North Carolina has been fortunate to have representatives in Congress who thoroughly understand the needs and priorities of our colleges and universities -- such as David Price, my colleague on the Duke University faculty; Bob Etheridge, former North Carolina Superintendent of Education; and Duke University President Emeritus and former United States Senator Terry Sanford. As far as I know, no other member of Congress is holding a public forum like this as part of the Higher Education Act reauthorization process. I commend Congressman Price for providing this exceptional opportunity to make our concerns known in Washington.

I also commend the members of the 105th Congress for their unprecedented work this year to assure that all Americans have access to education beyond high school. The recent budget agreement is a bold and powerful bipartisan commitment by the President and the Congress to the American people, and also a recognition that education is the best hope for the long-term economic strength of our country. The 105th Congress has approved an impressive array of provisions that will provide increased financial assistance for needy students, tax incentives to help families save for college and favorable tax treatment for student borrowers.

This year Congress will have another opportunity to strengthen higher education as it undertakes the reauthorization of the Higher Education Act. The HEA has helped to open the doors of higher education to millions of students who otherwise would have lacked the resources to attend college. Today, thanks to an array of federal loan and grant programs, a larger percentage of lower-income students than ever before are able to attend college. In an era when it is commonplace to question the value of federal programs, the provisions of the Higher Education Act that support our nation's commitment to helping young people attend college is exactly the kind of investment in human capital that the federal government should make. The act is an indispensable vehicle to help keep college affordable for lower- and middle-income families -- the majority of the families that we serve.

We are proud of the quality of the educational experience that we offer at Duke University. The quality of our faculty and programs has been recognized by many national surveys that rank Duke among the best universities in the nation. Providing the highest quality educational experience for our students is not inexpensive. Our relatively low class size, the strength of our faculty in both teaching and research, the excellence and accessibility of our libraries, the need for state-of-the-art laboratories for teaching and research, and the many other programs that we offer to enrich the lives of students, both inside and outside the classroom, are expensive.

At the same time, we are committed to being accessible to students of North Carolina and around the country. Indeed, Duke is one of a small and decreasing number of colleges and universities nationwide to admit students without regard for their financial circumstances. At Duke, an applicant is evaluated for academic potential and the ability to contribute to the educational experience of the entire student body. If the student is admitted, the university then commits to meeting 100 percent of his or her demonstrated need. This is an expensive commitment on the part of the university to offer the highest quality Duke education to the best students regardless of their socioeconomic background. And while our tuition now exceeds $21,000, we are able to maintain our commitment to a diverse student body, largely because of the extraordinary generosity of our alumni and friends who believe that Duke should be accessible not only to the rich. Scholarships and grants from private funds, and funds from federal and state student aid programs, combine to make it possible for many students to come to Duke who otherwise would be unable to attend. Four of every ten Duke students receive need-based financial aid.

There has been much discussion nationally about the affordability of a college education. Duke trustees, faculty, and administration are all very much aware of the need to ensure that we use our limited resources in ways that most benefit the missions of the university in teaching, research, and service. We have worked systematically to reduce our administrative costs, and in each of the last few years, more than $1 million saved as a result has been reallocated for investment in academic programs.

I emphasize this point because I am very much aware of national concern about the cost of college. I hear it from parents and students,
and certainly it has been the topic of considerable attention in the national news media. College costs have gone up. At the same time, the flurry of public concern about the issue stems to some degree from a lack of understanding. Preliminary evidence suggests that the public overestimates the price of a college education and underestimates the amount of financial aid that is available to help families meet college costs. During the last two years, the American Council on Education, working in concert with other higher education associations in Washington, has conducted several studies to determine what the public thinks a college education costs. The findings are consistent. The public greatly overestimates the cost of a college education. In a July 1996 survey, a representative sample of 1,000 adults from across the nation were asked how much they thought it cost to attend four different types of colleges -- a public community college, a public university, a private liberal arts college, and a large private university. In some cases, the estimates were more than three times higher than the actual price. The survey answers and the actual average prices are:

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Public Estimate</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public community college</td>
<td>$6,295</td>
<td>$1,194</td>
</tr>
<tr>
<td>Public university</td>
<td>$9,599</td>
<td>$2,982</td>
</tr>
<tr>
<td>Private liberal arts college</td>
<td>$13,824</td>
<td>$10,698</td>
</tr>
<tr>
<td>Large private university</td>
<td>$20,410</td>
<td>$14,510</td>
</tr>
</tbody>
</table>

In another survey, the public was asked to estimate the actual price and a "fair price" for college tuition. In the case of public two-year and four-year institutions, the "fair price" specified by the public actually exceeded the average price that is charged by those institutions.

The availability of student aid reduces for many families the price of a college education. The nonpartisan Congressional Budget Office recently estimated that when student aid is considered, more than 50 percent of all students nationally pay less than $3,000 a year in tuition, and just one student out of seven faces charges above $5,000. Unfortunately, surveys make clear that the public significantly overestimates college costs, underestimates the total amount of financial aid that is available, and also underestimates the number of students who will receive it and the amount they will receive. These misperceptions were held by respondents across the board, whether or not they had children in college. In short, higher education has the worst of both worlds. The public overestimates college costs and underestimates financial aid. When this fact is coupled with a tendency of the media to focus on prices at the most selective and expensive private colleges, without attention to the array of financial aid programs available through those institutions, it is no wonder that the public is concerned about this issue.

Last spring, The Chronicle of Higher Education, the leading newspaper that covers issues affecting higher education, assigned one of its senior editors to do an in-depth analysis of factors affecting tuition at Duke. When we decided to cooperate in this effort to provide a more comprehensive review of the realities of tuition and college costs, we did so with considerable trepidation, given the way in which similar stories had been covered by more mainstream national media. I would like to enclose with my testimony for the record a copy of that article, for it is the first report I have seen that has looked in-depth at this issue, and that documents the extent to which Duke and several other leading institutions are investing their own resources to ensure that high quality education is both accessible and affordable. Indeed, this is the first article I have seen anywhere which demonstrates that the actual cost of the education provided by the institution far exceeds the tuition price we charge, with the difference made up of private funds and other resources the university commits to support the educational enterprise. For example, at Duke (and at several independent colleges and universities) every student who attends -- even one who pays full tuition -- receives an implicit scholarship, resulting from investment of Duke resources, of some $11,000 a year. And those who receive need-based financial aid obviously receive even greater scholarship support. Just as private institutions such as Duke provide a subsidy for students, public institutions get a similar subsidy in the form of state funds, which keeps tuition relatively low and supports access to education.

With the federal government having made an unprecedented commitment in the recent budget agreement to increase access to higher education and to provide incentives for students and their families to save for college, and with universities across the land making increasing investments in financial aid from their own resources, it is unfortunate that there continues to be such a lack of understanding among the American people about the actual cost of attending college and the availability of financial aid. I can think of no effort more important than for the federal government and colleges and universities to work together to correct these misunderstandings so that bright people from all socioeconomic backgrounds are not deterred from pursuing a college education.

THE 'PERFECTING' ROLE

During the reauthorizations of the Higher Education Act in 1992, 1986 and 1980, Congress looked at fundamental changes that were
found to be necessary at the time. Over this period, Congress has significantly shifted its approach to financial aid from grant to loan programs. This has placed a greater burden on families and on colleges and universities, which have made up for the drop in available federal grant support by steadily committing larger amounts of direct aid to students from institutional operating budgets, with consequent implications for rising tuitions. This is one of the most significant challenges we now face.

By most other measures, the HEA is now working fairly well. I would urge Congress during this reauthorization process to play only a "perfecting" role --

1. by maintaining and strengthening the focus on financially needy and moderate-income students;

2. by strengthening campus based programs [Supplemental Educational Opportunity Grant, Federal Work-Study, and Perkins Loan programs] so that, together with Pell Grants, they will help reduce student borrowing;

3. by making borrowing from the federal student loan programs less expensive for students;

4. by allowing institutions with low loan default rates to exercise greater flexibility in packaging loans within the existing cumulative maximums for undergraduates and for graduate and professional students, respectively;

5. by developing incentives for students and families to save for college, and modifying needs analysis formulas to recognize savings efforts in determining need

6 and by modernizing the Department of Education and student aid processing.

In looking at means of perfecting the HEA, I also urge Congress to consider regulatory reform. Colleges and universities are subject to scores of federal regulations that affect all segments of our operations -- from minimum wage laws to the disposal of hazardous wastes -- and that add to our administrative burden. The reauthorizing committee should look at the HEA with an eye toward eliminating statutory provisions that have led to the development of regulations that are excessive, redundant and costly to implement, and that contribute little or nothing to campus accountability for federal financial aid programs. I am confident that my colleagues on the next panel this morning will expand upon this theme.

GRADUATE EDUCATION

While many of the provisions of the HEA are designed to help undergraduates, I urge the federal government to maintain a strong and visible role in financing graduate education as well. A strong federal investment in graduate education is essential if our nation is to produce the scientists and engineers needed to conduct the nation's research and development into the next century. Without a healthy pipeline of new, well-trained scientists, engineers, and physician researchers, the United States will not be able to maintain its enviable position as the world leader in science and technology. We must encourage the nation's most academically talented young men and women to pursue research careers. Completing a graduate degree, particularly in areas requiring sophisticated research, takes years of study. Add to this the lost income and the cost of earning a doctorate, and there is little wonder that many of the best students pursue other goals.

Because graduate education is a national enterprise without a clearly defined linkage between initial investment and subsequent returns, industry and the states are unlikely to make the substantial investments required to ensure that national needs are met. The Department of Education can play a unique role in the support of graduate education because, unlike other federal agencies, its programs consider both academic excellence and financial need. The department also has a critical role in providing support for students in the humanities and social sciences. Title IX graduate programs -- the Harris Fellowships, Javits Fellowships, Graduate
Assistance in Areas of National Need (GAANN), and Faculty Development Fellowships -- are frequently the only grant or fellowship aid available to graduate students in some areas of study.

Unfortunately, and possibly unwittingly, the federal government has been creating disincentives for students to pursue post-baccalaureate education and training on which much of the nation's future economic progress will depend. As Title IX and other graduate student aid diminishes, as it has in recent years, graduate students are increasingly incurring larger amounts of debt for student loans. At Duke, for example, 10 to 12 percent of graduate students in Arts and Sciences have student loans with an average indebtedness upon graduation of $20,000. In our Fuqua School of Business, 80 to 85 percent of the students have loans, and the average indebtedness for May 1997 graduates was $45,740. This is a significant financial burden for a young person entering any career path, and it is especially daunting to those students who want to enter public service.

A coalition of my colleagues at the nation's colleges and universities has recommended that the Title IX graduate programs be combined into a single, three-part National Graduate Fellowship Program that would award grants competitively to strong academic departments and talented but financially needy students. To meet the full range of student opportunity and national interest, the coalition recommends that the program have three components:

1. traineeships in areas of national need;

2. portable fellowships in the humanities, social sciences and the arts, awarded directly to the student for study at the institution of his or her choice; and

3. grants to increase the participation of students from underrepresented demographic groups.

It is difficult to overstate the importance of graduate education to the nation's long-term economic competitiveness, the health of its citizens, our national security, and the quality of life of our people. I encourage Congress to hold hearings on the steps the Department of Education can take to advance the national interest in graduate education most effectively. Such an examination would reveal why the federal role is crucial, and would provide a compelling justification for continued federal investment.

EDUCATION IN THE GLOBAL CONTEXT

We are seeing immense growth in the communications industry in the combined use of computer and video technology, and the use of satellites for video teleconferencing. Such instant global communication brings people together, permitting face-to-face discussions between people in distant locations. This technology is having a significant impact on teaching, learning and research at America's colleges and universities.

As an example, I might cite Duke University's Fuqua School of Business innovative "Global Executive MBA." The program combines classroom sites around the globe with advanced interactive communications technologies that enable business executives enrolled in the program, both in the United States and in other nations, to learn from leading Duke faculty members. These students spend more time "on line" than in the classroom. Many corporate employers pay the tuition that permits their employees to pursue this additional education. Some 25 percent of these business executives are self-employed, however, and must have access to student loans and other means of assistance to finance their studies. Considering the rate of growth in the nation's small businesses, financial assistance is important to assure that these companies can afford to have their employees pursue continuing education, work force retraining, or to earn a degree. The tuition support provided by employers to help advance employees' skills and their ability to contribute to society in a period of rapid change in technology should not lead to increased taxes for the employees. Regrettably, the recently passed tax bill did not provide needed incentives in this regard. I encourage Congress to look into the promise of distance education, examine the issues surrounding federal student aid for participants in such programs, and seek appropriate ways to ensure that students have access to the benefits of distance education.

Given the increasingly global marketplace, international education in all academic disciplines is critical to the nation's long-range strategic interests. The Title VI international education and foreign language programs should be updated and enhanced --

1 1. to address post-Cold War needs and to strengthen the nation's expertise in critical languages, issues and world areas;
2. to encourage increased cooperation to build national capacity in these areas; and

3. to incorporate new technologies to meet the nation's strategic needs.

Leadership in international education must be a partnership between the Department of Education and higher education institutions. In our increasingly global economy, characterized by rapid advances in technology, the kinds of artificial boundaries we associate with national borders are increasingly less relevant as far as knowledge is concerned. As global markets expand, we need to have people educated in the cultures and languages of other parts of the world. Only the federal government, in partnership with our nation's colleges and universities, can ensure that we have the necessary intellectual capacity and leadership to compete effectively in the economies that promise to drive the twenty-first century.