or offer. They have a database of more than 400 providers from which they select the best one to meet the needs of the client. Given METS high standards for providers, it is not surprising that they rely on fewer than 5 percent of the providers in the database.

Success in regards to METS Services can be measured in several ways. Certainly, numbers served, as reported above, is one measure of success. However, there are others as well. METS has been very successful in helping employers understand the true levers of performance in their respective organizations. That is, they use performance assessments to isolate exactly what employees need to do better, faster, differently or more frequently (as well as what they need to stop doing) if their work units/organizations are going to become more effective/competitive. METS has conducted performance assessments involving more than 5,000 employees.

A third type of success relates to METS' role as an "employer advocate" rather than an entity selling training. As a result, METS frequently finds itself in the position of talking employers out of wasting their limited resources on training programs that have no hope of actually changing behavior or affecting the bottom line. Experience has shown us that in the majority of instances where the "presenting problem" is described as a need for training, METS would be doing the organization a disservice by simply arranging for the requested training. That is because nothing would really have changed in the organization, the organization would have received no return on its investment, and the organization would be operating under the delusion that something had been done to resolve a problem or address an issue. METS does not track the frequency with which they discourage potential clients from using METS services, but they report that it is a very frequent occurrence.

The METS Center opened last September. Located only one mile from our international airport, it is a 43,000 square foot facility equipped with more than $4 million of state-of-the-science technology designed to enhance training and expand its reach. Since its opening, the METS Center has contracts serving more than 13,000 employees. (Note: the similarity in numbers served by METS Services and by the METS Center is purely coincidental.) Programs offered in the METS Center are occasionally offered by METS; more often the facility, or parts thereof, is rented by an employer who either provides its own training and trainer, or asks that METS provide the trainer.

As with METS Services, there are several indicators of the success of the METS Center. Certainly the number served is one indicator. In addition, we are finding

that once trainers/facilitators/meeting planners realize the implications of the equipment at the METS Center and the things that they can do with it, they often expand the basic learning objectives for their programs.

An example is the use of audience response technology which allows for instant, immediate, and confidential feedback from the audience. Trainers are initially unsure how to incorporate this into their training. However, once they are given a few suggestions, they dramatically alter the nature of their programs to provide richer and more valuable learning experiences. The high cost of audience response technology, like that of much of the METS Center technology, makes it unaffordable for all but the largest employers. By making it available at the METS Center, we allow employers of all sizes to incorporate it into their training.

The availability of other technology similarly enhances what clients can do at the METS Center. For example, METS can digitally record discussions, so that there is a permanent record of how decisions were made, who agreed to do what, and what commitments were made at the meeting. As another example, anyone with access to a computer and the Internet, anywhere in the world, can watch a discussion taking place at METS. It can be watched live, when it occurs, or METS can host it on their media site so that people can watch it when they choose.

One of the great successes of the METS Center is that we are saving local businesses from having to purchase their own equipment, which they might use less than a dozen times a year. Instead, they may rely on the equipment at METS and incur costs only when they actually need to use the equipment to advance the training and convening requirements of their business. This is especially beneficial for smaller companies who could not otherwise afford access to this high-tech equipment.

Overall, we feel very confident that both iNET and METS are responding well to the needs of the region. The anecdotal feedback for both units has been resoundingly positive; the numbers served are impressive, especially in regards to METS; and the units are contributing to our fulfilling our roles in regards to **preparing, sustaining, and providing** intellectual capital to serve our region.

Question 2. Facilitating partnerships between institutions of higher education for training and placement of highly skilled workers is one of the most critical improvements I believe Congress could make in reauthorizing the Higher Education Act. When you first met with regional leaders to identify the University's role in assisting the local business community, what was the response? How could Congress help institutions successfully build partnerships with business, similar to what your University has done?

Answer 2. An important part of the University's overall strategic planning is to meet regularly with corporate and community leaders to explore the opportunity for partnerships and joint ventures. When these meetings were initiated in 1997, it would be fair to say that there was interest mixed with skepticism. Universities often have periodic bursts of enthusiasm around such initiatives but they often are not sustained. However, over the past 7 years, the business community has come to trust that the University takes these partnerships seriously and delivers on what it promises. Today, there is a high level of trust and recognition that the University is serious when it described its intent to be an engine for regional economic development.

In building partnerships with the business community, it is important to have a clear understanding of what the University can and cannot contribute to economic development. It has been my experience that, too often, universities promise more than they can deliver. It is out of this concern about sticking to what we can realistically offer that we developed our focus on **seeding, preparing, sustaining, and providing intellectual capital.**

There are several steps that Congress can take to support partnerships between universities and the business community. In my initial testimony, I emphasized that, both nationally and locally, we must do more to support the growth of small and medium sized companies. This is where much of our future job growth will occur. Universities are sometimes limited in their services to these smaller companies because the companies cannot afford to pay the full cost of programs and services. In difficult budget times, universities, like companies, tend to focus on expanding their revenue centers while reducing their cost centers. Currently, universities generate revenue in several ways. They teach students who pay tuition. They conduct externally funded research and receive overhead funding from the grants. They involve themselves in a variety of auxiliary enterprises such as bookstores, food service, and other initiatives that produce revenue. And they sometimes embark on entrepreneurial activities such as workforce development which is the focus of your deliberations. The problem is that, in order to make workforce development a reve-

nue producer and not a cost center, the focus must be placed on serving large and prosperous companies that can afford to pay the full cost of the program. However, the need is to serve small and medium sized companies that generally require some form of subsidy.

The Federal Government currently subsidizes the costs associated with university involvement in both teaching (student grants and loans) and research (overhead expenses). These subsidies allow universities to cover the cost of these activities. I believe that Congress should consider a similar subsidy that would help support the provision of workforce programs and services for small and medium sized companies that cannot afford to pay the full cost. Second, I believe that Congress should consider funding pilot projects that reflect "best practice" in university/business partnerships so that others can learn what works and why.

Question 3. You mention in your testimony that your academic programs are targeted toward the local workforce needs, based on a study of employer responses. Clearly, such a study would cost the University a fair amount of resources to complete. Can you expand briefly on why that study was deemed a priority for your institution and how it has helped your institution match students with available high-growth jobs?

Answer 3. Over the past 140 years, American public higher education has received enormous public support because it was viewed by the public, not as an end in itself, but as a vehicle for achieving a broader set of social and economic priorities. It was these universities that brought science to agriculture, provided the workforce for industrial expansion, produced research that supported everything from national defense to improved health, contributed to inter-generational mobility, and pushed back the frontiers of knowledge related to nearly every dimension of human life. My point is that American higher education has prospered because it has served the public interest.

We made a decision 7 years ago that we were going to align ourselves with the needs of our region and build partnerships with business and community groups as a core element of our overall strategic plan. We felt that, if we became very focused and intentional in our support of the region, the region would, in turn, support us. In fact, this has been the case. In aligning our academic programs with the workforce needs of the region, we have not only served an important regional need but we have also been able to generate record levels of financial and political support.

We have determined the region's workforce needs in three different ways. First, we collect and analyze regional workforce and economic development studies conducted by such groups as the Tri-County Economic Development Corporation and the Northern Kentucky Chamber of Commerce. There is very little cost involved in this analysis. Second, we use our own faculty and staff to test workforce needs in specific employment sectors. The cost for this analysis is relatively modest. Third, we employ outside consultants to give us in-depth analysis before proceeding with a major workforce initiative. For example, we employed an outside consultant to study whether we should develop a college of engineering. His study indicated that the region had ample access to engineering graduates but that we should produce more information technology graduates which we have done.

Question 4. Small businesses offer the greatest opportunity for employment and broad skill development. As a former small business owner myself, I know that the typical small business does not have the resources, personnel or time to seek out partnerships with institutions of higher education. How can institutions of Higher Education be more responsive to the needs of small businesses?

Answer 4. Universities have human, programmatic, physical, and technological resources that can greatly benefit small businesses, but the challenge is to connect the needs of the businesses with the appropriate university resources. We have undertaken several initiatives to assist with this connection. I will share two of them, with the understanding that they exemplify what is possible when universities take an active role in regional stewardship.

iNET, with which you are already familiar, was created specifically to connect the needs of the regions' companies, especially high-tech companies, with the university's human, physical, and academic resources. A good example of an iNET partnership that is serving small businesses is the partnership with the Madison E-Zone, a high-tech incubator located in nearby Covington, Kentucky. As part of this partnership, iNET has:

- Reviewed business plans submitted by entrepreneurs;
- Put together a team of students and faculty to study investment criteria and created an assessment tool that is being tested in the Kentucky Innovation Center

program to determine the readiness of entrepreneurs for capital markets and equity investment;

- Critiqued investor presentations of entrepreneurs;
- Identified prospective employees and student interns for entrepreneurs;
- Created marketing and business plans for entrepreneurs.

A second example has been our creation of a call center, NKU Connect. Universities are complex organizations, and it is often daunting for someone or some entity outside the university to connect with the particular office that might be able to serve their needs. To overcome this barrier, we are implementing a "call center," staffed by persons who can listen to the caller's needs, determine whether the university has the necessary resources to respond to those needs (e.g., do we have the appropriate expertise) and then follow up to link the caller with the university resource. *NKU Connect* will not serve as a switchboard transferring callers to other offices; rather *NKU Connect* provides the follow-through to ensure that the caller—whether a local business person, a non-profit agency, or a community resident—is either provided with the services they are seeking or understands why the service cannot be provided.

In addition to the challenge of connecting with the university resources, small businesses often have a resource challenge in regards to providing training and development for their employees. Our experience suggests there are a variety of ways in which institutions of higher education can respond to this challenge. A college or university can:

- Bring together the needs of multiple businesses to create critical mass regarding resources. Sometimes one organization will have five people who need training on Topic X, another will have three, yet another will have four. None of the organizations alone could afford the training, but if their resources are pooled, the training can take place;
- Underwrite low-cost or free services for start-up or small businesses that lack the resources to pay, by using "excess" revenues generated from the corporations and organizations who can afford to pay. Similarly, offer free workshops to address the needs of the region's businesses. Workshops provide both education and networking opportunities for small businesses.
- Offer small businesses or non-profit entities deeply discounted or free entry to training programs that have unfilled seats. Registration for training programs can be quite costly, sometimes pricing them out of the range of the small businesses in the region. At the same time, most "public training programs" have seats that go unused. Deeply discounting or "comping" the registration charge fills the seats and serves the small businesses.
- Ensure that owners of small businesses are included on University advisory councils. Their membership serves the university by ensuring that the small business perspective is represented in discussions. At the same time, it serves the small business by helping them develop relationships with key people at the university.
- Develop a mechanism for faculty to share their expertise with small businesses. This might be done by offering a free or low-cost consulting service for business start-ups or by providing symposia where faculty share cutting-edge research that has direct application to local businesses.

Overall, if universities are to serve small businesses, they must be aligned to do this work. The university leadership must emphasize the value of this work, there must be a reward structure in place for the faculty who donate their intellectual capital, there must be a unit that assumes responsibility for coordinating and promoting this work, and there must be adequate financial resources to ensure that serving small businesses does not draw resources from the university's primary mission to educate its students.

Question 5. As a former small business owner myself and a merit badge counselor for the Boy Scouts Entrepreneurship merit badge, I'm curious as to why your school has placed such an emphasis on entrepreneurship. Can you describe briefly the institution's focus and successes with helping students understand the principles of starting your own business?

Answer 5. Our efforts to create impact across campus with entrepreneurship education began with the creation of the Fifth Third Bank Entrepreneurship Institute at NKU (EI). We formed the EI in 1999 with initial funding from the Coleman Foundation and then later funding from the Fifth Third Bank and Joseph Schmidlapp Foundations. The program was founded on a strategy of offering entrepreneurship to students who have traditionally been neglected by entrepreneurship education. From the start, we chose to offer a minor in Entrepreneurial Studies rather than a major so that students from across campus could take advantage of

the course offerings, and because nearly every student at NKU is required to take a minor field of study.

In addition to the minor, we now offer a graduate specialization to our students in the Masters of Business Administration (MBA), Masters of Science in Information Systems (MSIS) and Masters of Public Administration (MPA) programs. Beginning next fall, we will offer the entrepreneurship minor as an online program via the web, which will make it available to students regardless of where they live or when they are available to take classes.

Entrepreneurship, creating value through innovation, is one of the fastest growing subjects in today's business schools. A number of factors are driving this interest; however, the primary force is the desire and need to compete creatively in both large and small firms. Our entrepreneurship programs seek to address this need in the regional community.

The focus of our academic programs in entrepreneurship is on generating ideas based on creativity, opportunity identification, feasibility studies, start-up activities and early stage strategies, sound business practices, and new initiatives within corporate environments. Our overarching goal is to provide enrolled students with a unique opportunity to approach their careers from a paradigm based in integrated education, business partnerships, and creative solutions to business problems. Our programs have a general business and entrepreneurship skills content combined with applied research opportunities for students.

Our educational objectives are to build a quality entrepreneurship education program by promoting the awareness of entrepreneurship as a career, teaching prospective entrepreneur show to establish new enterprises, grow, manage and maintain them efficiently, and offering the skills necessary to operate entrepreneurially within large, established organizations. Our programs provide students with contemporary, professional, applied, community-related, economic development, and international perspectives.

Our courses offer the opportunity to combine an entrepreneurial mind-set with the management skills necessary to launch and build a successful venture. By approaching business management from an entrepreneurial perspective, we provide a new paradigm for business education, an approach that is based on "productive" thinking—putting together the familiar in new, innovative ways. Thus, our entrepreneurship programs offer students exposure to a variety of topics. The broader the learning experience, the more creative "wells" the student has to draw from for inspiration. In order to encourage this paradigm among students, our curriculum is interdisciplinary in nature. For example, subject areas may range from legal issues such as intellectual property protection and organizational structure to technology issues involved in new product or service development to issues of capital acquisition and financing.

Prior to launching our new minor, we formed a campus-wide committee, including faculty from each of our colleges, to develop the curriculum for the minor. We were able quickly to gain campus-wide support and began to offer our first courses in fall 2000.

Since the beginning of the Entrepreneurship Institute 3 years ago, we have had a number of significant accomplishments. For example, we have:

- Maintained strong and consistent leadership and support in the EI, the College of Business, and the University;
- Created and utilized an involved advisory council comprised of successful regional entrepreneurs and national leaders in entrepreneurship education;
- Created working committees of regional community leaders to assist with curriculum development, fund raising, program development, marketing, strategic visioning and serve as classroom lecturers, internship advisors and adjunct professors;
- Raised more than $1 million in grant money and an additional $1 million in private donations;
- Created a graduate specialization in Entrepreneurship;
- Began a successful "CEO!" student organization on campus;
- Expanded staffing of the EI by hiring a second faculty member in Entrepreneurship with a third one to be hired to begin in fall 2004; hiring an Assistant Director who has an MBA and more than 25 years of experience as an entrepreneur; hiring a Research Associate; and hiring a Coordinator of programs;
- Created the Three Stage Entrepreneurial Assessment Tool used by the Kentucky Innovation and Commercialization Center program;
- Created a Rural Center for Innovation, Entrepreneurship and IT in Grant County, Kentucky to serve five rural Kentucky counties and hired a director to lead that effort;

• Developed and implemented the first annual high school contest—The Entrepreneurship Challenge—for students in 9th and 10th grades to come to NKU to compete for the chance to participate in a national business plan contest;
• Initiated a student created and managed company through one of our classes;
• Received an Innovation in Education Award from AACSB, the leading accrediting agency for Colleges of Business.

It is also important to note that in our short history, more than half of our graduates with entrepreneurship minors have been non-business majors.

Question 6. In one of the two recommendations you make to this committee, you recommend appropriate loan counseling for student borrowers. Last Fall I introduced the Financial Literacy in Higher Education Act, which would encourage institutions to provide much more intensive financial literacy training than they currently receive, including the necessary skills to manage their student loans and budget their income as they leave the institution. Are there examples of institutions that you know of that are doing a good job at preparing their students with these skills?

Answer 6. Both the University of California and the California State university (CSU) have systems in place to address this issue. For more information in this area, you may find the CSU's website http://www.scumentor.edu, helpful. Another example source for information on college costs and loan repayment can be found at http://www.finaid.org/calculators/. The benefit of your legislation, and the recommendation I offered, is that they will both build this information into the nation's student financial aid system. This systemic reform is important so that many more students can benefit from this knowledge. In addition, the recommendations I offered would require the institutions to provide students with salary information related to the student's course of study. This salary information provides much needed context upon which students can make intelligent decisions about the amount of debt to incur.

PREPARED STATEMENT OF BETH B. BUEHLMAN

Mr. Chairman, Senator Enzi, and Members of the Committee: As the vice-president and executive director of the Center for Workforce Preparation (CWP), I am pleased to be here today to discuss the relationship between postsecondary education and our nation's ability to have a prepared, competitive workforce. The U.S. Chamber of Commerce is the world's largest business federation, representing the more than 3 million businesses and organizations of every size, sector and region. CWP, an affiliate of the U.S. Chamber, focuses on workforce development and quality education issues. It helps businesses and chambers in their communities find, use, and build resources to support productive workplaces and develop a skilled workforce.

Thank you for this opportunity to relate the challenges employees and employers face, as together, they strive to maintain a competitive American workforce. I would like to cover several points in my remarks—a skilled workforce is a bottom line issue for employers to remain competitive; postsecondary education is a necessary factor to achieving a skilled workforce; traditional concepts of postsecondary education may need broadening; and suggested policy considerations for the reauthorization of the Higher Education Act to address these concerns.

Across America, employers of all sizes share the view that a skilled workforce is essential to maintaining competitiveness. Chambers consistently report that workforce development is among the top three concerns of their business members. In CWP surveys of small and medium-sized businesses conducted over the past 3 years, employers report difficulty in finding qualified workers due to a lack of skills. Even more revealing were their responses when asked about the ability of their current workforce in meeting their future skill requirements. Within 2 years, about 30 percent of these employers no longer believe that the skills of their workforce will keep pace. Business quality, productivity and profitability depend on qualified workers who can perform on the job today and adapt to the new demands of tomorrow.

Technology, demographics and diversity have brought far-reaching changes to the U.S. economy and the workplace placing increased demand on the need for a well-educated and highly skilled workforce. In 1950, eighty percent of jobs were classified as "unskilled"; now, an estimated 85 percent of all jobs are classified as "skilled". Today few working adults have the education and skills required for a knowledge economy—only 40 percent of adults in the workforce in 2000 had any postsecondary degree, associates or higher. In this decade 40 percent of job growth will be in jobs requiring postsecondary education; those requiring associates degrees growing the fastest. Hedrick Smith states that, "60 percent of our corporations are prevented

from upgrading technologically by the low . . . educational and technical skill levels of our workers." Clearly, there is a greater need for more educated and highly skilled workers than ever before.

One might think the answer lies in simply replacing unqualified workers with new, more qualified workers because that has been the response over the past 20 years. From 1980 to 2000 the size and skill of the workforce grew significantly. Baby boomers were in their prime employment years, women entered the labor force in large numbers, and the number of college-educated workers more than doubled. However, these trends have ended.

The native-born workforce is aging—no new net growth is expected through 2020 in prime age workers. Immigrants and workers staying in the workforce longer are expected to account for all net workforce growth between now and 2020. Growth in workers with education beyond high school between the years 1980 and 2000 was 138 percent. Between 2000 and 2020 it is projected to be only 19 percent. Most of the 2020 workforce is already beyond reach of the K–12 system, which means that to upgrade skills, employers and workers will need to rely on postsecondary education.

Unfortunately, these findings also suggest that the severity of these current workforce challenges is just a precursor to a disconcerting forecast for the future. Looking forward, it is estimated that sixty percent of tomorrow's jobs, while involving variations of current business operations and practices, will continue to reflect the rapid advance of technology, requiring skills that are only possessed by twenty percent of today's workers. Many of tomorrow's jobs—estimated at forty percent—don't exist today. These jobs will most certainly require a workforce of highly educated workers, utilizing skills that have not yet been identified in fields and operations that, today, are only being discussed in theory. These forecasts have led experts and analysts to project that, in the future, 4 out of every 5 jobs will require postsecondary education or equivalent training and that 75 percent of the today's workforce will need to be retrained just to keep their current jobs.

To correct these deficiencies, remedy the current workforce dilemma and alleviate the threat to American competitiveness and our economy, we must address the shortage of well-educated and highly skilled workers by ensuring employers and their employees have access to continuing education and training that is flexible and responsive to the rapid changes in the marketplace. Lifetime education and training is no longer an option, it is a necessity—for individuals, for employers and for the economy.

Looking ahead, employers and workers are going to place greater reliance on postsecondary education to address the ever-increasing skill demands of a competitive American economy. When the Higher Education Act was first authorized in 1965, a recognized purpose of it was the development of the workforce—directly out of high school. What these policies did not anticipate is the role postsecondary education would have in the ongoing advancement of working adults—or what we generally refer to as non-traditional students.

Mr. Chairman, any meaningful strategy to combat these workforce challenges must begin with a comprehensive education and workforce development system that incorporates the realities of a global economy. We are already attempting to improve our K–12 system, making it more competitive with other industrialized nations and leading to a more knowledgeable and highly skilled American workforce in the coming decades.

However, it is equally important to note that the deficiencies and challenges within the existing workforce—individuals that are beyond the reach of on-going K–12 initiatives—also demand immediate attention. Absent a sustained investment in a comprehensive educational system that is responsive to the needs of employers and their incumbent workers, the American workforce will be ill equipped to compete in the global economy and American businesses will become less profitable and the nation's economic security less certain.

Thus, the U.S. Chamber supports an education agenda that addresses both the long-term objectives of American businesses and workers, as well as the more immediate workforce deficiencies that are best remedied through reauthorization of legislation currently pending before Congress: the Higher Education Act, the Workforce Investment Act and the Perkins Vocational and Technical Education Act. Reauthorization of these policies would provide employees and employers continuing access to essential retraining and educational opportunities.

Focusing on the reauthorization of the Higher Education Act, as the head of the Center for Workforce Preparation I think of at least two constituencies, the employers who need skilled workers and the adult workers who recognize the importance of postsecondary skills development. When one is determining how best to shape legislation with the worker in mind, it is critical to have an accurate understanding

of the make up of the existing workforce and the obstacles they confront in the pursuit of their career aspirations.

These working adults are trying to balance careers, family responsibilities, financial and other personal obligations to get the education they need to advance in the workforce. They cannot afford to reduce their hours on the job and risk losing valuable wages while incurring additional expenses, such as tuition and childcare. Similarly, employers want and need their employees to keep pace with the escalating skill demands of the workplace. Employers, especially small and medium-sized, are not able to interrupt their operations for employees who are attending classes that make them unavailable during normal business hours. We need to examine the policies that we have in place. Many only focus on the needs of traditional students, and miss a very large group—the non-traditional and working adult students.

Seventy-three percent of all post-secondary students are non-traditional students. That is to say, they are not individuals that graduate from high school, go immediately to a 4-year college and depend on parents for financial support. This large and growing segment of our population is mostly comprised of working adults who are seeking additional education and training to return to the workforce, remain current in their field, increase their earnings potential, pursue another job or consider a career change in today's demanding economy.

In 1999–2000 almost three quarters of American undergraduates were nontraditional in some way: More than half (51 percent) were financially independent; Almost half (46 percent) delayed enrolling in college; 39 percent were adults 25 years of age or older; Almost half attended part-time (48 percent); 39 percent worked full time; and Just over one-fifth (22 percent) had dependents; 13 percent were single parents.

In 1999–2000 most non-traditional students (82 percent) age 24 or older worked. Over 80 percent report that gaining skills to advance their current job or future career was an important consideration in their postsecondary education. Roughly one-third enrolled to obtain additional education required by their jobs.

Census Bureau data show that monthly earnings increase significantly with increased education levels. From 1991 to 1999 the number of adults participating in any form of education increased from 58 million to 90 million. Almost 45 million were taking work-related courses and 18 million were seeking formal postsecondary credentials. With longer workweeks, there is limited time for education and training. It is understandable then that working adults overwhelming prefer short, intensive programs and find it difficult to sustain even a part-time commitment over a period of 15 weeks—the length of the traditional college semester. Employees and employers both are seeking curriculums and training programs that impart relevant knowledge and skills that have a practical application in the workplace. The availability of flexible and modularized programs is key to meeting these needs.

The strength of America's postsecondary education system is the diversity and types of institutions providing courses, programs and training for adult workers—2- and 4-year, public and private, and non-profit and for profit. Some institutions are better able than others to provide coursework that is relevant to the workplace. Others can adjust more quickly to the needs of employers with just-in-time training. Regardless, the opportunity for many adult workers to access this education and training is limited by some of the provisions of the Higher Education Act.

A number of provisions in the Higher Education Act are outdated and limit the ability of postsecondary education institutions to provide innovative solutions to America's workforce needs. The reauthorization of the Higher Education Act provides an opportunity at a critical juncture in the development of the economy for the members of this committee and this Congress to modernize it to meet the new competitive demands of the 21st century. To meet this objective the committee might want to consider: policies that foster collaboration among all types of institutions, including 4-year institutions, community colleges and proprietary schools; financial aid reforms to help nontraditional students obtain access to postsecondary and ongoing education; broadened distance learning to accommodate the lifestyles and geographic restrictions of nontraditional students; and a strong and viable proprietary postsecondary education industry.

Financial Aid Reforms for Less-Than-Halftime Students

Working adults because they have jobs and often, family responsibilities, lack the time, money and flexibility to fit the traditional model of higher education. They typically are able to attend school on a less than halftime basis and therefore get very little financial aid from Federal or State sources. Working adults going to school less than half time are unable to receive assistance with living expenses that a dependent living in the same household would receive. Their expenses could be calculated more generously and their incomes more narrowly. Federal Direct Loan

and Federal Family Education Loan Programs are not available to students taking courses on a less than half-time basis. All these barriers limit financial support for working adults and thus their ability to participate in postsecondary education or training. In addition, consideration could be given to year-round eligibility for Pell Grants providing more flexible and year round access to postsecondary education. So that there is a better estimate of the number of eligible Pell grant recipients for appropriations purposes, the committee might want to consider having the cost estimates for Pell provided by the Secretary of Education with input from the Secretary of Labor.

Modification of Financial Aid Eligibility to Shorter Term and More Flexible Educational Programs and Greater Utilization of Distance Learning

The "12 hour rule" is a barrier to schools developing and using distance learning programs. This rule requires full-time students to be in a classroom for at least 12 hours each week to be eligible to receive student aid. In order to meet the needs of adult workers, this provision might be modified to include shorter credential programs, modularization of courses, open entry/open exit programming and distance learning. In addition, the "50% rule" that requires an institution to offer no more than 50 percent of its courses on-line, limits opportunity for adult learners. On-line delivery of programs is an effective way to reach adult workers that may not have access, time or ability to enroll in traditional classroom settings. Technology is making rapid changes to the workplace, and it has great potential to reach new learners and create new educational opportunities.

Incentives for Institutions That Develop Programs and Schedules for Working Adults

Programs that lead to degrees are often campus bound or have prerequisites that are difficult to meet. Programs that require 60 to 75 credit hours are daunting when the student can take only three or four credits at a time. This perspective is exacerbated by the fact that adult workers may have industry-recognized certificates or credentials that are not recognized by traditional postsecondary institutions for credit toward a degree. Consideration should be given to applying the competencies developed through the certification programs toward traditional college credit. Additionally, because evening and weekend classes are not perceived as rigorous as more traditional scheduling by accreditation bodies, these courses are often offered for non-credit, denying working adult students the ability to accumulate credit toward a degree.

Establish Flexibility for New Collaboratives to Deliver Services

As we face shortages of workers in specific fields such as healthcare and teaching, as we approach the possibility of millions of retirements from the Baby Boomer generation and as the need for working adults to increase their workplace skills becomes acute, new ways of delivering these services must be created. With the qualified teacher requirement under No Child Left Behind Act, teachers need access to professional development courses and may not have the time or the ability to travel distances to receive this training. Similarly in healthcare, access to training is critical. In addition to better on-line coursework access, classroom instruction schedules and locations must be flexible enough to accommodate work schedules of employed adults. Within communities across the country there are community colleges, proprietary schools, and other education and training programs, available to meet these needs. However, more traditional 4-year institutions may be geographically less available and require significant travel time in order to attend. In these situations, 4-year institutions may want the flexibility to collaborate with other educational entities in communities to deliver programs and services. Such flexibility may require a redefinition of eligible institutions and other considerations in order for students to remain eligible to receive financial aid and other supports.

Examine Differences Across Institutions and What Impact Different Treatment by Federal and State Law has on Serving Adult Working Students Efficiently and Effectively

The Higher Education Act has multiple definitions of institutions of higher education and distinguishes for-profit and non-profit and public institutions. These multiple definitions are confusing and fail to recognize the maturation of for-profit institutions and their contributions. These distinctions also limit the ability of students to transfer credits they earn at for-profit institutions to other institutions. If students are required to retake courses, the cost of education increases. Private sector postsecondary institutions have developed focused, market-responsive and innovative approaches that result in immediate and effective improvements in the workforce. Their success demonstrates how free enterprise goals can harmonize with a public mission: to provide career-focused degree and non-degree programs for stu-

dents seeking educational and economic advancement and to provide American business and industry with a skilled and knowledgeable workforce.

These are just a few broad recommendations to align postsecondary education with the needs of employers and adult workers to become more skilled and remain competitive. Attached to this testimony are two sets of policy recommendations. One is from the Education, Employment, and Training Committee, the policy committee for the U.S. Chamber of Commerce. The other is from a partnership that the Chamber has formed with Corinthian Colleges, Inc., DeVry Inc., and Kaplan, Inc.

I want to thank the committee for this opportunity to testify, and I would be happy to answer any questions you may have at the appropriate time. Thank you, Mr. Chairman.

RESPONSE TO QUESTIONS OF THE HELP COMMITTEE FROM BETH B. BUEHLMANN

Question 1. I think you've hit the target with your discussion of a skilled workforce being essential to competitiveness. In your estimation, is higher education adapting sufficiently quickly to the needs of the workforce in the next two decades, and if not, how might Congress create appropriate incentives for institutions of higher education to focus more on the workforce preparation activities?

Answer 1. Our policies in terms of adult workers are outmoded. They continue to primarily focus on traditional students, providing little or no options for non-traditional students, i.e. adult workers. There are two populations that higher education needs to address:

1. Students entering postsecondary institutions directly from high school —Often high school students do not know why certain courses are being taught and they perceive that colleges or employers do not place much importance on the kinds of courses they are taking. Students must see the practical application of their learning because if they cannot clearly see how classroom studies translate to specific job functions and career progression, the lessons are forgotten as soon as they are taught. Postsecondary institutions must also understand that a large number of students entering college directly from high school are at a disadvantage due to a disparity between high school graduation requirements and college entrance standards.

2 Adults in the workforce—Many restrictions in the policy hinder adult workers' ability to further their education and advance in the workplace. Financial aid restrictions for less than ½ time students, Federal Pell grant regulations, the 50% rule with respect to distance learning, the inability to transfer certificate/credentials into college credit, lack of modularized courses all contribute to the barriers adult workers face when enrolled in postsecondary education.

The reauthorization of the Higher Education Act (HEA) should allow collaborative efforts among postsecondary institutions to bring education to the students, including involvement by community colleges and 4-year institutions. For example, collaboration of this nature would be instrumental in bringing professional development courses to teachers to help them in meeting the "highly qualified" standard under the "No Child Left Behind" Act.

Question 2. The Center for Workforce Preparation (CWP) conducted a survey of small and medium business and found that these employers had difficulty in finding qualified workers due to lack of skills. How can institutions of Higher Education do a better job of partnering with and meeting the needs of small businesses—where the real opportunity in America lies?

Answer 2. Institutions of higher learning can work with chambers of commerce to become more labor market-responsive. Chambers are able to aggregate the needs of small and medium-sized businesses. Chambers working with proprietary schools is one good example of this type of partnership. These companies, comprising a now maturing industry, have identified the needs of business and have developed focused, market-responsive and innovative approaches that result in immediate and effective improvements in the workforce.

However, solving the workforce dilemma requires more than one solution and no one institution can do it alone. There must be collaboration with communities to help them identify and understand their resources and how to connect with them to serve the needs of local businesses. For example, Washington State has developed an on-line resource that enables community colleges to connect course offerings to local businesses based on skills needed.

The higher education community should be encouraged to become more active in workforce investment boards and ask chamber executives to serve on higher education boards and committees. This collaboration is important because it is a way to foster partnerships and increases the awareness of local labor market information and the needs of employers in communities.

Question 3. Your comments today are very similar to comments that Chairman Alan Greenspan made to the Banking Committee a few weeks ago when he described a skilled workforce as the most important component of the changing economy. He asserted that the bulk of job creation over the next several years will be largely in the areas of highly skilled jobs, which is what you have also argued in your testimony. Do you anticipate that the next generation of available jobs are going to be high-wage to accompany their high-skilled nature?

Answer 3. Technology, dempgraphics and diversity have brought far-reaching changes to the U.S. economy and the workplace, placing increased demand on the need for a well-educated and highly-skilled workforce. In 1950, 80 percent of jobs were classified as "unskilled"; now, an estimated 85 percent of all jobs are classified as "skilled". Census Bureau data show that monthly earnings increase significantly with increased education levels. Working adults understand that without opportunities, they will be stuck in low-income jobs and many are working to change that. From 1991 to 1999 the number of adults participating in any form of education increased from 58 million to 90 million. Almost 45 million were taking work-related courses and 18 million were seeking formal postsecondary credentials. Workers need opportunities for advancement. Employers need skilled, qualified workers to fill tomorrow's high-skill jobs. Higher education is vital a link between those two needs.

In addition, if immigration is to play a role in filling the job deficiency, we must accommodate the needs of immigrants by focusing on literacy and English as a Second Language education. The Committee for Economic Development (CED) issued a brief from the business perspective regarding America's workforce after the Baby Boomers and the role of immigration in trying to fill the worker gap. For example, 14 percent of native-born workers are high school dropouts, while 37 percent of immigrants are high school dropouts (2000 census). If we are concerned about the skills of the workforce as well as the demographics, it is clear from these figures that immigration is not the only solution to the worker shortage we are facing. Not only is the potential number of workers leaving the workforce larger than other generations, it is the quality of their education and experience that will be lost—a loss of social capital as well as human capital. Immigrants are generally younger and do not have the 'social capital' of American workers, even if they are highly educated (CED Brief: "America's Workforce After the Baby Boomers"; www.ced.org).

Section 127, the Hope Credit and Lifetime Learning tax credit are outside of HEA but they need to be reviewed and modified in the context of providing incentives to employers and adult workers that encourage and participate in continuing education. Small and medium-size businesses, where 75 percent of new job growth will occur, are especially affected because they do not have the infrastructure that big businesses have to develop and provide training programs for their employees. There is a need to give individuals and employers options for advancement and change in the workplace. A recent survey conducted by Household International in December 2003 and featured in USA Today, reveals that 62 percent of men and 82 percent of women value tuition reimbursement and skills training over other nonpay benefits offered by employers.

Question 4. Your discussion of nontraditional students is especially interesting. How significant of a barrier is the 50% rule in facilitating the needs of the developing workforce?

Answer 4. The perception is that the 50% rule is a barrier. The Education, Employment and Training Committee (EETC), the policy committee for the U.S. Chamber of Commerce, unanimously agrees that bricks and mortar is not the answer. There is no available money to build new educational facilities. The focus should be on meeting needs in a variety of innovative ways.

The 50% rule is an artificial barrier. Technology changes rapidly and through it learning can be brought to the people. Distance learning should be viewed as another education delivery system. Technology is pushing the learning curve and the rule is obsolete in an age where technology is such a large part of people's work and personal lives. If we require workers to use technology, how can we place limitations on learning? The 50% rule originally came about because of correspondence courses. Times have changed. In this new information age, the demanding high-tech global economy is creating newer and more innovative opportunities that require technological skills and knowledge. Our education delivery systems must keep pace if we are to remain competitive.

Question 5. As you mentioned in your testimony regarding nontraditional students, many working adults would prefer shorter, more modularized courses that would reduce the amount of time they would have to spend in a single course. I understand that the University of Phoenix is one of a few institutions of higher edu-

cation that is pursuing this route. Are you aware of any others, and what can you say about their success? Is this becoming a trend in higher education, or are institutions slow to accept changes of this nature?

Answer 5. Institutions of higher education are beginning to understand the roles they must play in responding to the economy and their local labor markets. For instance, NOVA Southeastern University's Center for Continuing and Professional Studies (CCPS) is an expanded presence built on the foundation of the Office of Continuing Education and NSUCommuniversity. Both early units are incorporated with a dynamic infrastructure of programs designed for enriching personal and professional development. The CCPS develops, implements and maintains quality assurance for non-credit, non-degree, continuing education opportunities; professional development courses, seminars, workshops and programs; certificate programs for professionals; and profession-specific provider status for license renewal and continuing education credits. The CCPS hallmark is independent and interdependent course and program availability. Each of the programs and courses is cross-marketed and packaged to meet the personal and professional needs of participants.

Proprietary schools such as Kaplan and Corinthian College are moving toward the idea of more accessible, modularized courses for working adults. Kaplan College Online enables students to earn an accredited college degree on their terms without job interruptions, travel expenses or hours spent searching the campus map. Students are able to study anytime, anywhere. Corinthian Colleges, Inc. is one of the largest postsecondary education companies in North America and serves the large and growing segment of the population seeking to acquire career-oriented education. The objective of the company is to fulfill the ever-growing educational needs of individuals seeking to obtain relevant, career-training skills in a number of marketable fields.

Question 6. A recent GAO report asserted that providing financial assistance to less than half-time students, who are currently ineligible for aid, would have uncertain impacts. Are you familiar with that report and could you comment on its conclusions?

Answer 6. Concerns about high default rates may be unfounded when it comes to adult workers because the GAO report is looking at students receiving a degree at the completion of their coursework, when the majority of adult workers do not necessarily require a degree to complete their studies and meet their intended goals as well as the needs of their employers. Working adult learners are in school to gain knowledge that will help them advance in the workplace. A degree is not necessarily the only desired end result. We need to find other ways to measure success or impact than just by number of degrees earned.

Institutions of higher learning are limiting access to a very large number of individuals who enroll in school for a specific purpose and have a context for their learning. Modifying financial support to nontraditional students is only part of the solution. We have to change the entire culture in terms of providing support to less than half-time students. Reforms must take the whole package into consideration. Financial and support needs are not the same for adult learners and traditional students. Relatively few student support services are available to adult workers in the evenings and on weekends. Nontraditional students need more convenient access to services such as career counselors and key librarians. Even something as simple as not having convenient parking office hours for students to get parking passes while on campus on the weekends or after hours are things that can easily discourage nontraditional students from pursuing higher education. When faced with these obstacles, from their perspective, the message is clear: adult learners—NOT wanted.

Finally, there are so many other areas of quality control in the law that the GAO's concern is a non-issue. A separate funding stream can be developed to provide financial aid for currently ineligible less-than-halftime students. The Secretary of Education recommends providing estimates for Pell. A more accurate estimate would result if it was jointly provided by the Secretary of Education and the Secretary of Labor.

Question 7. The issue you raise in adult learners being able to transfer credit is one that I believe is critical in the current discussion of reauthorization. The House has introduced legislation that would facilitate better transfer of credit between institutions of higher education. Are you familiar with that proposal and could you comment on the House approach?

Answer 7. Yes, I am familiar with the proposal and I believe that it is important to broaden traditional accrediting for nontraditional students by developing policies to promote the transfer of academic credits between institutions. Turning industry-recognized certificates into credits should also be allowed. This would be especially

helpful for military spouses who need to be able to transfer their credits to other institutions when their families are relocated by the military.

For courses not leading to a degree, but necessary to advance in the workplace and validated by an employer, a program should be designed to provide Federal student financial assistance through short-term, low interest loans; employer incentives and tax policies. In addition, a panel could be created to study how to structure a system that provides students who have successfully earned several recognized certificates the option of creating portfolios that are accepted as official records/transcripts of coursework and grades that can be used toward obtaining a degree, and make recommendations to the Secretary of Education. Because CWP has experience in convening various stakeholders to address challenges in education, the workforce and other related issues, the Center could be a potential organizer of this panel.

Question 8. You mention in your testimony that facilitating partnerships between 4-year institutions and other institutions of higher education in local communities could be beneficial for helping adult workers to receive advanced skill training. Can you expand on your recommendation as to how Congress could facilitate these types of partnerships between institutions for skills training?

Answer 8. There are barriers to collaboration between institutions of higher learning. We need to look at policies to facilitate collaboration between 4-year institutions and other postsecondary institutions. Much of this must be done at the State level because of the role of States in licensing institutions of higher education. One option would be to have waiver authority at the State level for institutions of higher learning that want to collaborate. National accrediting agencies need to be part of this discussion so that appropriate accreditation measures are used.

If there is a duplication of services, which institution receives credit for the student? This is important to determine because public institutions receive some of their State financial support based on Full Time Equivalency (FTE).

Another recommendation is to form a national blue-ribbon panel to discuss the issue. A variety of stakeholders could be convened to look at barriers and make recommendations for two States to demonstrate this. CWP could convene this panel with businesses and accrediting and licensure bodies representing institutions included on the panel.

PREPARED STATEMENT OF DIANA G. OBLINGER

Mr. Chairman and Members of the Committee: My name is Diana Oblinger and I am the Executive Director of Higher Education for the Microsoft Corporation. I want to thank you for the opportunity to appear today to provide a perspective on how higher education is preparing the workforce. I have spent my career either in higher education or working with it, so I believe I have a perspective on American colleges and universities, both from the "inside" as well as the "outside."

Higher education has helped shape the socio-economic structure of American society. Higher education is critical in preparing the workforce for today, but especially for tomorrow. However, before I talk about how we are doing, let me say a few words about what we should be doing. I believe there are three things that citizens, employers, parents and students are asking of higher education. Those are to: Develop a skilled workforce; Provide social mobility; and Encourage an active and engaged citizenry.

Skilled workforce. The competent, creative and continuously learning individuals created by U.S. higher education have redefined what a "skilled workforce" means. College is almost a pre-requisite in today's workplace. And, according to the Association of American Colleges and Universities (AAC&U) report, Greater Expectations, future jobs and careers will require higher levels of education than in the past. That education must enable individuals to be able to discover what one needs to know rather than just having static knowledge. AAC&U and many others have concluded that the type of employees needed in a knowledge-based economy are college educated people with mental agility and adaptability.

Social mobility. For a country founded on the principles of equity, the opportunity to better oneself is a deeply held belief. As society has changed, that opportunity increasingly depends on access to quality education. Study after study has shown a strong correlation between education level and economic success. A post-secondary education enables people to interact with others from outside their sphere of childhood experience and to reposition themselves, sometimes recreate themselves, intellectually, socially, politically and economically. The United States has used higher education to encourage social mobility. For example, the first college to admit women as well as men was Oberlin College (1830). In 1847, the City College of New York was established to serve students from low-income families. The Land Grant

Act (1862) provided for the education of the sons and daughters of the working class. In the mid-1800s, the first historically black colleges were created. The GI bill transformed access to higher education after World War II. And in the late 1960s we took another major step with the expansion of the community college movement.

Active, informed and engaged citizens. Society also needs active, informed and engaged educated citizens. According to Jefferson, a democracy's success flows directly from the thoughtful participation of an informed and enlightened citizenry. Unless citizens are sufficiently educated, self-government is not possible. As a result, he felt it was imperative that the Nation ensure that suitable education be provided for all of its citizens.

We expect that, in the process of their education, students will acquire the information and attitudes necessary to become good citizens and uphold a strong democracy. We have also learned that those who are well-educated participate more in their communities and vote more often. More importantly, an education grounded in civic responsibility helps citizens evaluate issues, making them better able—perhaps even more willing—to contribute to improving society.

To a great degree, personal and professional success depends on an excellent education. And social well-being is tied to a well-educated populace. Although the benefits of higher education accrue to individuals, higher education ultimately is not a private good—it is a social, cultural and economic imperative for the nation as a whole. If education is an imperative, then we have the responsibility to not just ask how strong our educational system is, but to explore what we might do to make it even stronger.

HOW ARE WE DOING?

We are fond of saying that American higher education is the envy of the rest of the world. The United States has been—and remains—first in the developed world in terms of the percentage of its population with an undergraduate or graduate degree. But, will that—and what it promises—continue?

Access to post-secondary education is a good predictor of future achievement. Although the United States once sent the highest percentage of high school graduates to college, other countries have surpassed us in the past decade. In 2001 the United States ranked 13th out of 26 Organization for Economic Cooperation and Development (OECD) countries for entry rates into 4-year institutions; for 2-year enrollments we ranked 10th out of 26 developed countries. The point is not that the United States is doing poorly but that other countries are doing better and better.

Unfortunately, significant numbers of high achieving, low-income students are not going to college. The highest achieving low-income students attend college at the same rate (78 percent) as low achieving high-income students (77 percent), according to the Education Trust. Looking only at students in the highest quartile in standardized tests, those from the most affluent families are more than twice as likely to go to college compared to those form the poorest families. When the Educational Testing Service compared college-going rates among high school students from high vs. low income families, they found rates of 80 percent vs. 44 percent for 4-year attendance and 14 percent vs. 23 percent for 2-year attendance.

The number of students who attend college is linked, in part, to the affordability of education. This is particularly true for low income and minority students. A recent study estimated that for every $1,000 increase in tuition at a public institution, there was a corresponding decrease in enrollment of 4.4 percent for high-income students and 7.2 percent for low-income students. The National Center for Public Policy and Higher Education estimates that a quarter of a million prospective students were unable to attend college due to rising tuition or cuts in admissions and course offerings last fall.

Of course, getting students into college is only one part of the challenge. Equally important is the capacity of post-secondary institutions to retain students and ensure that they successfully complete a degree—or whatever their individual goal might be—in reasonable time. Unfortunately, gains in college completion have not kept pace with gains in enrollment. What is unclear is the degree to which this represents the current enrollment and goal patterns of students. As more lifelong learners have entered the educational system, their goal is not necessarily to complete a degree, but to acquire the courses or skills needed for a new job or a promotion. The challenge of understanding completion rates has been exacerbated by students attending multiple institutions—sometimes simultaneously.

However, it is important that we not just focus on where we might improve. We should also acknowledge the world-class education that so many of our college and university students receive. The last decade has seen increased attention being paid to effective learning environments, such as problem-based learning or undergradu-

ate research, and to student services as well as a range of other programs that are designed to improve education. Our colleges and universities—and all the individuals who work in them—continue to be major contributors to so much that is good in our society.

WHAT HAS CHANGED?

In the last decade, the United States society has changed enormously with the proliferation of new technologies, the intensification of globalization and shifting demographics resulting in more students seeking a postsecondary education. To keep up with these changes, society's demands on higher education have changed to include lifelong learning; the assurance that students are gaining more sophisticated skills; a curriculum that encourages cultural sensitivity and global awareness; as well as access and real academic attainment for a larger share of the population.

Who are our students?

The undergraduate population has changed dramatically in the past decade. What was once considered the "traditional" student—some one who enrolls in college immediately after high school, lives on campus, studies full-time and depends on parents for financial support—is now the exception, not the rule; in 1999–2000, just 27 percent of undergraduates met these criteria.

In contrast, the NCES found that nearly three-quarters of undergraduate students had one or more of the following "non-traditional" characteristics: Delayed enrollment between graduation from high school and entry into college; Part-time college attendance for at least part of the academic year; Full-time employment while enrolled; Financial independence from parents; Children or other dependents (other than spouse); Single parenting responsibilities; and High school completion through a GED or other alternative means.

The student population is also much more diverse than it once was. For example, 39 percent of all postsecondary students were 25 years or older in 1999 compared with 28 percent in 1970. Women now represent 56 percent of the student population versus 42 percent in 1970, and one-third of currently enrolled college students define themselves as non-white. Nine percent of undergraduates have a disability, and for the first time, a significant number of students speak a language other than English at home.

This diverse student population brings to college a set of life experiences quite different from those of most administrators, staff and faculty at colleges and universities. Plus, the experiences and expectations adult learners have may be significantly different than those of younger students.

The "Net Generation," students born in or after 1982, have never known life without the Internet. IT is integral in their work, communication, entertainment and education. Most say they could not function without the Internet—it is as essential to them as oxygen. From their earliest years, they learned to sort through and manage vast amounts of information. Rather than viewing computers as machines for analysis and data processing, they view technology as a natural extension of their lives: for work, entertainment and learning. They also bring with them a new set of skills and expectations due to this comfort with technology.

The patterns can be seen emerging among teens. Much of what they want from the Net relates to learning—either formal or informal learning. For example, 100 percent of teenagers report they search for information about college, careers and jobs online. Seventy-eight percent say that they use the Internet as an aid to learning. Students conduct research on the Internet to help them write papers and complete class assignments; they correspond with teachers and classmates about school projects; they also participate in online study groups and take online classes.

Perhaps the most striking difference with prior generations is their comfort with the Internet as a communication channel; teens use the Net for communication and community. Sixty percent of teens say they use the Internet as their primary tool for communication. Fifty-six percent indicate they prefer e-mail or instant messaging to the telephone when communicating with friends and relatives. Although it may seem surprising on the surface, consider that the Internet is a technology most teens simply assume is available in much the same way that Baby Boomers always assumed there would be a telephone in the house.

How Do Students Learn?

Learning for the Net generation, and, perhaps, for many generations to come, is not synonymous with school. The accessibility of the Internet has created a pervasive learning environment in which young people have anytime anywhere access to learning material in a variety of formats. They often fashion their own "curriculum" based on their ability to assemble accessible material.

Service expectations are high for this generation. Having grown up in a customer-service environment, they expect services that are tailored to their needs. They look for choice, immediacy and customization. These expectations apply to recruitment and admissions, food service and housing options as well as on- and off-campus interactions.

NetGen students favor different learning styles. For example, their learning preferences tend toward teamwork, experiential activities, the use of technology and engagement. This generation learns by doing. Having grown up in the age of multimedia, they want to engage all their senses. Their strengths include multitasking, a goal orientation, a positive attitude and a collaborative style. They are also very community-oriented and are socially conscious. Students believe that science and technology can be used to make the world a better place; they want what they do to make a difference.

The contrast between student and faculty teaching/learning preferences may be significant. To many of us, students communicate in a language we don't completely understand; we are not facile with instant messaging and text messaging. Nor are we as comfortable with their interactive approach to learning or their use of complex montages of images, sound and communication. Many students are pushing learning into new dimensions.

WHAT MUST WE DO?

In light of the changes in technology, the economy, and the student population, colleges and universities must continue to adapt to better serve the needs of their students and the community at large. In order to adapt, colleges and universities must ask a series of difficult questions. A colleague of mine from Brown University, Frank Newman, says that we should ask:

Can we out think the rest of the world?

Do we make it possible for students to succeed?

Will our students get all A's and still flunk life?

Can We Out Think the Rest of the World?

Employers look for workers who can adapt their skills and knowledge to a quickly changing array of situations. It is no longer sufficient to bring to a job a static set of technical aptitudes or knowledge; instead employees must continuously develop new skills, competencies and approaches as companies take advantage of new opportunities and new technologies. In short, employees must learn how to learn, how to assess what they need to know, and how to obtain and apply those new skills.

Being able to "out think the world" may be the most important competitive advantage. To do that will require that we consider what makes individuals successful—in the short and long term—which is a complex task.

Successful intelligence. The goal of education is more than just knowing things. Facts matter; but facts are not sufficient. Learners must be able to solve problems, transfer learning from one situation to another and "learn to learn." Education must also prepare learners socially, not just intellectually. The concept of successful intelligence illustrates the desired outcomes of education. Coined by Robert Sternberg, "successful intelligence" encompasses analytical intelligence, creative intelligence and practical intelligence. Analytical intelligence—knowing facts, answering questions and solving problems—has always been a strength of U.S. education. But with innovation and discovery driving much of the economy, creative intelligence is required as well. Creative intelligence means individuals can conceptualize new products, design experiments to test theories and resolve social conflicts. Practical intelligence, the ability to get things done and to get along with others, is critical as well. All three are important to individuals and organizations.

Beyond successful intelligence, there are certain skills that graduates need. Companies like Microsoft are defining the competencies their employees need, how they can assess their level of competence as well as how they can improve. Let me mention a few.

Communication and interpersonal skills. Communication skills are often cited as an essential skill. However, the communication skills needed 25 years ago are not sufficient for today's environment. In addition to writing, speaking and listening, today's list might include negotiation skills, being able to provide feedback, give encouragement, delegate responsibility and share recognition.

Strategic perspective. Taking a strategic perspective involves seeing the "big picture," understanding the underlying forces that influence the system. It also involves the ability to sense change, to identify opportunities for future development, to define future direction and to manage the process of change.

Creativity. In an increasingly complex world, individuals need the ability to see patterns, find new alternatives and create viable solutions to problems. Creativity

has become an important skill. Creativity allows individuals to define and redefine problems in different ways. Being creative is more than having ideas. It also implies being able to analyze and evaluate ideas, make a decision and translate that idea into a practical accomplishment.

Results-oriented. Whether in college, at work or in personal life, achieving results is important. Being results-oriented involves developing and implementing plans as well as achieving positive, concrete results. To achieve results, one must be able to make decisions, work as a member of a team, communicate and problem-solve.

Intentional learners. Beyond a list of specific skills, attitude is important. The Association of American Colleges and Universities (AAC&U) has concluded that students should be intentional learners "who can adapt to new environments, integrate knowledge from different sources and continue learning throughout their lives." They advocate that learners be: "Empowered through the mastery of intellectual and practical skills; Informed by knowledge about the natural and social worlds and about forms of inquiry basic to these studies; and Responsible for their personal actions and for civic values."

More specific skills are described, such as communicating, interpreting and evaluating information from a variety of sources, being able to use quantitative and qualitative analysis to solve problems and demonstrating the ability to deal with change. Beyond intellectual skills, they also advocate that students develop a deep understanding of global and cross-cultural communities, natural, social and technical worlds and the history and values underlying U.S. democracy.

But that learning is not just theoretical. They suggest that the greatest impact will occur when students apply their skills to the world's significant problems.

Also recognized is the importance of social responsibility and ethical judgment. Intellectual honesty, taking responsibility and being an active citizen who understands the consequences of ones actions and decisions are cited as examples.

Do We Make It Possible to Succeed?

Admission to college is only the first step to student success. A great deal else will be required for students to graduate.

According to the National Center for Educational Statistics (NCES), our success in graduating students is uneven, at best. Only 7 percent of low-income students who begin college immediately after high school graduate by the time they are 24 years old. In fact, 29 percent of African Americans and 31 percent of Hispanics leave college before completing their first year. It is unclear how many return and the number who reach their ultimate educational objective.

NCES has identified several risk factors associated with students not completing their degrees. These include part-time enrollment, having children, delaying college enrollment after high-school and working full-time during college. The more risk factors a student has, the less likely he or she is to complete the first year in college or to graduate. While early outreach programs, grants and learning support communities have proven to be effective in helping at-risk students successfully complete a degree, the implementation of these programs is uneven. When students are asked to explain why they have left school, they cite bureaucratic hurdles related to financial aid, poor counseling regarding academic choices and inability to manage conflicting demands.

Unfortunately, there are a number of problems that some students encounter: incorrect advice, financial difficulties, inadequate college preparation, poor study skills, and so on.

We know that there are a number of programs that help ensure students success: early outreach, academic support, retention, remediation, and early warning programs, to name a few. These programs have proven to increase graduation rates for first-generation students as well as low income or minority students.

One of the most important pre-requisites to college success is adequate high school preparation. Large numbers of students enter college unprepared. Nearly half of all college students need some form of remediation. This is symptomatic of inadequate high school preparation and oftentimes, of weak expectations of what these students can achieve. Recently, we have come to embrace the understanding that all students can learn. Those who need remedial assistance are not incapable; too often, it is that we haven't helped them find the path to successful learning.

One of the best ways of ensuring that students succeed is to remove the barriers to their success. For many, the greatest barrier is the fixed time schedule of a traditional course. Programs designed for adult learners or distance education programs, such as those at Rio Salado College in Phoenix Arizona, remove many of the barriers to education for adults.

For others, the barrier may be not recognizing prior learning. For an individual who has retired from the military or another profession, completing an entire 4-year

curriculum to be able to teach in K–12 schools presents a formidable barrier. Western Governors University (WGU) has designed programs to remove such barriers. WGU is nation's first competency-based, fully accredited online higher education institution. It was designed to meet the needs of non-traditional students whose jobs and family obligations prevent them from attending daily college courses or relocating to earn a new degree.

Making students successful means we must have a range of programs and options available. Students have their own unique backgrounds, aspirations and difficulties. It would be a disservice to treat all of them the same.

Although I've spoken about student success, that is not necessarily synonymous with graduation for all students, particularly in an era of lifelong learning. Some students come to college—or return there—to acquire specific skills or courses. Graduation is not their goal. This may be increasingly true in the future as individuals stay in the workforce longer and workers seek alternative careers that provide them with increased earning power and personal flexibility.

Will Our Students Get All A's and Still Flunk Life?

College is not just about preparing for a job, it is also about preparing for life. But, being an engaged and enlightened global citizen requires much more than simply reading and writing. Global awareness and cultural sensitivity are increasingly important in our world.

The rationale goes beyond a desire for everyone to "get along." The way we view situations and solve problems is based on our cultural perspective; what we see depends on what we have learned to look for. Our cultural perspective can constrain or enlighten. For example, someone from a western culture tends to think of medical remedies from a pharmacological point of view. Someone from Asia might consider a different set of remedies, such as acupuncture, herbal treatments, and so on. Most disciplines are situated in socially constructed contexts. If we only know and understand a single cultural perspective, our ability to interact globally is impaired, whether that be the ability to develop worldwide products, solve public health crises or find peaceful resolution to conflicts.

Scientific and technical literacy is also important to do well in life. Without an understanding of science and technology, how can individuals make reliable decisions about complex issues such as global warming or the safety of genetically engineered food? Just teaching science is not enough; students must be able to apply it to their lives, use the principles to reason with and be comfortable finding new, reliable sources of information.

Education is linked to being an active, informed and engaged citizen. Our democracy depends on civic participation. This goes well beyond voting; it is about being involved in the community and about having the ethics and the will to do the right thing.

It is important to remember that although a large part of the higher education experience is about the workplace, the workplace exists in a much larger context—it exists in the context of communities striving to improve the quality of life for all citizens. The workplace exists in the context of an increasingly diverse culture. And, the workplace exists in a world that cannot turn back the clock on globalization. Education helps people enlarge their perspective rather than narrow it.

CONCLUSION

What we have been talking about are expectations. Great expectations are a hallmark of our times. Putting a man on the moon was a great expectation that shaped an earlier generation. Erasing inequities, curing cancer and preserving our environment are emblematic of the great expectations that drive society today.

Change is also a hallmark of our times. Many of the changes that define our times—such as globalization—have been catalyzed by information technology (IT). Technology has stimulated the economy and improved lives by enabling breakthroughs in existing industries as well as the creation of new industries. It has changed where, how, what and when we learn. And it has led to a new type of worker whose value hinges on education, creativity and the use of IT.

In the United States, we have great—and greater—expectations of higher education. Higher education is a critical element in how we fare—as individuals and as a society. We all share the responsibility to be certain that higher education can help us actively compete with the rest of the world, ensure student success and be prepared for a life of active citizenship. A strong higher education system is critical if we are to be prepared for the future.

RESPONSE TO QUESTIONS OF THE HELP COMMITTEE FROM DIANA OBLINGER

Question 1. Testimony from the other witnesses has identified how important partnerships between businesses and institutions of higher education are for preparing the workforce with necessary skills. Can you comment in more detail on partnerships that Microsoft has created with institutions of higher education and the success of those partnerships?

Answer 1. Microsoft works with higher education institutions to help them prepare students for the global workforce. This includes traditional students as well as displaced workers. Several examples are included below.

Microsoft IT Academy. The Microsoft IT Academy is a worldwide membership alliance with accredited academic institution that choose to participate. The program helps schools and colleges prepare students with computer skills required for jobs in the 21st Century. These skills range from basic desktop skills required for all citizens and workers today to people working in IT careers such as help desk support, developers, programmers and network administrators. The program offers roadmaps to careers, industry certifications, discounted lab licensing, courseware and certification exams, as well as faculty training. Technical information and information about new technology and technology that is under development is also provided so instructors can incorporate the latest information into the curriculum. The Microsoft IT Academy was launched in November 2002; there are currently 1,600 member institutions, worldwide. For more information about Microsoft IT Academies visit: http://www.microsoft.com/education/msitacademy/default.asp?ID=ITApHome.

Future Professors Pilot: Future Professors is an incubator project to help prepare future professors to teach effectively in the 21st Century. The project involves graduate students and their mentor professors who develop innovative and effective instructional models using technology in their disciplines. Throughout the academic year, project outcomes are documented and reviewed. At the end of the pilot in June 2004, the scholars and professors will publish one or more journal articles that describe their experiences with integrating technology in the classroom so that others can learn from their experience. Microsoft hopes through this project and others to inspire, support and demonstrate to professors and future professors how to use technology to support learning outcomes. For more information, visit http://www.microsoft.com/education/?ID=FutureProfessors.

Model Professional Development. To successfully educate students for the 21st Century, it is vital that educators have access to professional development and be able to effectively integrate technology into the curriculum. To achieve this end, Microsoft has established the Model Professional Development program. This showcases programs that illustrate exemplary professional development along with the implementation of technology as a teaching tool. The program is for both higher education and K–12 professionals. For more information visit: http://www.microsoft.com/education/?ID=ModelPD.

Partners in Developer Learning. Through Partners in Developer Learning, Microsoft is fostering the growth of the IT workforce worldwide by offering resources to students and faculty in higher education to develop their technical expertise. In its first year, the pilot program provided software, training, curriculum content, grants and scholarships to students and faculty in several countries around the world. There are multiple components to the program. For example, the MSDN Academic Alliance (MSDN AA) makes it easier and more affordable for academic labs, faculty and students in Computer Science, Engineering and Information Systems to get Microsoft developer tools, platforms and servers for instructional and research purposes. A Curriculum Repository, which contains actual course content that has been used in the classrooms, is provided as a teaching resource for faculty. Faculty development is conducted throughout the year to keep interested faculty abreast of upcoming technology innovations. Other program components include a student programming competition and an online community.

Thurgood Marshall Scholarship Fund Technology Initiative. Through the Thurgood Marshall Scholarship Fund (TMSF) 45 member Historically Black Colleges and Universities (HBCUs) are receiving a $15 million software grant to support the Thurgood Marshall Scholarship Fund Technology Initiative. The initiative will upgrade technology at public HBCUs to ensure these students are provided with a continuum of learning bolstered by technology, giving graduates the skills needed to succeed in today's workplace. In addition to software for the TMSF, Microsoft will provide technical assistance in the development of the technology initiative. The goal is to enable the schools to upgrade their computers, increase efficiencies and help the TMSF expand technology training programs offered to students. The hope is that Microsoft's donation and technology expertise will be a catalyst to se-

curing additional funding from other corporations that are committed to ensuring improved technology programs in public HBCUs.

United Negro College Fund. Microsoft has contributed nearly $100 million in cash and software to support the United Negro College Fund's (UNCF's) efforts to strengthen technology access and infrastructure at member colleges and universities. In one phase of the program, Microsoft provided software and computers to the TRIO Upward Bound program at Xavier University and five New Orleans public schools. The programs helps Americans overcome class, social and cultural barriers to higher education by providing the academic strength, skills and motivation necessary for post-secondary education success. Other programs have been focused on providing technology enrichment for faculty, administration and students. Other efforts have helped campuses implement wireless networks and upgrade software in computer science labs.

Cybersecurity partnership with EDUCAUSE/Internet2 Security Task Force. Computer and network security has become a critically important issue. Virtually everyone in education (K–12 and higher education) as well as the workforce must be aware of good security practices and adopt them. IT personnel, whether help desk workers, programmers or technical architects, must understand security. Microsoft has been working closely with the EDUCAUSE/Internet2 Security Task Force to foster practical solutions and strategies for enhancing cyber security in campus environments. Activities, to date, have ranged from a significant end-user awareness campaign to technical modifications. What was initially a collaboration involving only Microsoft has expanded to include a number of other companies, recognizing that it will take broad cooperation to ensure a secure campus environment.

Question 2. Microsoft is an excellent example of the changing workforce. Many of the jobs within your company were nonexistent 10 years ago. How has Microsoft helped prospective employees and its current employees maintain adequate skills for success in the workforce?

Answer 2. Microsoft has defined the competencies they seek in employees. These competencies can be used as a guide in recruitment and hiring, in professional development and in evaluation. For example, competencies include categories such as individual excellence, being result-oriented, teamwork and long-term approach. Within the category of individual excellence, specific attributes include items such as being action-oriented, having creativity, and the ability to deal with ambiguity. Being results-oriented is considered very important in business. Specific attributes might include decision-making, a drive for result and problem-solving skills. Teamwork has become important in all walks of life. Skills that foster teamwork are ones like communication skills, interpersonal skills, negotiation and conflict management as well as the ability to foster diversity.

Employees are also provided with clear examples of the competency, questions they may ask themselves to monitor their own development as well as suggested activities that can be used to learn on the job. For example, if an employee wanted to monitor their own decision-making skill, a set of questions might be asked:

How much time do I have to make this decision?

What are the consequences of a bad decision?

Have I failed to consider any important tradeoffs?

Who am I neglecting to involve in the decision?

To encourage self-development, "coaching" is provided. For decision-making, reminders might include:

Before making a decision, ask "What is the big picture?"

Force yourself to make decisions within a specified time period even when all data may not be available.

Manage risk; be sure you understand the implications of your decision.

Career and professional development is an ongoing process at Microsoft. Emphasis is placed on aligning individual development plans with Microsoft's business plan. The philosophy is that developing one's career requires the person to view their development as a path rather than a point in time or a job. An annual process that reinforces this is the mid-year review. One of the main purposes of Microsoft's mid-year review process is for managers and employees to discuss career goals, professional development opportunities and to track progress on the individual's development plan.

To help guide employees in their careers, job matrices are defined. These allow employees to see job descriptions for various categories of positions (e.g., development, sales). They are designed to make it easy for individuals to see how responsibilities and requirements change from one position to the next, enabling individuals to establish career plans. A number of tools are provided, as well, for areas such as self-analysis or skills gap analysis.

To facilitate individual development, training opportunities are available through the company, many being online. Tuition assistance programs make it possible for employees to pursue education outside Microsoft at accredited colleges and universities. Mentor programs exist, as well. Some focus on career mentoring (typically helping someone prepare for advancement) and others on peer mentoring (sharing knowledge with a peer such as a new employee).

Question 3. You co-authored a book entitled What Business Wants from Higher Education, which I find to be a fascinating subject. Based on your previous research on the subject and the views you've expressed in that book, what role can Congress play in matching the needs of businesses with institutions of higher education?

Answer 3. I have three suggestions based on recent work with higher education.

The first is to sponsor an effort to define the competencies needed for the 21st Century. This could build on existing work in higher education and the business community. The effort should also look at any gaps that exist between current competencies and what is needed. The risk to individuals and the economy of not closing these gaps should also be explored.

The second is to assemble a national database of effective practices. A great deal has been learned about how to improve education through the use of information technology, but there is no single, trusted repository that supports faculty who are working to improve the quality of student learning.

The third is the creation of a competitive grant fund. One of the most important stimuli behind the creation of America's great research and development enterprise was the establishment of a competitive grants process. Through the National Science Foundation, the National Institutes of Health and other organizations, competitively awarded research grants provide scientists with the funds and the competitive environment that has been the foundation of much of our innovation and competitive advantage. There is no comparable program focused on the science of learning or of the application of learning science and technology to college and university instruction. If we are to continue to have the world's greatest system of higher education, we must invest in both basic and applied research.

Question 4. In 2000 you wrote an article for the EDUCAUSE Review regarding distance learning and its potential to spur a transition within the field of higher education. Do you still see distance learning as a major catalyst for change in higher education, and can it help shift the focus of higher education more directly to workforce development?

Answer 4. First, it may be helpful to define workforce development. To me, workforce development is not about preparing for a single job, it is about developing—and redeveloping—one's capabilities throughout an entire lifetime. As such, workforce development might be considered as synonymous with lifelong learning.

Distance education (originally through correspondence courses) was designed to make lifelong learning accessible to those who could not enroll at a campus full time. As technologies changed, we moved into an era where distance education or distance learning was delivered via the Internet rather than a course pack sent through the mail. Today, we use the term e-learning to refer to Internet-based distance learning.

In the early days of e-learning, much of the focus was on the technology or the "e" part of e-learning. That was perhaps appropriate given our understanding of the technology at the time. In the past decade we have learned a great deal. Today, I would define e-learning as the use of information technology to facilitate learning. Such a definition focuses on the potential of e-learning to bring quality education to individuals wherever they are physically and at whatever point in their learning they happen to be, thereby making it possible for every member of society to acquire the intellectual skills and expertise needed to become a productive member of a knowledge-based economy.

E-learning can enable those in higher education to prepare individuals to become more productive members of the knowledge economy. Technology has the potential to enhance learning processes and to extend learning to those who might not otherwise have the opportunity. It can facilitate critical parts of the learning experience—such as dynamic representations of complex ideas, peer interaction, feedback, and access to resources—and scale the experience to an ever-broadening audience of learners.

Two examples may illustrate the point. One deals with what are called multimodal interfaces for interacting with computing devices. Basically, these interfaces allow the extension of sensory capability, allowing an individual to "feel," hear, smell or see. For example, students can practice angioplasty using a simulated patient. As the catheter is inserted, the student "feels" the resistance at different

points. Simultaneously a visual display shows the progress of the catheter as it moves toward the heart. When the catheter enters the heart, the "pull" of the heart beat can be felt. Such uses of technology in the learning process are vital to many disciplines.

Simulating laboratory experiences provides another example. Specially designed software enables students to conduct virtual chemistry and biochemistry experiments. Data are generated as students manipulate the virtual laboratory equipment: increasing the temperature on the hot plate, slowing down the stirring motor, or adding more of a chemical substance produces a unique set of results. Another student using a different temperature or a different chemical concentration will generate different data. The lab experience is equally available to students on—or off—campus.

Perhaps more important, IT provides tools that challenge us to rethink the delivery of education, making it more relevant to all generations of learners. E-learning can help us make education richer, more accessible, and more convenient. IT has provided us with the richest array of learning tools in our history.

Question 5. As the only employer directly represented on this panel, is the current approach to higher education sufficient to prepare the modern workforce with the necessary skills? Looking to the future, how important will higher education be in ensuring that your employees have a chance to expand their skills to meet the needs of the changing workforce?

Answer 5. Higher education is critical in preparing the workforce for today—and tomorrow. Students, parents and employers look to our colleges and universities to prepare them for life—not just for their first job but for a career path that may develop into disciplines that weren't even known at the time they began college.

Although American higher education has been the envy of the world, there is more we can—and should—do. Many of those recommendations are pointed out in reports that have come from higher education, such as the Greater Expectations report, so there is a fairly widespread recognition that more can be done.

Part of that emerging agenda deals with how we define what it means to be educated. Employers are asking that students be better prepared, not just in the skills that are "easily" taught (science, mathematics, history) but in the skills and competencies that are needed in the workplace: negotiation skills, an appreciation of diversity, the ability to foster cross-group collaboration, and so on. This does not imply that colleges should add a course in each skill area. It implies that the development of such skills must be woven into the curriculum or integrated through co-curricular activities. In fact, out-of-class activities may be the most important venue for the development of these complex competencies.

There appears to be a growing trend of employers wanting to know that prospective employees can apply what they've learned to real-life situations. Some colleges are experimenting with experiential learning tied to industry certifications; students graduate with a degree as well as an industry certification. Although not appropriate in all disciplines, we applaud this type of experimentation from the higher education community.

Higher education is important in that it provides us with our understanding of how people learn, what motivates one person but discourages another and how to apply theory to practice. There is a great deal more we need to know if we are to remain competitive as a workforce. For example, what is the best way to ensure that a skill just learned will be applied correctly to another problem, in a different setting? How do we measure complex competencies? What learning approaches are best for older workers vs. those that work well for recent high school graduates?

There are other areas worth considering, as well. For example, business would like to see better integration of technology skills for the workforce into degree programs. There is also a definite need to increase math and science skills. And, we still need to do a better job recruiting and retaining women and minorities in fields such as science, technology and engineering.

We must not forget the importance of ensuring that students with disabilities receive an education. We hope that colleges will support the development of computer skills for persons with disabilities. Microsoft is interested in employing diverse populations, including persons with disabilities.

Although higher education is about more than preparing students for a job, some highly effective programs have been created when higher education institutions work closely with industries to ensure that their degrees, certificates and programs link with career paths. Community and technical college are typically very effective in these collaborations at the local level.

PREPARED STATEMENT OF ELLEN O'BRIEN SAUNDERS

Mr. Chairman and Members of the Committee: On behalf of the State of Washington, I would like to thank you for inviting me to discuss the connections among higher education, workforce development and economic vitality. I serve as the Executive Director of the Workforce Training and Education Coordinating Board, Washington State's Workforce Investment Board and its State Board for Vocational Education. The Board is responsible for analyzing the State's workforce needs, and developing strategies to meet them, including creating a workforce development system that benefits workers, students, and employers as well as our economy as a whole.

I am especially pleased to appear before the Health, Education, Labor, and Pensions Committee since this offers me an opportunity to extend our appreciation to you for the fine work you did on S. 1627, reauthorization of the Workforce Investment Act (WIA). The Workforce Investment Act has provided a critical framework for Washington State's workforce development system. Indeed, you will hear in my testimony of important ways that State and local leaders have used WIA to create a more demand-driven, responsive, and comprehensive system of services and investments. The improvements you made in the current law are exactly that, improvements, and we look forward to putting them into action.

At some point soon, you will also be taking up reauthorization of the Carl D. Perkins Vocational and Technical Education Act. There is no way to overemphasize the importance of career and technical skills education to our nation's future. Making sure that the Federal investment drives excellence in career and technical education is our overarching goal for the reauthorization discussion, and we'll be prepared to discuss Washington State's perspectives when the time is right.

For clarity in today's discussion, I should note that the phrase "workforce development" throughout my presentation includes all education and training aimed at employment or employability. The State's workforce development system therefore, encompasses institutions and organizations that: (1) deliver education and/or training; (2) provide support services to help people enter and advance in the labor market and succeed in school; and (3) provide funding for education or training. (See Appendix A for a list of programs included.)

THE CONTEXT: WASHINGTON STATE

In 1991, Governor Booth Gardner and the Washington State Legislature formed the Workforce Training and Education Coordinating Board (Workforce Board). The Board's membership enables it to develop policy and program innovations that respond to the needs of customers. Three of our members represent business' interests, three represent labor's, and three are the heads of the State agencies with major responsibility for workforce development programs—our Employment Security Commissioner, the Executive Director of the State Board for Community and Technical Colleges, and the elected Superintendent of Public Instruction. Current representation from business includes Don Brunell, President of the Association of Washington Business and current representation from labor includes Rick Bender, President of the Washington State Labor Council, AFL-CIO. This membership brings the interests of customers and providers to the table as decisions are made, and is echoed throughout the State in other venues.

Every 2 years the Workforce Board develops *High Skills, High Wages: Washington's Comprehensive Plan for Workforce Development*. This plan communicates our shared vision:

A workforce development system that offers every Washingtonian access to high quality academic and occupational skills education throughout his or her lifetime, effective help to find work or training when unemployed, and the personalized assistance to make progress in the labor market.

The Workforce Board ensures that workforce and economic development linkages are a major focus of *High Skills, High Wages*. To frame our plan, we begin with analyses of our economy and our labor force. We rely on a number of data resources for our data—among them our State's excellent Labor Market and Economic Analysis branch (the Bureau of Labor Statistics' local partner), and the Census Bureau. We also conduct our own scientific survey of employer needs and practices which, with the assistance of the Association of Washington Business, is sent out to nearly 12,000 employers in the State making it the most comprehensive in the State.

In 1999, Governor Gary Locke issued Executive Order 99-02 to implement the Workforce Investment Act. In it, he charged the workforce development system with the following goals:

- To close the gap between the need of employers for skilled workers and the supply of Washington residents prepared to meet the need.

• To enable workers to make smooth transitions so that they and their employers may fully benefit from the new, changing economy by putting in place a coherent strategy for dislocated and incumbent worker training.

• To assist disadvantaged youth, persons with disabilities, new labor market entrants, recent immigrants, and other low-wage workers to move up the job ladder during their lifetimes by developing a wage progression strategy for low-income workers. Specific progress will be made in improving operating agencies and reducing the earnings gap facing people of color, people with disabilities, and women.

In 2000, as we developed our plan, we added a fourth goal:

• To integrate workforce development programs to improve customer service.

To accomplish these goals, *High Skills, High Wages* includes an Action Agenda, which give each of the State level partners lead responsibility for specific strategies to ensure both progress and accountability.

At the local level, Washington State has 12 local area Workforce Development Councils (WDCs) that serve as the local Workforce Investment Boards. Each Council, in consultation with chief local elected officials, oversees WIA Title I-B activities, including One Stop Centers, coordinates local area workforce development services, and provides outreach to employers. Governor Gary Locke has required all WDCs to include at least two postsecondary and two secondary education representatives to tighten the connections between education and WIA functions. The Councils use their leadership to ensure a link with local economic development strategies. Each Council has a Governor-approved local Unified Plan that includes an assessment of local employment opportunities and skill needs, and sets forth goals, objectives, and strategies for the local workforce development system consistent with *High Skills, High Wages*. The strategic role of local Workforce Development Councils makes them the counterpart to the State Workforce Board at the local level, building on what is required by WIA. Given this new responsibility, we have formed an entirely new state-to-local and local-to-state set of relationships.

The employer community recognizes the critical importance of providing postsecondary training. Governor Locke's Competitiveness Council, consisting of some of the top business leaders in our State, recently concluded that human capital is the key to economic competitiveness. The Workforce Board's own 2003 survey of employers, conducted with the assistance of the Washington Association of Business, shows that employers are having difficulty finding qualified workers with postsecondary education and training even during slow economic times. Forty-five percent of employers who attempted to hire someone in the previous 12 months reported difficulty finding qualified job applicants. While there were shortages at all postsecondary levels, the largest number of employers reported difficulty finding job applicants with a vocational certificate or associate degree. The type of skills that employers had the greatest trouble finding were job specific skills; for example, they wanted to hire a registered nurse or a carpenter and could not find one. After job specific skills, employers had the most difficulty finding job applicants with good general workplace skills, such as work ethic, problem solving, teamwork, and communication skills.

Within this context, how do higher education, workforce development and economic development connect—especially, what are the specific innovations in Washington that are linking the two?

TARGETING OUR RESOURCES TO ECONOMIC CLUSTERS

". . . geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also cooperate." (Michael Porter, On Competition, Harvard Business School Press, 1998)

In order to promote economic vitality across our diverse State, Washington has adopted a cluster strategy. By targeting workforce development resources to key sectors of local economies, the public sector can make a positive, measurable difference, as opposed to spreading scarce resources so thinly that their effect is virtually unnoticeable.

High concentrations of related companies and suppliers within a geographic region suggest a cluster. Examples in Washington State include: agriculture and food processing, aerospace, marine services, and information technology. The central and southeastern areas of Washington have an obvious cluster in agriculture and food processing, for an unusually large number of employers and jobs in agriculture and food processing are located there compared to the number of such employers and jobs in other areas of the nation, and there is a large network of related firms and institutions. These resources create an advantage in competing in the agriculture

and food processing market compared to other geographic areas. If supported, a cluster of firms increases the likelihood of further growth in that industry, including the spin-off new businesses. To the extent that the educational "suppliers" have innovative, current, and flexible programs, the industry will be strengthened as it competes around the world. This is higher education's critical role in creating and sustaining economic vitality and job growth.

Coordinating Our Investments

In order to strategically target State workforce development resources to key sectors of our economy, the State Board for Community and Technical Colleges (SBCTC), the Workforce Board, and the Employment Security Department (ESD), began coordinating their investments in 2002 to meet the workforce needs of key industries.

The agencies coordinated four Requests for Proposals (RFP) which reflect four stages of demand-driven workforce development. The first stage is to create an Industry Skill Panel, including business leaders in a key economic sector so that they will identify critical skill needs and identify solutions. (See the following section on Industry Skill Panels.) The second stage is to use the Panel to develop industry skill standards for the key occupations in their sector. The third stage is to develop new training programs that prepare workers to meet the standards. And the fourth stage is to actually provide the training.

All RFPs included common elements to enhance coordination and to take advantage of the synergistic effect of the funds working together. The common required criteria have included:

• Regional Proposal: Proposals have to be for a specified geographic region of the State.

• Economic Analysis: Proposals have to demonstrate the importance of the economic sector to future economic opportunities in the region.

• Industry-driven: The proposals have to provide evidence that the projects would meet the needs of a key area industry and demonstrate involvement of local industry leaders.

• Partnership of Key Stakeholders: Employers, labor, training providers, workforce development councils, economic development councils, and other appropriate stakeholders have to be partners in the proposals.

In all, since 2002, we have deployed $11 million in a combination of State general funds and Workforce Investment Act Funds.

By linking our resources to economic clusters, we are focusing precious State and Federal resources on sectors where the market has already demonstrated that Washington has a competitive edge over other areas of the nation. Targeting public resources in this manner will help ensure that they are invested where they are likely to deliver the greatest return to our economic growth.

We will continue this coordinated approach to targeting workforce development and higher education resources, and will build upon it by including additional sources of support. As part of Governor Locke's Joint Economic Vitality Cabinet, these agencies are currently working with the Departments of Community, Trade and Economic Development, Ecology, Agriculture, and Transportation to pilot cluster-based approaches to economic vitality.

Industry Skill Panels: Organizing the Demand

Begun by Governor Locke and the Legislature in 2000, and sustained since then through investments from WIA, Industry Skill Panels are public-private partnerships comprised of business, labor, and education (including community and technical colleges) that organize to meet the existing and future workforce needs in key industries. These panels provide forums for discussion with multiple stakeholders vested in a particular industry. Skill panels create industry-driven teams that find solutions for short-, mid- and long-term challenges and opportunities for an industry's workforce. They foster an environment of knowledge sharing among individuals who take action, make investments, and make recommendations for immediate and future action for policy changes necessary to keep an industry's workforce, and therefore the industry, competitive.

Three types of industry skill panels are emerging in Washington State:

• Crisis Driven; i.e. agriculture and food processing, health care and aerospace

• Industries in Transition; i.e. information technology, marine services, construction, electronics, manufacturing and energy

• Emerging Industries; i.e. computer game software development and biotechnology

Although Washington skill panels are less than 3 years old, a few tangible results include:

• The development of a variety of tools, products, and materials such as curricula, skill standards, assessment tools, and new apprenticeship programs.

• A renewed interest from local media on workforce and economic development topics and achievements.

• Industrial or regionally centered research that has provided credible information for both the public and private sector to use to find solutions for skill gaps. Shared instructional design and curricula, resulting in the ability of industries with multiple locations to use courses that are consistent throughout the State.

Skill panels are important strategic investments, aligning workforce and economic development strategies. Washington State's investment in skill panels is relatively small. It is intended to be seed money to assist companies and their supplies in an industry in a local region to organize themselves to identify and meet their workforce needs. Facilitators of skill panels are local workforce development councils, community colleges, business associations and community-based organizations. Virtually all skill panels have used funding from the Workforce Board to leverage additional financial support from other public or private resources. Moreover, private investments are being made on a continuing basis. These investments take the form of cash, executive time, wages, benefits, and travel.

An important local partner in many Industry Skill Panels is the local WorkSource Center (the One Stop). To strengthen their contribution to key sectors even more, the State will use a small Department of Labor Technical Assistance and Training grant to deepen selected Centers' knowledge of their communities' workforce needs. The attention you have given to employer engagement in S. 1627 is very supportive of our goals and directions. Finally, we are pleased to be one of the sites for the Workforce Innovation Networks (WINs) project hosted by the Center for Workforce Preparation of the U.S. Chambers of Commerce, Jobs for the Future, and the Center for Workforce Success of the National Association of Manufacturers. This project is directed to engaging employers more deeply with the workforce development system, and we anticipate that it will strengthen the system's responsiveness to employer needs.

Since 2001 Washington State has invested in 33 industry skill panels in the following industries: Construction, Information Technology, Health Care, Energy Technology, Electronics, Manufacturing, Marine Services, Food Processing and Agriculture, Biotechnology and Computer Game Software. Today, over 300 business partners are actively engaged in this effort. Fifteen programs were created in 2002—2003 in six different industries, including curriculum development and improvement. In addition skill standards were developed in three industries—energy, computer game software and electronics. These tools will result in postsecondary programs tailored to meet the real skill needs of industry.

Centers of Excellence

"Centers for Excellence" are broadly defined as places that industries can rely on to understand their particular needs and interests, to help solve their skill-related problems, to help ensure a continuing flow of new entrants, and to provide a source of upgrading its existing workforce. Centers are a "one-stop shop" for the firms that comprise a cluster, so that educators and trainers are able to more efficiently stay abreast of changes in technology and employment and develop special resources for employers. (State Board for Community and Technical Colleges, Fall 2003)

The State Board for Community and Technical Colleges (SBCTC) is supporting its 34 community and technical colleges as they meet the dynamic changes required in these times of high unemployment and diminishing resources. For the 2003—2005 biennium, it targeted $1,398,100 for workforce program start-up or expansion of high demand programs linked to economic development. Successful awardees responded to local economic development needs. Six "Centers for Excellence" were funded in the following industries: Process Manufacturing, Power Plant Operations and Generation, Materials Technology in Manufacturing, Center for Manufacturing Excellence, Agriculture, Allied Health Technologies. These centers will develop depth in their knowledge of industry skill needs and will share that expertise, including curricula, within the college system. The employers on 14 Industry Skill Panels are positioned to partner with these Centers. Through the Centers for Excellence initiative, Washington State's investments will go further, and postsecondary programs across the State will produce graduates fully prepared to take advantage of the job opportunities available in these industries.

Health Care: An Industry in Crisis

A powerful example of the power of partnerships targeted to meet industry demand is health care.

As in many other States, the health care personnel shortage is at a crisis level in Washington. Health care facilities are operating with critical staff shortages even though we have one of the higher unemployment rates in the country. So critical is the shortage that the industry has resorted to importing workers from other countries and utilizing temporary employment agencies for regular staffing needs. These expensive short-term responses have not been adequate to fill the gap between supply and demand, and cannot be sustained over the long run. While health care employers search for staff, a large number of Washington State's health care training programs are turning away qualified students because the programs lack the capacity, faculty and clinical sites to train them. Fifty-six programs offering nursing and allied health training reported waiting lists in 2001.

To address this issue, four State representatives requested the Workforce Board in 2002 to convene a Task Force to include representatives of health care employers and employees, labor, State agencies, and education and training organizations, including community and technical colleges and 4-year colleges and universities. The Workforce Board is using WIA funding to support the work of the Task Force. (See Appendix B for membership.)

The Task Force has developed an action plan last year whose goals are:

- Increasing the number of people entering health care professions.
- Increasing the capacity of health care education and training programs.
- Modifying State regulations and statutes to alleviate the shortage.
- Considering rural health care workforce issues.
- Increasing the racial and ethnic diversity of the health care workforce.
- Being accountable by monitoring its own progress.

A year later, in its December 2003 progress report, the Task Force cited significant progress:

- For the 2003–05 biennium, the Legislature appropriated $11.8 million that will expand capacity by an estimated 2,000 full-time equivalent students in health care programs at 2- and 4-year institutions.
- The Legislature passed Substitute House Bill 1189 allowing hospital districts to reimburse employees for education and training and travel costs for interviews.
- Substitute Senate Bill 5966 reduced barriers for dentists from other States to practice in Washington.
- All 12 Workforce Development Councils have established health skill panels with initial financial support from the Workforce Board. These panels of local employers, education, labor, and government representatives develop local solutions to address health care shortages. Two examples suggest their accomplishments. In the Tacoma/Pierce County area, its health skill panel and Tacoma Community College developed a Diagnostic Medical Sonography program to meet the high demand for these imaging specialists. In North Central Washington, the skill panel is targeting incumbent health workers who live some distance from their local community college campuses and bringing classes to their workplace in a School-at-Work model.
- Washington State focused it $3 million Federal award for surpassing performance targets for workforce development programs on health care (see following section).
- Local health skill panels in Seattle-King County, Northwest Washington, Snohomish County, and Tacoma-Pierce County workforce development areas successfully collaborated to capture a $2.4 million U.S. Department of Labor awarded H1-B grant to train 294 incumbent workers at institutions of higher education to fill high-demand health care positions in nursing, specialized imaging technology, and radiologic technology.
- The U.S. Department of Health Resources and Services Administration awarded the Pierce County Health Services Career Council a $683,100 grant to improve the skills of registered nurses by developing and implementing a shared residency program for 535 nurses. The curriculum addresses issues of diversity, cultural competence, service to underserved populations, and mentoring. The project, which includes Pierce and Tacoma Community Colleges and Clover Park Technical College, also aims to recruit 165 nurses who have not been in practice and prepare them to return to patient care.
- Because of new apprenticeships developed in health care occupations, the Department of Labor's Office of Apprenticeship Training, Employer and Labor Services, selected Washington State to pilot specialty apprenticeships in certified nurse assistant and licensed practical nurse as alternative pathways to complement traditional education programs.

Workforce Incentive Act Section 503 Incentive Grants

As you know, the Workforce Investment Act provides that those States that surpass their performance targets in WIA Title I-B, the Adult Education and Family

Literacy Act, and the Carl D. Perkins Vocational and Technical Education Act are entitled to an incentive grant. For PY 2001 performance, Washington received $3 million in Section 503 incentive grant funds. This provision is especially beneficial as we work to create a "system" out of separate State and Federal programs. We have noted with appreciation that S. 1627 retains it.

Washington's State Plan for workforce development States that Washington will allocate any Section 503 incentive funds to local WDCs "for system building initiatives, not activities that pertain only to a particular program." Washington State chose to direct all of its Section 503 incentive grant funds to support workforce development for health care occupations.

The Workforce Development Councils, in coordination with K–12 and community and technical college stakeholders, are using the funds to support education and training projects addressing regional health care personnel shortages. As shown in Appendix C, a significant portion of the $3,000,000 will be used to increase the capacity of community and technical colleges to deliver health care training programs.

This Section 503 planning process has brought these leaders closer together and has resulted in increased recognition of their mutual and complementary roles in developing our workforce system. As a State community college leader said, "the increased local collaboration initiated by this policy will benefit us well into the future."

State Investments in High-Demand Fields of Study

In order to expand higher education capacity in fields of study in high demand by employers, Washington State earmarks higher education funds for enrollments in high-demand areas.

Until fairly recently, the State budget process contained no mechanism to direct student enrollments to areas demanded by employers. The result at the non-baccalaureate level was flat enrollment in many of these fields.

This began to change in 1999. In the 1999–2001 biennial budget, Governor Locke proposed to target growth and the Legislature earmarked funding for 500 full-time equivalent students (FTEs) for fields of study where employer demand exceeded the supply of graduates. No such funding was included in the 2001–03 biennial budget. But, in the 2003–05 budget, funding is once again provided for 500 high demand FTEs at 4-year institutions. In addition, the Legislature appropriated $12.609 million for high demand programs at community and technical colleges.

The fields of study that are in increasing demand by employers tend to cost more than the average for higher education. This is for two main reasons: (1) Changes in technology often underlie growing employer demand and the same, often costly, new technology may be required to teach high demand fields. (2) The workforce shortages in high demand fields tend to push up compensation and therefore increase the faculty salaries necessary to compete with salaries in the private sector. The more expensive nature of high demand fields creates a disincentive for higher education institutions to expand their enrollments in these fields. While employers have frequently helped by contributing equipment, faculty, or other resources, they cannot, and should not, be expected to cover the full cost differential. Having a more adequate supply of students prepared in high-demand fields will benefit more than just the employers and students directly involved. The Legislature has recognized this cost differential by funding high-demand FTEs at an enhanced rate.

Worker Retraining: Smoothing Workers' Transitions

Not only do we create workforce development strategies to support our key industries, we also recognize that economic change is continuous and that global competition and changing technology can have serious downsides for workers. Washington State has long been committed to assisting dislocated workers, and has developed one of the best sets of policies in the nation for responding to worker dislocations. In 1993, the State created the Worker Retraining program that pays the State's share of the cost of retraining dislocated and long-term unemployed workers at community and technical colleges and private career schools. While most of the money pays for training, the program also helps with childcare, transportation, and some financial assistance for workers who have exhausted their unemployment benefits.

From the beginning, the program was integrated with the Job Training Partnership Act (JTPA) and now the WIA Dislocated Worker program. Typically, the State will first contact dislocated workers through Rapid Response services, and JTPA/WIA will provide case management, assessments, career and education counseling, help with tuition, and provide job search assistance.

With the advent of WIA in 1998, Pell grants became the first option for funding tuition. For dislocated workers, however, Pell grants are often not available, because the workers do not meet the financial need requirements and often work part-time

and go to school part-time. Pell grants are not authorized for part-time students. Washington State is now looking at options for creating a State financial aid program for low-wage workers who are part-time students.

Finally, in 2000, Washington created the Training Benefits program that provides up to 73 additional weeks of unemployment benefits for dislocated workers who enroll in retraining. This financial assistance is key to enabling many workers to stay in retraining long enough to complete a certificate or degree in a high demand technical program.

The Worker Retraining program has grown from 7,161 students in 1993–94 to 13,836 in 2001–02. In the fall of 2002, enrollments were up 59 percent from the previous fall. WorkSource (One Stop) Centers were experiencing barriers enrolling dislocated workers into retraining because the community and technical colleges were already full. To address this capacity problem, the State took advantage of WIA's flexibility to contract for additional training slots.

On an FTE basis, Worker Retraining students represent about one-sixth of the colleges' total workforce education efforts. The growth of the Worker Retraining program has been a major factor why workforce education at the community and technical colleges has grown over the past decade. The increased demand for the Worker Retraining program is due not only to the current economic recession. The long-run trend is for more dislocations to occur due to ever more rapidly changing technology and increasing international competition. Responding to these economic changes means that higher education must have the capacity to retrain dislocated workers who need new skills. This will be an increasing need in the future.

Preparing A Workforce With the Basics: Adult Basic Skills Education

Our community and technical colleges are the primary institutions in our State to provide adult basic skills (i.e. literacy) instruction to the growing population of recent immigrants and others who need basic instruction in English. This is the fastest growing mission area of our 2-year colleges, having grown 100 percent over the last decade. This growth is putting a financial strain on our colleges since students do not pay normal student tuition. Providing this education, however, is critical if we are to enable recent immigrants and others to be good citizens and productive workers. The most successful programs, as shown by the Workforce Board's evaluations and national research, are those that combine adult basic skills instruction with occupational skills training.

TOOLS FOR DECISION-MAKING: ACCOUNTABILITY FOR RESULTS

Evaluation is a critical component in the development of the type of workforce Washington State desires. The Workforce Board is tasked with this responsibility and biennially evaluates the performance results of the training programs provided by the community and technical colleges, private career schools, apprenticeship, worker retraining, Vocational Rehabilitation, secondary career and technical education and the Workforce Investment Act. We provide data to policy makers to assist them with their investment decisions, and to program managers for continuous improvement.

The latest evaluation of the State's workforce development system found that:

- All workforce development programs are estimated to boost participants' lifetime earnings and public tax revenues by amounts exceeding program costs.
- Post-program employment rates among former program participants vary from 60 to 92 percent. They have remained stable during the past 2 years despite the recession.
- In programs serving adults, 68 to 92 percent of employed former participants reported they were working in jobs related to their training. Placement in training-related jobs increased during the past 2 years for four of the 10 programs.
- Hourly wages and quarterly earnings of program participants increased significantly during the past 2 years for almost all programs.
- Over 85 percent of employers reported they were "somewhat" or "very satisfied" with the overall quality of work by former program participants.

Program results of particular interest to the Health, Education, Labor and Pensions Committee's work in higher education are:

Community and Technical College Job Training

There are 34 community and technical colleges in Washington State, all of which provide job preparatory training. This training provides students with the skills required for specific occupations. (The definition of "job preparatory training" does not include students who intend to transfer to a 4-year college, worker retraining, students who enroll to raise their basic skills, or working adults who take a few courses to improve their skill for their current jobs.) It is supported through State appro-

priations and student tuition; colleges also use Carl D. Perkins Vocational and Applied Technology Education Act funds to improve programs and student success.

The Workforce Board obtained information on almost 16,700 job preparatory students, 51 percent of whom received degrees or certificates, up from 45 percent in 2000. Overall, 94 percent indicated they had met their educational objectives; satisfaction with the quality of teachers, length of training and interaction was over 90 percent in all instances. Employers were equally impressed and 92 percent said they were either "somewhat" or "very satisfied" with the overall productivity and job-specific skills of these new employees. As for employability, 78 percent had reported employment in the Northwest during the third quarter after leaving the program. Their median wage was $13.17 per hour, with annualized earnings of $24,180. These results are 16 percent higher than for those who left in 1997–98 and 25 percent higher than 1995–96.

Our evaluations further show that job preparatory training has strong positive short-term net impacts on employment, wages (an additional $2.59/hr), hours worked (40.4/hrs per quarter), and earnings (mean quarterly increase of $1,470). Projected participants benefits to age 65 outweigh public costs by a ratio of over $16 in participant benefits per public dollar invested in college training. Finally, the public benefits as well through increased taxes. (See Appendix D.)

Private Career Schools

There are over 325 private career schools and colleges in Washington State, approximately 250 of which are licensed by the Workforce Board. (Either the Higher Education Coordinating Board or the State's Department of Licensing regulates the remainder.) Most students who attended programs at schools licensed by the Board said their skills improved substantially (between 60 and 70 percent depending upon the course of study undertaken) and overall 80 percent said they were satisfied with the training they received. Eighty-eight percent of employers said they were either "somewhat" or "very satisfied" with the overall quality of work of these new employees. Eighty-seven percent of career school students were employed 6 to 9 months after leaving their programs and were earning a median wage of $11.24/hr, a 20 percent increase over the median wage reported 2 years earlier. Among students who completed their programs, the training substantially increased employment and raised earnings.

TOOLS FOR DECISION-MAKING: STUDENTS, PARENTS, EMPLOYERS

Enrollment in postsecondary education is an important decision, one that should be based on the best information possible—program requirements, costs, future employment possibilities, expected earnings and suitability to one's skills and interests.

Washington State has several tools in place to help students of all ages make informed decisions:

Where Are You Going?

The Workforce Board publishes *Where Are You Going*? a career guide providing information on more than 320 occupations in Washington State, on various schools and training programs, financial aid, and other related information relating to preparing for employment. Supported by Perkins funding, over 165,000 were distributed last year through high schools, WorkSource (One Stop) Centers, worker retraining sites, community and technical colleges, and community-based organizations. This publication is of great assistance to our students as they prepare to leave high school, but more guidance needs to happen at earlier ages so that students make the right choices during high school.

Consumer Report System

Washington State has developed a consumer report system to inform the public about occupational training programs, including their results. (The system fulfills the requirements of WIA, but ours was under development before WIA was enacted and was facilitated by years of interagency collaboration to create a performance accountability system.) Community and technical colleges, private career schools, and 4-year colleges and universities participate in the consumer report system. The system is made up of two websites: Job Training Results (www.jobtrainingresults.org) and the Eligible Training Provider List. (www.wtb.wa.gov/etp).

The training programs on the Eligible Training Provider List (ETPL) have met the State's minimum performance standards for completion rate, employment, and earnings of former participants. These training providers can serve people who are eligible for financial assistance for occupational training, including not only WIA Individual Training Account voucher recipients, but also dislocated workers with Trade Adjustment Assistance, which in Washington State includes many dislocated

Boeing employees. The State Legislature also applied the ETPL to the State's Training Benefits program; that is, programs must be listed in order for dislocated workers to use Training Benefits while they study.

Participation in the Eligible Training Provider List is voluntary, but even so, the ETPL currently has over 350 training providers offering over 2,200 training programs throughout the State. Programs at all 34 community and technical colleges in the State are listed as are those at 222 private career schools, and 70 private and public 4-year institutions and their branches. Worker retraining sites, community-based organizations, and apprenticeship programs are also included. The Workforce Board revisits the policy on standards for inclusion on the ETPL each year. We are gratified that S. 1627 allows States the option of continuing the ETPL; we have found it very useful.

The second part of the consumer report system is Job Training Results (www.jobtrainingresults.org) where anyone can see the actual performance results of specific training programs of interest. If a customer finds a program of interest on the ETP List, he or she can link directly to www.jobtrainingresults.org to find out about its results, such as employment and earnings as well as information about the students who participated such as their prior education level, race/ethnicity, gender and age. Detailed program information is also included, such as tuition rates, length of program, and school contact information. www.jobtrainingresults.org provides a wealth of information about hundreds of training programs in one, user-friendly website. Programs at all Washington State community and technical colleges and a growing number of private career schools and 4-year institutions have chosen to be part of the www.jobtrainingresults.org website.

A strong feature of the Washington State consumer report system is that the performance information for all programs is calculated in the same way by the State. Therefore, when consumers look up, for example, the earnings results for different programs, $25,000 at program X means the same as $25,000 at program Y. We believe that consistent information should be available to potential students so they can make informed decisions.

CONCLUSION

In conclusion, I would like to thank you for the opportunity to share Washington State's perspectives—and actions—on the connections among higher education, workforce development, and economic vitality. I've only sketched the tip of a very deep iceberg of policies, programs, and partnerships designed to respond to our needs. Our country's need for a workforce more highly skilled than those of our competitors and more able to thrive in a knowledge economy is not "news" to you. Our challenge is huge, and we are ready to work with you as you continue to craft national solutions and responses.

In my remarks today, I hope I have been able to communicate a couple of themes:

In Washington State, we are determined to align our workforce and higher education investments toward our economic future.

We are committed to using the Federal resources we receive wisely, responsibly, and creatively.

We believe that partnerships, whether Federal/State/local, public/private, business/labor, or education/business, are critical to making our investments go further, strengthening the ties among leaders with common goals, and improving our outcomes.

Again, thank you for your attention.

APPENDIX A

Washington State Workforce Development System

State Board for Community and Technical Colleges	Postsecondary Technical Education Adult and Family Literacy Carl D. Perkins Vocational and Technical Education Act (Postsecondary) Worker Retraining Program Volunteer Literacy Program Job Skills Program
Office of Superintendents of Public Instruction	Secondary Career and Technical Education Carl D. Perkins Vocational and Technical Education Act (Secondary)
Employment Security Department	WIA, Title I-B Dislocated Workers Program WIA, Title 1-B Adult Program WIA, Title 1-B Youth Program Wagner-Peyser Training Benefits Program
Department of Social and Health Services	Division of Vocational Rehabilitation
Department of Services for the Blind	Vocational Rehabilitation for the Blind
Opportunities Industrialization Center	Employment and Training for Migrant and Seasonal Workers
Department of Labor and Industries	Apprenticeship
Private Career Schools	

APPENDIX B

Washington State
Health Care Personnel Shortage Task Force

Holly Moore, **Task Force Chair,** President, Shoreline Community College
Bill Gray, **Task Force Vice-Chair,** Washington State University - Spokane

Dana Duzan, Allied Health Professionals
Joan Garner, Washington State Nurses Association
Marc Gaspard, Higher Education Coordinating Board
Earl Hale, State Board for Community and Technical Colleges
Troy Hutson, Washington State Hospital Association
Brian Jeffries, Office of Superintendent of Public Instruction
Brian McAlpin, Washington Medical Association
Jeff Mero, Association of Washington Public Hospital Districts
Ellen O'Brien Saunders, Workforce Training and Education Coordinating Board
Rick Ouhl, Washington State Dental Association
Julie Peterson, Washington Association of Housing and Services for the Aging
Gloria Rodriguez, Community and Migrant Health Centers
Lorelee Bauer, Group Health Cooperative
Mary Selecky, Washington State Department of Health
Diane Sosne, Service Employees International Union
Evelyn Torkeleson, Washington Rural Health Association
Vickie Ybarra, State Board of Health
Diane Zahn, United Food and Commercial Workers Union

See www.wtb.wa.gov/HEALTHCARETASKFORCE.HTM

APPENDIX C

Section 503 Incentive Award ($3 million) Activities In Washington State

Workforce Development Areas	Youth Initiatives	Transitions and Bridges	Training
Eastern Washington Partnership (Ferry, Pend Oreille, Garfield, Stevens, Columbia, Lincoln, Whitman, Asotin, and Walla Walla counties) **Awarded: $206,313**			Support expanded educational capacity for licensed practical nurse programs at local community colleges. Provide funds for additional instructors and 20 additional students
Olympic (Clallam, Kitsap and Jefferson counties) **Awarded: $130,707**	Fund a regional health occupations summer camp experience	Provide management training to registered nurses and medical terminology training to hospital employees	Manage a medical occupations scholarship program (testing fees, tutor costs, tuition support)
Pacific Mountain (Grays Harbor, Mason, Lewis, Thurston and Pacific counties) **Awarded: $228,812**	Deliver integrated health care focused workshops		Create a regional medical laboratory technologist program
Southwest Washington (Cowlitz, Wahkiakum, Skamania and Clark counties) **Awarded: $216,147**	Improve preparation of K-12 students via pilot projects	Conduct incumbent worker pilot to develop best practices for overcoming barriers to training	Implement best practice health care pilots
Spokane Area (Spokane County) **Awarded: $275,129**	Provide K-12 Skills Center students with hands-on college laboratory experience	Deliver transition services online or on campus	Provide support services to reduce barriers to success while in training and in employment

Workforce Development Areas	Youth Initiatives	Transitions and Bridges	Training
Tacoma-Pierce County (Pierce County) **Awarded: $327,413**	Deliver health care occupations workshops with outreach to K-12 and populations with limited English-language proficiency	Clinical placement and tuition assistance for incumbent worker nursing training. Enhance coordination of nursing clinical placement and increase tuition support for incumbent worker training	Support Diagnostic Medical Sonography program and Nurse Educator program
Tri-County (Yakima, Kittitas and Klickitat counties) **Awarded: $260,200**	Develop health care curriculum for high school students	Coordinate cross training and career planning for health care workers	Provide funds to support faculty costs for health care program costs at Yakima Valley Community College
Benton-Franklin (Benton and Franklin counties) **Awarded: $150,866**	Help ethnically diverse students interested in health care careers to meet pre-requisites and plan their career paths. This program addresses shortages of diverse health care staff and assists students with traditionally lower educational outcomes.	Promote increased awareness among K-12 counselors/teachers about health care opportunities	Employ coordinator to implement the Mathematics, Engineering Science Achievement (MESA) program in Benton and Franklin county schools
North Central (Chelan, Okanogan, Grant, Douglas and Adams counties) **Awarded: $221,291**	Provide career summits for all 9th grade students, teachers and parents	Arrange additional career pathway services for economically disadvantaged 9th graders. Coordinate with Tech Prep partners to enable students to take advantage of dual enrollment and shorter time to degree/credential	

Workforce Development Areas	Youth Initiatives	Transitions and Bridges	Training
Northwest (Whatcom, Skagit, Island and San Juan counties) **Awarded: $188,200**	Have partners deliver lesson plans at area schools and arrange one week and six-week health care career camps	Implement *Bridge Classes* targeted to students who have the potential to enter health care training programs	
Snohomish County (Snohomish County) **Awarded: $243,155**	Deliver *High School and Beyond* project activities, assessing training needs and informing targeted youth about health care opportunities	Develop a Vocational English as a Second Language health care bridge program and provide incumbent worker specialized training	Add training capacity for community college health care programs
Seattle-King County (King County) **Awarded: $551,747**	Provide youth with career exploration and training in health care fields.	Provide career development specialists on-site for hospital workers to plan for career progression to higher-wage occupations	Expand regional health care training capacity at selected community and technical colleges

APPENDIX D

Benefits and Costs of Job Preparatory Training at Community and Technical Colleges

	First 2.5 years after Program		Forecast to Age 65	
	Participant	Public	Participant	Public
Earnings	$4,275		$96,263	
Employee Benefits	$ 855		$19,253	
Taxes	-$1,075	$1,075	-$24,210	$24,210
UI Benefits	-$ 7	$ 7	-$ 1,767	$ 1,767
TANF	-$ 469	$ 469	-$ 905	$ 905
Food Stamps	-$ 20	$ 20	-$ 141	$ 141
Medical Benefits	-$ 39	$ 39	-$ 141	$ 141
Foregone Earnings	-$1,375		-$ 1,375	
Program Costs	-$3,118	-$6,916	-$ 3,118	-$ 6,919
TOTAL	-$ 973	-$5,306	$84,216	$19,890

APPENDIX E

Recent Workforce Board Publications of Interest

Workforce Training Results 2002 - An Evaluation of Washington State's Workforce Development System

High Skills, High Wages 2002- Washington's Strategic Plan for Workforce Development

Annual Report to the Legislature 2003 - Progress of Agencies in Implementing High Skills, High Wages

Competitiveness and Opportunity - Public/Private Industry Partnerships That Work (Skill Panel report)

Health Care Personnel Shortage: Crisis or Opportunity? 2002

Progress 2003 - A Report of the Health Care Personnel Shortage Task Force

These publications are all available online at www.wtb.wa.gov/publications.html

STATEMENT LAURA PALMER NOONE

Mr. Chairman and Members of the Committee, the University of Phoenix would like to thank you for your willingness to accept this written testimony. The importance of the work of this committee cannot be overstated. Never has the link between education and workforce preparedness been more critical.

THE UNIVERSITY OF PHOENIX

The University of Phoenix enrolls over 200,000 working adult students in degree programs nationwide at our network of campuses as well as through online delivery. The admissions standards of the University require students to be at least 21 years of age and to be either currently employed or temporarily unemployed. In this manner, the University can ensure that the serious, working adult student can complete his or her courses with peers and be able to apply the knowledge gained back to the workplace.

In existence for only a brief 28 years, there are already over 282,000 graduates of the University of Phoenix.

The University's degree programs are at the associates, bachelors, masters and doctoral level in the disciplines of business and management, technology, health and human services, counseling, nursing, education, and criminal justice. The University's model of education focuses on the needs of the working adult, by holding classes in the evening or online, attending school year round, and enrolling students throughout the year. The academic delivery model provides sequential coursework for students to attend one course at a time for 5 or 6 weeks until degree completion. Class size is small, with an average of 14 students per class in the physical campuses and an average of 11 students per class online. In addition students are required to be part of a learning team (two to five students) who meet outside of the classroom to work together on group projects and problems, thereby enhancing the competency of working together as a group.

The University strives to make the academic experience as convenient for students as possible which then results in more time for the student to focus on the course content. Courses are located close to students' home or office (to minimize drive time) and administrative support is available both at the facility and through the Internet. Virtually all support systems are available to the students through the Internet, including library, academic advisement, financial advisement, and learning resources.

STUDENT DEMOGRAPHICS ARE CHANGING

Recent statistics tell us that only one in six college students is traditional—an 18–22 year old living on campus, attending classes full time, with primary financial

support from a parent. Clearly, what has been our notion of the traditional student is becoming by virtue of dwindling percentage, the non-traditional student. Contrast this with the fact that nearly 40 percent of the students attending college today are 25 or older and it is clear that the face of the college campus today has changed.[1]

Adult students are returning to college in record numbers for a variety of reasons, but nearly all of them are economic. A college education is rapidly becoming the union card for entry into today's market place. Forty-eight of the top fifty paying jobs in America require a bachelor's degree.[2] An individual with a bachelor's degree can expect to earn over a million dollars more during his or her lifetime than a counterpart with only a high school education.[3] Finally, unemployment is much lower among educated adults. Clearly, there are many reasons for adults to consider returning to school.

A WORKFORCE IN TRANSITION

From the post World War II baby boom (1950) to the age of the personal computer (1991), the percentage of skilled workers in the workforce increased by 25 points. Between 1991 and 2000, it is estimated that the same sector of skilled workers increased by another 20 percent.[4] Conversely, manufacturing jobs have declined from 40 percent at the end of World War II to less than 18 percent at the close of the 20th century. During the same period, the service sector increased from 14 percent to 35 percent. In 1959 only 20 percent of workers between the ages of 30 and 59 needed some college; today that number is 56 percent and rising.[5]

Newspaper reports tell us that some jobs are migrating overseas. For example in the field of information technology, it is estimated by the year 2008, the IT workforce situated in the United States will be 25 percent smaller than it is today. Yet, the IT jobs that will remain in the United States will be more important than ever. Those jobs will be in architecture, strategy, project management and business processes. These jobs require higher education.[6]

Our economy is changing and churning. Research shows that the average adult will change careers—not just jobs—three to four times in his or her lifetime. These types of shifts often require education and/or training; hence many adults consider returning to school in order to re-career or upgrade their skills for promotions. Based on a 2003 alumni survey, 33 percent of students attributed a recent job change or promotion to their degree earned at the University of Phoenix.

THE PARTNERSHIP WITH BUSINESS AND INDUSTRY

A key component of ensuring a qualified workforce is a strong partnership between the academic community and the business community. This partnership starts with meeting the needs of both the student and his or her employer. Nearly 90 percent of University of Phoenix Alumni asserted that their education adequately prepared them for the workplace.

Support by the business and industry community is a good indicator of the level of support for higher education. Approximately 48 percent of our students receive some level of tuition reimbursement from their employers, with the percentage substantially higher among those industries where tuition reimbursement is more common. Major corporations such as AT&T, Boeing, Intel, Motorola, and Verizon have sent thousands of employees to the University of Phoenix.

Approximately 95 percent of the 2002–2003 graduates of the University of Phoenix were employed in the following sectors: Technology 19.7 percent, Manufacturing 14.1 percent, Health Services 12.3 percent, Government/Military 11.9 percent, Education 11.1 percent, Other Services 10.9 percent, Banking/Finance 9.1 percent, and Communications/Media 5.0 percent.

Another important aspect to partnerships with business and industry is the recognition and valuation of company training programs. Institutions that understand that not all learning occurs inside a classroom can evaluate prior learning for equivalence to college coursework. Through articulation agreements and evaluations of coursework by faculty, the University of Phoenix has reviewed or is currently reviewing training materials from 355 businesses and provides these credit recommendations to the employees of those companies. A total of 14,837 company-spon-

[1] Digest of Educational Statistics, http://nces.ed.gov/programs/digest/d02/tables/dt176.asp
[2] U.S. Department of Labor, Bureau of Labor Statistics
[3] U.S. Department of Education, Annual Earnings of Young Adults by Educational Attainment, http://wdcrobcolp01.ed.gov/CFAPPS/ERIC/resumes/records.cfm?ericnum=ED430322
[4] 21st Century Skills/Jobs Report, Jan. 1999; U.S. Bureau of Labor Statistics.
[5] U.S. Bureau of Labor Statistics
[6] Overby, S. (December 15, 2003). The Future of Jobs and Innovation, CIO Magazine

sored training courses have been evaluated through this process. By considering prior learning in this manner, student/employees are able to minimize the duplication of instructional material and complete their programs as expeditiously and efficiently as possible.

ACCESS IS KEY

It appears that one of the real issues before the committee is about creating an environment where adults can take responsibility for their own futures through access to education. Access, according to the National Education Association (NEA) Higher Education Research Center, is comprised of four components: geographical, legal, academic, and financial. It is the last of these four that is of primary concern to this committee.

Financial access can come through a variety of means. For example, at the University of Phoenix, a majority of our students participate in student financial aid—either through loans, grants, or scholarships. Yet, the loan limits, especially for first and second year students, have not been raised for years. The combined subsidized and unsubsidized loan limit for first year independent students is $6,625 per year. This amount does not cover the cost of continuous enrollment for the first academic year and students must find alternate funding to cover the shortfall.[7] This may result in students having to temporarily drop out until they can obtain the additional non-Federal limited resources. They must then re-enroll when eligible to receive the next financial aid disbursement. When this sort of artificial break in attendance occurs, it is not only disruptive to the students' academic progress, but these students are less likely to return to class than a student who has been the beneficiary of continuous enrollment. It is impossible to cultivate a prepared workforce without the ability to financially access the institutions that have classroom space readily available.

Even more vexing to the plight of these students is the fact that loan limits for the 4 years of attendance at an academic institution are tiered. First year combined limits (subsidized and unsubsidized) for independent students are $6,625, while second year students may have a combined limit of $7,500. Third and fourth year students enjoy a combined loan limit of $10,500. When working adults return to school, they already have financial obligations—a home mortgage, car payments, etc. They are classified as independent and thus cannot qualify for PLUS loans, which allow dependent student families to qualify up to the costs of attendance. Similarly private loan programs rarely assist these students because the independent students won't meet the debt-to-income ratio or credit scoring criteria. While the costs of attendance are generally equal for students across the years of college, the funding levels are not. Hence, the current loan policy restricts non-traditional students from obtaining a degree and by extension, limits the ability of U.S. workers to upgrade their workplace skills and employability.

Minority students are hardest hit by these economic shortfalls. Today minority students make up 30 percent of college enrollment (and nearly 40 percent of the enrollment at the University of Phoenix.) Most of these students are first generation collegians and 20 percent were themselves or have a parent born outside the United States. This may translate to lack of early awareness or ability to save for college.

Although it would be easy to assume that education costs have outpaced inflation, one must also take into consideration the source of funding. A public institution charging resident rates is actually subsidizing the cost of attendance. That subsidy comes through State allocations as well as through endowment funds. Nearly all States have had to tighten budgets, leading colleges to seek other revenue sources. As a last resort, many colleges have had to increase tuition rates to cover the shortfall.

CONCLUSION

We know we must have an educated workforce. The National Center for Educational Statistics directly relates the increase in educational attainment to worker productivity. The statistics cited above support the need for a better-educated workforce. This committee can help to achieve that goal by providing more funds to those in need of assistance to obtain or further a college education. Thank you for considering this testimony and thank you for allowing the University of Phoenix to be part of this important national discussion.

[7] For example, at the University's Online program, a financial aid disbursement would mandate completion of four courses but the amount disbursed will pay for only three courses' tuition.

STATEMENT OF THE COALITION FOR A COMPETITIVE AMERICAN WORKFORCE

In recent years, enterprising, market-oriented postsecondary education and training companies have evolved to supply the demand for educated and skilled employees and to rectify workforce deficiencies. These private sector postsecondary institutions have developed focused, market-responsive and innovative approaches that result in immediate and effective improvements in the workforce.

Proprietary postsecondary education companies offer working adults, irrespective of their financial means, access to quality, affordable, convenient and flexible educational opportunities. In addition, the industry provides employers more realistic options, such as the ability to work with proprietary companies in a cooperative effort to develop timely, relevant and flexible studies and programs, for addressing deficiencies and improving the quality of their employees.

The Coalition is a partnership of the U.S. Chamber, Corinthian Colleges, Inc., DeVry Inc., and Kaplan, Inc. These three companies are leaders among the market-oriented, innovative companies that contribute to the nation's economic development. Like other private enterprises, they operate to make a profit for their shareholders. They employ thousands of instructors, job placement counselors, admissions representatives, and other personnel. They pay Federal, State and local taxes. They have grown by accessing private and public capital markets and by reinvesting the income generated from providing educational services to students. Their success demonstrates how free enterprise goals can harmonize with a public mission: to provide career-focused degree and non-degree programs for students seeking educational and economic advancement and to provide American business and industry with a skilled and knowledgeable workforce.

These companies provide a vital means by which both those seeking to enter the workforce and those needing to retrain or upgrade knowledge and skills can better their lives. They have the potential to do so on a wider scale and believe that the reauthorization of the Higher Education Act, as amended (HEA), provides the opportunity to expand the services of for-profit schools to nontraditional students to meet the new competitive demands of the 21st Century.

Critical financing that enables individuals to pay for the education and training offered by these companies comes from the student financial assistance programs authorized by the HEA of 1965. These programs include guaranteed student loans, direct loans from the Federal Government, and Pell Grants for those with substantial financial need. The HEA's goals of expanding access to postsecondary education and training, improving its affordability, and demanding accountability for institutions' use of the public's funds match well with the focus and achievements of the members of the Coalition.

The following factors should be modified in the reauthorization of the Higher Education Act to better serve non-traditional students as well as our nation's ability to maintain a competitive workforce.

Remove Restrictions on the Availability of Financial Aid to Students in Online Education Programs

The HEA currently equates online education with correspondence schools and imposes arbitrary 50% rules that impede the offering of fully online education programs. The Web-Based Education Commission, the U.S. Department of Education, and Congress itself have all found that online education is an effective method of delivery of education and training that leverages the power of technology to create new educational opportunities, especially for working adults who cannot afford to stop their lives and enroll in traditional colleges and universities. Outmoded restrictions in the HEA should be removed and the student financial assistance programs should be opened up, with appropriate safeguards, to those who enroll in quality online educational programs.

Repeal of the "90-10" Rule

The HEA requires for-profit enterprises, like the institutions operated by the members of the Coalition, and them alone, to obtain at least 10 percent of their revenues from sources other than the student financial assistance programs. Non-profit and public institutions, even though they are advantaged through favorable tax treatment and public subsidies, are free to secure all their revenues from HEA programs. This 90-10 rule had the ostensible purpose of curbing abuses and providing an indication of educational quality. Yet, the rule has been incoherently applied. And, most importantly, it has created perverse and counterproductive incentives that conflict with the HEA's aims. Experience under the rule shows that it measures not institutional integrity and quality, but the socio-economic status of students. Simply put, the more needy an institution's students, the more they will qualify for Pell Grants and other forms of financial aid. The more aid they receive, how-

ever, the more the institution is at peril of violating the 90-10 rule. And, the consequence of violating the rule is that the institution and its students cease to be eligible for the critical financial aid programs. Thus, the rule incentives institutions either not to serve the most needy students or to raise their tuition—results that are contrary to the purposes of access and affordability in the HEA.

Increase loan limits and allow year-round eligibility for Pell Grants. Limits on the amount of loans that students may take out to finance their education and training have not been increased in over 10 years. Furthermore, the HEA currently specifies loan limits for first and second-year students that are significantly lower than the limits for third and fourth-year students. First-year students are especially affected, with a limit that is less than half of third and fourth-year students. Yet, tuition is the same for all these students, and students in the early stages of education and training need more and not less help to ensure that they will succeed. Similarly, non-traditional students, who are now the majority (73 percent), need access to education and training on a year-round basis, not on the old September–May schedule of the traditional academy. Pell Grants should be available to these students throughout the year.

Treat For-Profit Institutions and Their Students Equitably

The HEA currently has multiple definitions of institutions of higher education and distinguishes for-profit from non-profit and public institutions. These multiple definitions are a source of confusion and fail to recognize the maturation of for-profit institutions and the contributions they make to the education and training of students. These distinctions and other unfounded discriminatory practices also impede the ability of students to transfer the credits they earned at for-profit institutions to other institutions. The ability to transfer credits is more than a matter of equity. By requiring students to retake courses, the cost of education is driven up. And, the ability of the postsecondary educational system to efficiently respond to workforce needs is constrained. For-profit institutions should be recognized in the HEA as full and equal participants in its programs, and anticompetitive rules and practices should not be allowed to substitute for an examination of what students have actually learned and achieved.

STATEMENT OF THE U.S. CHAMBER OF COMMERCE

Education is directly related to successful participation in the workforce. Education and training are not keeping pace with the changing workplace. According to a report from the National Commission on Mathematics and Science Teaching for the 21st Century, sixty percent of all new jobs in the early 21st century will require skills that are possessed by only 20 percent of the current workforce. The Higher Education Act of 1965 (HEA) is one way to begin to address some of these issues that are of interest to the business community.

Previous efforts to hold institutions of higher education accountable have not been successful because they have focused on post-participation factors such as graduation rate and placement in jobs related to areas of study. The Higher Education Act provides funding for Pell grants—a significant Federal investment of funds. Pell grants form the foundation of student financial assistance, and are the gateway to participation in higher education without which many students would not attend. Access to higher education is not the only measure of success for the Pell grant program. What needs to be measured is the success with which Pell grant recipients continue to make progress toward degrees. Many of the students who receive Pell grants are at risk and may not persist in their education without a supportive learning environment. If institutions of higher education can demonstrate an increase in the persistence rate of students receiving Pell grants, then this reflects a supportive learning environment where all students can succeed.

Both businesses and educational institutions face the problem of how to hire, retain, train, and advance employees. Teacher and administrator retention is a serious issue that underscores quality. Therefore, it is necessary to strengthen initial teacher preparation programs as one way of addressing the retention issue and providing all students with highly qualified teachers. Alignment needs to be developed among the quality teacher provisions of No Child Left Behind (NCLB), State teacher licensure standards, State program standards, and State K–12 academic standards. Teachers must possess subject area competence and be cognizant of the student academic standards against which they will be judged.

In addition, educational institutions must attract nontraditional teacher and administrator candidates. Alternative routes to certification should be encouraged as a way to meet hiring needs. However, quality control measures must be in place to ensure rigorous standards.

Distance learning can provide increased flexibility in the delivery of educational services to a diverse population. It is a tool to meet the educational and training demands of nontraditional and incumbent workers. As a retention and advancement tool, distance learning has the potential to create opportunities that allow individuals to increase their skills. Additionally, the use of distance learning will relieve some of the pressure on overburdened facilities and reduce the potential cost for new facilities.

Higher education is a significant part of the pipeline that provides opportunities for life long learning to obtain knowledge and skills necessary to participate and advance in the workplace. Therefore, higher education must be aligned with K–12 education standards and the skills necessary to function and compete in the workplace.

In the 108th Congress, the following principles should be considered as they reauthorize the Higher Education Act of 1965.

1. Accountability for results—retention and graduation—from the Federal investment in student financial assistance, particularly Pell Grants. Similar to the concept of annual yearly progress in NCLB, require institutions of higher education to document annual increases in retention rates for students receiving Pell Grants over the life of the legislation. To be eligible to receive Pell Grants, students must already be making adequate academic progress as defined by the institution.

2. Transparency of requirements—alignment between high school graduation requirements, State academic achievement standards, and postsecondary entrance requirements to increase understanding of what is needed to transition from high school to postsecondary education in a competitive admissions environment and to increase the likelihood of student success once they are admitted. Alignment also is necessary between postsecondary education and workplace requirements.

3. Initial teacher preparation—NCLB provides for reform of professional development for teachers and school administrators, involving State licensure/certification agencies and local school districts. Initial teacher preparation must be addressed through HEA, and where possible support and be consistent with NCLB. Therefore the following points are suggested as a framework for reform in the HEA:

- Include teacher preparation entities as partners in reform efforts, including teacher and administrator induction programs;
- Align initial teacher preparation program requirements with certification and achievement standards for K–12 students leading to highly qualified teachers;
- Establish high quality alternative routes to certification to recruit nontraditional teacher and administrator candidates;
- Encourage collaborative efforts among employers, local education agencies and teacher preparation providers to assist individuals (with content knowledge, especially those close to retirement) in moving from their current employment into teaching; and
- Support the collection of data and information regarding program and certification requirements that will assist States in developing reciprocal agreements and aid teacher mobility.

4. Distance Learning—in order to reduce the pressure to construct new facilities, to continue to provide access and control costs, to accommodate more nontraditional students (military, working, older, and part-time), and to meet demands for incumbent worker training and skills upgrading, broaden the flexibility of institutions to offer certificate and degree-granting programs through expanded distance education programs. This flexibility should be broad enough to allow an institution to grant degrees to students who accumulate credit hours from multiple institutions recognized by the degree-granting institution.

5. Certificate Programs—for courses not leading to a degree, but necessary to advance in the workplace and validated by an employer, design a program to provide Federal student financial assistance through short-term, low interest loans; employer incentives, and tax policies. In addition, create a panel to study how to structure a system that provides students who have successfully earned several recognized certificates the option of creating portfolios that are accepted as official records/transcripts of coursework and grades that can be used toward obtaining a degree, and make recommendations to the Secretary of Education.

STATEMENT OF THE AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES

The American Association of State Colleges and Universities (AASCU), The United States Student Association (USSR), and The Public Interest Research Group (PIRG) appreciate the opportunity to respond to the committee's request for recommendations regarding the reauthorization of the Higher Education Act (HEA). On behalf of students nationwide, as well as the more than 430 public colleges, universities, and university systems in the AASCU membership, the following com-

ments and recommendations draw heavily on AASCU's 2003 Public Policy Agenda, which has been approved by the Association's membership.

EXPAND ACCESS TO HIGHER EDUCATION

AASCU firmly believes that need-based aid is the most effective Federal tool for promoting access and opportunity and encouraging persistence and completion. Research by the Department of Education has consistently shown the importance of aid in extending access to disadvantaged groups, as well as the adverse impacts of excessive work and consumer debt on persistence and completion.

Federal policy should continue to target the greatest share of resources on the neediest students, and should be sufficient to enable even the poorest students with no parental resources to finance a baccalaureate degree as a resident student at an AASCU institution. AASCU supports substantial increases in Federal grant funds and institutional flexibility in setting maximum subsidized loan amounts to minimize excessive work and consumer borrowing by students, particularly low-income students. Data from the National Center for Education Statistics (NCES) indicate that students working less than 15 hours per week had better persistence rates than those working the average, which was 22 hours per week in Academic Year 1999–2000.

To make this goal possible, AASCU estimates that Federal grant and loan resources will have to cover approximately two-thirds of the total cost of attendance of the lowest income student, which averages about $13,000 per year at a public 4-year institution. NCES data indicate that low-income students are much more likely to receive Federal student aid funds than State or institutional funds. But those students who receive significant funds from non-federal sources may be able to reduce their loan and work responsibilities.

Federal Grants

AASCU maintains that Pell Grants are the most efficient and effective delivery mechanism for ensuring broad higher education access and opportunity. We will continue to advocate increases in the maximum award for the Pell Grant program, in which approximately half the recipients have family incomes so low that they have no expected family contribution under the Federal statute. Keeping the focus of Pell Grants on the financially needy should be one of the most important objectives in HEA reauthorization.

The Federal Supplemental Education Opportunity Grant Study (CWS) programs also provide essential need-based student assistance, promoting timely program completion with minimal student indebtedness.

Because these programs are discretionary budget items, and Congress appropriates funding for these items on an annual basis, they must compete for funding with other domestic discretionary spending, which restricts funding growth. AASCU proposes that the Pell Grant authorization be modified to change the way that the program is managed and funded. Specifically, once Congress has set the Pell Grant maximum, AASCU proposes that funding be provided, even if program estimates change, without the need for a supplemental appropriation.

AASCU supports the Leveraging Educational Assistance Partnerships (LEAP) program as an important Federal-State link in providing need-based aid to students. Additionally, AASCU urges the Congress to consider changes in the program formula that would provide a more meaningful incentive for States with little or no need-based aid programming to strengthen their efforts in this area.

Federal Loans

Since the Federal Family Education Loan Program and the Direct Loan Program receive mandatory funding through the Federal budget, loan volume has increased more dramatically than Pell Grant funding in recent years. Annual loan volume increased from $36 billion in fiscal year 1998 to $55 billion in fiscal year 2002. The median debt of graduates of public institutions more than doubled between 1993 and 2000. According to the NCES median debt for low-income dependent graduates increased from $6,400 to $15,000, while median debt for low-income independent graduates jumped from $7,600 to $18,000. Over the same period, the portion of students borrowing increased from 38 percent to 60 percent.

Moreover, there is increasing evidence that the debt-to-income ratio for many students leaving public 4-year institutions exceeds 10 percent in the first few years after leaving college; 10 percent is widely regarded as a reasonable limit to ensure that borrowers can repay their loans without excessive financial hardship. Data from the Department indicate that 31 percent of borrowers from public 4-year institutions entering repayment in 1997 had debt-to-income ratios above 10 percent.

A recent study by Nellie Mae indicates that debt is causing more hardship for low-income borrowers than for other borrowers, stating "Pell recipients who left school without completing a degree are much more likely than other noncompleters to report that loans played a significant role in this decision." Additionally, "borrowers who received Pell Grants face more difficult financial circumstances after graduation, as well as starting salaries, current earnings, and current household incomes that are all significantly lower than those reported by other borrowers. As a result, Pell recipients have higher average payment-to-income ratios than borrowers who came from higher-income families."

Therefore, AASCU advocates the following to help students manage and minimize their debt burdens:

• AASCU calls for the elimination of all up-front fees in the Federal student loan programs.

• AASCU supports extension of repayment (when appropriate) for both the FFEL and Direct Loan programs.

• AASCU advocates income-contingent repayment for borrowers in both the FFEL and Direct Loan programs, to help those with debt-to-income ratios so unfavorable that they cannot afford to cover interest payments on their debt.

• AASCU firmly believes that borrowers should receive periodic information from lenders, servicers, guaranty agencies, and the Department of Education, as appropriate, recommending that they review their payments relative to their current financial circumstances, to remain in good status on their payments. Moreover, such information would help students to avoid unnecessary extension of repayment and interest payments as their financial circumstances improve.

• AASCU, joining with the U.S. Public Interest Research Groups (PIRG), and the United States Student Association (USSA), recommend that the current aggregate borrowing limits in the Federal student loan programs be maintained, and propose that alternatives to increases in aggregate limits be considered and implemented. Such alternatives include flexibility in the first and second years on annual limits, and the creation of a zero interest loan program for students who have need beyond current annual loan limits. Any proposal along these lines would effectively target students who require additional assistance, and ensure that the extra loan burden they undertake would not significantly raise their overall debt burden.

Additionally, AASCU calls on the Department of Education to focus on issues related to borrower default.

AASCU supports changes to the Federal loan programs to eliminate default by ensuring that the Department of Education, the guaranty agencies, and the lenders maintain contact with all borrowers after they leave college, and place borrowers in an appropriate repayment plan. We believe that the Federal Government has the tools to make sure that no borrower in good faith is 270 days delinquent on a Federal loan without making a payment based on a repayment plan appropriate to the borrower's financial circumstances. If the borrower has sufficient income and/or assets and is not willing to make payments in good faith, we believe the government's authority to attach wages, retain Federal income tax refunds, or sue is sufficient to begin the repayment process.

AASCU further recommends more in-depth study of the causes of default, as more than 50,000 borrowers from public 4-year institutions currently lapse into default each year. While it is clear that lenders and guaranty agencies often have trouble locating borrowers after they leave school, AASCU calls on the Department of Education to determine what role "skips" (borrowers unable to be located by lenders and guaranty agencies) play in total defaults. If the Department needs further authority to locate borrowers after they leave college, AASCU supports legislative changes to provide such authority.

AASCU joins with the recommendations of other higher education associations to the Department of Education, dated February 28, 2003, in advocating for the repeal of provisions in current law that result in larger payments to guaranty agencies in the event of borrower default. Further, AASCU agrees that the key role of the guaranty agencies should be to assist student and parent borrowers to successfully complete loan repayment, and recommends the following steps to achieve this goal: strengthen the guaranty role in providing early and aggressive management/default prevention programs; increase the use of performance incentives linked to the borrower repayment; and retain and expand the Secretary's current authority to enter into Voluntary Flexible Agreements with guarantors and encourage the development of best practices.

Tax Proposals

While AASCU believes that the Federal tax code should not be viewed as a primary mechanism for delivering student financial aid, we offer several recommenda-

tions to better align existing HEA and non-HEA programs with the goals of higher education access and opportunity.

AASCU, working with PIRG, USSA, and other groups, will actively pursue legislation that would provide a tax credit for student loan interest paid by low-income borrowers.

AASCU working with PIRG, USSA, and other groups, will advance a proposal to establish a Federal tax exemption for loan forgiveness proceeds for borrowers after 25 years of repayment in the income-contingent repayment program.

AASCU believes that untaxed interest earnings from prepaid tuition plans, college savings plans, or Coverdell Education Savings Accounts should not be considered as income and therefore excluded in the calculation of expected family contribution (EFC).

AASCU will advocate for changes in the HOPE and Lifetime Learning Tax Credits that will make them more accessible to the neediest students, including refundability, expansion to non-tuition expenses, and removal of the offset against Pell and SEOG awards. However, AASCU believes that Federal financial aid programs that more directly benefit the neediest students (i.e. Pell Grants) are a higher policy priority than expansion of tax benefits.

AASCU will continue to pursue the repeal of the current administrative and reporting provisions of the HOPE and Lifetime Learning Tax Credits, and replace them with a reporting structure that is simpler and less burdensome for institutions.

State colleges and universities are becoming increasingly reliant on private gifts to support their infrastructure and activities. Therefore, AASCU supports proposals in the President's fiscal year 2004 budget that:

- Would permit individuals to transfer proceeds from an Individual Retirement Account (IRA) tax-free to charitable and other non-profit organizations, and
- Would allow taxpayers that do not itemize deductions on their Federal income tax returns to claim a deduction for charitable contributions.

COLLEGE COSTS AND AFFORDABILITY

AASCU commends Congress for the study of college costs mandated by the 1998 Amendments to the Higher Education Act (HEA). The study, conducted by the National Center of Educational Statistics (LACES), found that changes in State appropriations are the dominant factor affecting changes in public college and university prices. LACES also commissioned a volume of papers by distinguished economists and college presidents on the factors involved in setting tuition at public and independent institutions. AASCU has found these to be extremely useful in detailing the financial pressures on colleges in recent years, as well as the choices that States and institutions make to provide educational opportunity at affordable prices.

The shift in the financing of public higher education has been widely documented by those concerned about how students finance higher education. Bruce Johnstone, now professor of economics and higher education finance at SUNY Buffalo, was president of SUNY institutions for 9 years, and chancellor of the SUNY System for 6 years, and, during his tenure, had to cut faculty, staff, and operating expenses, totaling approximately 20 percent of the full-time faculty and staff of the state-operated system. Johnstone wrote in 1999, "Rising tuition in the public sector is overwhelmingly caused by the withdrawal of State tax revenue and a shift in the relative cost burden from the taxpayer to students and parents." Indeed, State spending on higher education as a share of personal disposable income fell more than 17 percent from fiscal year 1981 to fiscal year 2001.

In spite of significant increases during the last decade, tuition at public 4-year institutions averaged $4,081 in Academic Year (AY) 2002–2003 for in-state students, which is manageable for most middle-class families. State investment in 4-year institutions totaled $63.6 billion in fiscal year 2003 to provide the major support for public higher education.

Non-tuition expenses, however, add another $10,000–$12,000 for dependent residential students, and more than that for independent students with dependents.

Federal and State student aid is essential to providing access for low-income students if public 4-year institutions are to be affordable for these students.

ACCOUNTABILITY

AASCU recommends that the Department of Education make fuller use of existing research and program data (e.g. persistence of Pell Grant recipients and beginning postsecondary students) to assess program efficacy before contemplating any new reporting mandates, and to carefully examine current institutional data collection with the goal of eliminating collections that yield data of little or no utility.

Moreover, AASCU strongly encourages the Department of Education to recognize the central role of the States in establishing the mission of public institutions and promoting program integrity and accountability, and to work with the States to maintain appropriate and complementary roles.

AASCU offers the following comments regarding changes in HEA that would reduce unproductive regulation and promote institutional innovation while maintaining an appropriate level of accountability for Federal funds:

• Generally speaking, AASCU strongly advocates for a reduction in the number and scope of Federal regulations. We believe that the current "one size fits all" approach to gatekeeping and oversight should be replaced by a system of equitable and appropriate regulation of participating institutions by type and control. Such an approach would allow the Department of Education to focus its limited enforcement resources on problem schools, and alleviate the unnecessary burdens imposed on other institutions.

• AASCU calls for revisions to HEA provisions (e.g. those pertaining to return of Title IV funds) that are unduly harsh on many high-risk, low-income students who used Federal funds to attempt postsecondary education and who have left school, including servicemembers called to active duty.

IMPROVE OUR NATION'S TEACHER TRAINING PROGRAMS

AASCU strongly recommends that Title II of the Higher Education Act be aligned with relevant provisions of the No Child Left Behind Act (NCLB). This alignment must cover the preparation of all school personnel. The key to increased alignment is the role of the States in two areas—licensure, which was addressed in NCLB, and teacher preparation program approval, which should be addressed in the Higher Education Act.

For this reason, AASCU recommends that resources should be provided through Title II of HEA to States for three purposes:

1. Implementing reforms that aid teacher preparation programs in preparing teachers and other school personnel who are highly qualified, as required by NCLB and consistent with the applicable State's approved plan for implementing NCLB;

2. Reforming State teacher preparation program approval standards and processes, as such reforms should aid in aligning K–12 competency standards, teacher licensure standards, and teacher preparation program standards; and

3. Allowing States to use their funds in support of the activities authorized under section 2113 (C) of NCLB.

In addition to the State grants, AASCU recommends continuation of the partnership grants. However, the definition of "eligible partnership" should be modified to parallel the definition of partnership found in Title II of NCLB. The required partners should be a private or State institution of higher education and the division of the institution that prepares teachers and principals, a school of arts and sciences, and a local educational agency (LEA), with priority given to high-need LEAs. The partnership grants should have three required activities: (1) implementing reforms to strengthen and enhance teacher preparation programs so that new teachers are highly qualified; (2) providing high quality clinical experiences, which should be done in collaboration for the benefit of classroom teachers, institutional faculty, and teacher candidates; and, (3) supporting professional development for all school personnel.

The Teacher Recruitment Grant program and the Preparing Tomorrows Teacher to Use Technology program (PT3) should be reauthorized. AASCU stands ready to work with Congress to address any concerns pertaining to section 207.

PROMOTE QUALITY EDUCATIONAL OPPORTUNITIES

AASCU supports current law that calls for the Federal Government to determine the legal authority of an institution to operate within a State, the accreditation status, and the administrative capacity and financial responsibility for institutions that expect to qualify for participation in programs under the Higher Education Act. The Federal Government should continue to exercise oversight through its current role of recognizing agencies or associations that perform the function of assessing the quality of education.

Accreditation works well, but it could be improved. The acceptance of status quo will not maintain the public trust. To reinforce higher education's commitment to maintain this trust, AASCU recommends that accreditation reports of institutional reviews be made public either by the review authority or the institution. The assurance afforded by accreditation is essential, especially for the most at-risk and economically disadvantaged populations. Agencies or associations responsible for as-

sessing the quality of education under voluntary self-regulation must step up their efforts to streamline and strengthen accreditation.

New challenges for the current system are present in the growth of distance education. AASCU supports the proposal in the February 28, 2003 letter of the higher education associations that the Distance Education Demonstration Program authorized in HEA Section 486 become the prototype for a permanent program for non-traditional delivery of higher education:

"The Higher Education Act should permit and support a carefully monitored expansion of programs that use innovative means to deliver education programs, while ensuring continued program integrity . . . "

SIMPLIFY THE STUDENT FINANCIAL AID PROCESS

AASCU supports the elimination of non-germane aid eligibility requirements, such as those related to drug convictions and Selective Service registration.

AASCU encourages Congress to review carefully the operation of the Performance Based Organization (PBO) in modernizing the systems for delivering student aid and the repayment of student loans.

PROMOTE STUDENT ACADEMIC PREPARATION FOR POSTSECONDARY EDUCATION

AASCU advocates for increased funding of the TRIO and GEAR UP programs, specifically:

Expansion of those programs to reach community-based organizations and other groups that serve underrepresented students, and

Aid to colleges and universities for tracking and providing support systems for under prepared college students.

Funding for these programs is important to increasing the college readiness of high school students, as well as the persistence and completion of at-risk college students.

Additionally, AASCU urges policymakers at both the Federal and State levels to take a long-term, comprehensive approach to developmental education, creating a State/Federal partnership initiative to provide resources for institutions enrolling a significant number of academically at-risk students.

As the Senate prepares to take up this important legislation, AASCU, USSA and PIRG stand ready to work with policymakers to promote college access and success for the nation's students.

[Whereupon, at 11:25 a.m., the committee was adjourned.]

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