U.S. DEPARTMENT OF EDUCATION

+ + + + +

A NATIONAL DIALOGUE: THE SECRETARY OF EDUCATION'S COMMISSION ON THE FUTURE OF HIGHER EDUCATION

+ + + + +

PUBLIC HEARING

+ + + + +

MONDAY, MARCH 20, 2006

+ + + + +

The Public Hearing was convened in State Suite B of the Fairmont Copley Plaza Hotel, 138 St. James Avenue, Boston, Massachusetts, at 9:00 a.m., Jim Duderstadt, Acting Chair, presiding.

COMMISSIONERS PRESENT:

NICHOLAS DONOFRIO	
JIM DUDERSTADT	
CHARLENE NUNLEY	
CHERYL OLDHAM	Executive Director
RICHARD VEDDER	
CHARLES VEST	

PRESENTERS:

SUSAN HOCKFIELD	President, Massachusetts Institute of Technology
JACK WILSON	President, The University of Massachusetts (System)
DENNIS D. BERKEY	President, Worcester Polytechnic Institute
ROBERT BROWN	President, Boston University
RICHARD MILLER	President, Olin College of Engineering
LAWRENCE S. BACOW	President, Tufts University
MARY FIFIELD	President, Bunker Hill Community College
STEPHEN RENO	Chancellor, University System of New Hampshire
VALERIE LEWIS	Commissioner, Connecticut Board of Governors for Higher Education

PUBLIC COMMENT:

RICHARD ALLEGRA
RON BERSE

JESSICA BIBEAU
BARBARA BRITTINGHAM
CATHERINE BURDELL
COURTNEY BURN
JOSHUA CHAISSON
PETER CHU
ADAM CORL
JOHN DAVIDS
JONATHAN DeFELICE
MICHAEL DENNEHY
RICHARD DOHERTY
JOHN FOLEY
LINDSAY FOLEY
LAURIE GANZ
BEN GORDON
DEBORAH HART
RISHI S. JAITLY
JOHN LEAVITTS
PRECIOUS KOFIE
JESSICA LAFLAMME
ED MARTH
ELVIS MENDEZ
GUY MUBARAK
ROB O'CONNELL
EILEEN O'LEARY
JENNIFER PAE
LEN PAOLILLO
SCOTT PEACH
KRISTI PIERCE
JASON PRAMAS
JERRI ROACH
JIM ROONEY
JAMES SCHMOTTER
KATIE SCHOEN
MAHESH SHARMA
SUZANNE SHEA
JAHANTAB SIDDIQUI
CHAD SINCLAIRE
WICK SLOAN
PRISCILLA WALKER

A G E N D A

PRESENTERS

P-R-O-C-E-E-D-I-N-G-S

(9:00 a.m.)

DR. DUDERSTADT: Okay. I'd like to call this morning's hearing to order. I'm Jim Duderstadt, former President of the University of Michigan, one who enjoys returning to the Boston and New England area, having lent a daughter to Harvard and a son-in-law to Boston University, and a Provost to MIT.

We're delighted to be able to hold this hearing for the Secretary of Education's Commission On The Future of Higher Education in America in the Boston area, because the New England area in many ways represents the epicenter for quality in higher education in America, and we're very interested in hearing from leaders and others of higher education in this region.

The Commission was launched last fall in September to engage in a national dialogue to hear what people believe to be the higher education needs of the nation, both today and in the future, to learn a little bit more about how we access the current higher education enterprise in the United States and its capability for meeting those needs. And then, perhaps, to arrive at a series of recommendations which we'll be making in a report we're due to deliver to the Secretary of Education, Margaret Spellings, in

August of this year, so it's a fairly quick time cycle for this effort.

The Commission numbers 20. We have six of the Commissioners here today, and I'd like to have them each introduce themselves. I guess we're down to five now. Okay. We lost one, Arthur Rothkopf on the way. Chuck, why don't you introduce yourself, and we'll go down to introduce the other Commissioners.

DR. VEST: Chuck Vest, the former President of MIT, and my own personal background involved several different slices of higher education. I'm a graduate of West Virginia University, did my graduate work at the University of Michigan, served one year as Visiting Professor at Stanford.

DR. NUNLEY: Good morning. I'm Charlene Nunley, President of Montgomery College in Maryland. Montgomery College, because a lot of people don't realize it, is a community college, and I represent community colleges on the Commission.

MR. DONOFRIO: Good morning. I'm Nick Donofrio, Executive Vice President for Innovation and Technology at IBM. I've been there for 42 years.

DR. VEDDER: I'm Rich Vedder. I've been a Professor for 41 years at Ohio University. I used to say I was the only one on the Commission that actually teaches but that's not quite true. Jim teaches,

several of us actually still teach, and I'm most notorious for a book I wrote on higher ed called *Going Broke By Degree*.

DR. DUDERSTADT: Thank you very much. This is a federal commission, operates under the Federal Advisory Commission Act and, therefore, there are certain protocols involved that will govern today's hearing. I'd like to turn to Cheryl Oldham, who is the Staff Director of the Commission, to make some comments on that process.

MS. OLDHAM: Thanks, Jim. We're going to start the morning session with invited presenters from the National Higher Education Leaders from Boston and New England, and after lunch we'll have the opportunity to hear from the public. And ask that if you haven't yet checked in at the registration, to please do so. You must be registered to provide testimony this afternoon, so please see one of our staff members outside to get a number, and that's how we will call people this afternoon. So if you can try and remain in this vicinity after lunch. We'll start as promptly as we can at 1:00, the afternoon session. We've got quite a response to our offer for public testimony, and so we've got a pretty packed afternoon, but we will wrap up by 4, so if you haven't -- you registered and you didn't get the opportunity to

present to the Commission today, we certainly welcome testimony to be provided to us that we can share amongst the Commissioners.

This afternoon, and I'll go over this again when we get back together a little bit before 1, but we've got a timer here, so everyone is allowed three minutes. You'll see the green light, and then it'll go to yellow when there's about 30 seconds left, and then it'll go to red, and there'll be a beep, and I'll turn it off quickly so it won't be too obnoxious, but that's how we kind of need to keep it so we can get as many people as possible to testify this afternoon as we can.

Again, if you haven't registered yet, please do so out front and we'll try to accommodate as many of you as possible. Thanks.

DR. DUDERSTADT: This morning our invited speakers, we've planned for roughly 20 minutes of dialogue. Although this seems like a very formal process, we really want to have a discussion this morning in which there's an interaction between members of the Commission and leaders of higher education in this area. And, therefore, since many of you presented written testimony, if you could kind of summarize the key points in that, and then kind of get into a Q&A with members of the Commission, we think

that might be the most constructive way to approach this, keeping it as informal as possible.

We'll keep an eye on the clock so we don't go passed the 20 minutes. But as I say, I hope that the fact that we're a foot above you does not mean that we're not peers in this discussion. Actually, maybe we should be lower.

Let's begin with President Susan Hockfield, President of MIT. President Hockfield.

DR. HOCKFIELD: Thank you. Good morning. I want to thank the Commission for the opportunity to participate in this important national dialogue. But before I talk about the work our colleges and universities do, I want to describe the context in which we operate. And as I see that context, two issues stand out; opportunity and preparation. First, opportunity.

Higher education is the key to success in American society, and the basis of our strength as a knowledge-based economy. Today's college graduation rates correlate closely with family income. To sustain our robust democracy and to compete in a global market place, we need to send an even higher percentage of our population on to college and to graduation.

At MIT we admit undergraduates on the

basis of academic merit alone, without reference to their ability to pay. And we do not give advantage in admission to athletes, or to children of alumni. We award MIT scholarship aid solely on the basis of need, and we meet the full need of all admitted students.

Next year, 57 percent of our 4,000 undergraduates will receive need-based scholarships from MIT averaging $25,500 per student. These policies have made the American dream come true for many MIT alumni. And true to our decades old admission policies, about 15 percent of MIT students come from families with incomes less than $40,000 a year. To help ease the debt burden of our students with the greatest financial need, beginning next fall we will provide matching funds for the Federal Pell Grants for our students.

Next year, MIT will grant more than $60 million in scholarship aid. These financial aid commitments have significant opportunity costs. Funds used for financial aid will not be available for other educational investments, such as the extremely expensive classroom and laboratory facilities needed to teach science and engineering today.

The correlation between graduation rates and family income signals a greater need for financial aid if we are serious about expanding access. Yet,

Congress recently cut more than $12 billion from the federal budget for student loans over the next five years, and the maximum amount of a Pell Grant has been frozen for the last four years. All this, while the cost of quality higher education, especially in the sciences and engineering, is rising.

Higher education is the best recipe we have for improving economic opportunity and the quality of life for our citizens. I hope the Commission will help us develop a better understanding of the relationships between financial resources and college success, because we need an informed public discussion of how the nation can afford the education our young people need.

Now just as we need to expand opportunity for higher education, we also need to strengthen preparation for it, especially in math and science. I urge the Commission to bear in mind that higher education works with the products of our K-12 education, which by many measures fails a large fraction of American children. Colleges and universities cannot take on the core work of primary or secondary education. We lack the necessary expertise, and our primary obligation must be to our own students, but we can build better bridges between K-12 education and college, and at MIT we want to do

all we can to help.

In an era in which science and technology increasingly shape major policy issues, responsible citizenship itself requires mathematic and scientific literacy. MIT will continue our efforts to help strengthen K-12 math and science education.

Now while the issues of access and preparation effect all colleges and universities, as I turn to higher education itself, I will speak a bit more narrowly from the perspective of the American Research University. American Research Universities have developed a uniquely successful integration of teaching and research. At MIT, we benefit from the many distinguished researchers who are deeply committed to undergraduate education. This term, Professor Richard Schrock, who received the Nobel Prize in chemistry last December, is teaching "Introductory Inorganic Chemistry". And last fall, Wolfgang Ketterle, who won the Nobel Prize in physics in 2001, taught three sections, 20 students apiece, of Freshman Physics. And our undergraduates participate in cutting edge research in an activity we call UROP, which I'll describe shortly.

This distinctly American integration of teaching research allows innovations to flow from research into teaching in real-time, and has been

spectacularly successful. One respected rating system recently concluded that 17 of the world's top 20 universities are in the United States. This success has depended on our ability to foster innovation in teaching, as well as research. And this success has bred growing competition from universities around the world.

Today, unprecedented opportunities at the intersections between traditional scientific and engineering discipline erode their boundaries, and create new knowledge sets which give rise to new discoveries, and new industries.

Perhaps, the most compelling example comes at the convergence of the Life Sciences with Engineering. In just the last few years, MIT has launched new undergraduate majors in Biological Engineering, and in Chemical Biological Engineering, and a new graduate program, Computational and Systems Biology. These programs bring biology, chemical engineering, chemistry, computational science, material science and engineering, and other fields together in ways we could hardly have imagined a decade ago.

Such curricular innovation succeeds only if it demands rigor and excellence. Indeed, work in interdisciplinary areas requires a solid grounding in

fundamental disciplines. The development of our new educational programs parallels the emergence of important new research collaborations in areas such as gnomic medicine, which have enormous implications for the economy and for human well-being. Curricular innovation is not option for U.S. universities. It has been, and will continue to be, the source of our vitality and our ability to respond to changes in the world.

Just as we need to innovate in the curriculum, we also need to develop new ways to connect our education to the world our students will enter when they graduate. At MIT, we have launched a number of innovative programs that take students into the world of practice. I'll mention three. Longest running of these is UROP, the program mentioned before the Undergraduate Research Opportunities Program, which allows undergraduates to work directly with faculty in cutting edge research. About 85 percent of MIT undergraduates participate in UROP.

UROP then served as a model for UPOP, the Undergraduate Professional Opportunities Program, which integrates internships closely into engineering education, and now attracts about 40 percent of the sophomores in the School of Engineering.

Today's students also need first-hand

experience of other cultures and other ways of working. The MIT International Science and Technology Initiatives, MISTI, places students in intensive professional internships in companies, research laboratories, and universities around the world, from Beijing to Berlin.

A third important stream of educational innovation is the use of technology. Here, I will highlight only two major MIT initiatives. First, MIT OpenCourseWare offers free web access to the materials for over 1,200 MIT courses. Our Dean of Engineering, Professor Tom Magnanti, spoke about OCW at the Commission's San Diego Field Hearing early last month. As he explained, OCW is not a distance learning program. Instead, it allows educators and students around the country to benefit from the teaching materials created by our faculty. With over 35,000 unique hits a day, OCW's content reaches across the country into colleges, universities, and even into secondary schools. The primary audience for OCW is outside MIT, but has also strengthened education on our own campus.

And second, MIT's iLabs allows students to conduct real laboratory experiments remotely from any internet-accessible browser. These remote laboratories enable much more efficient use of

laboratory equipment, which can be shared across a university, and across institutions. It vastly increases the scope of experiments to which students have access in the course of their studies.

We're now exploring how the models of OCW and iLabs might be adapted for use in secondary schools. This is one important way we hope to do our part to address the challenges in K-12 math and science education.

As the Commission reviews our nation's higher education programs, I urge the members to consider the great strength that has come through educational innovation which depends intrinsically upon institutional flexibility, diversity, and competition. An interventionist approach, whether in the form of standardized curricula, or more mandatory testing will stifle the educational innovation our country needs.

Let me mention one example from Computer Science. The Computer Research Association, which includes some of MIT's computer science leaders, wants to encourage students to enter this vital and fascinating area of study which is now facing declining enrollments. While highschool advanced placement courses can provide advanced students the inspiration of a higher level academic challenge, the

AP test in computer science focuses only on programming language skills. It sends students and educators the wrong message. Encouraging courses on programming, rather on the emerging areas of creative work, and it discourages intellectually ambitious students from entering the field.

Standardized curricula or testing would limit our ability to educate, to develop new curricula, and to train the innovators our nation so desperately needs now. MIT rigorously assesses the progress and success of our students and our academic programs, and we regularly reassess our curriculum. Each institution needs the flexibility to define the central features of its educational program.

My own belief is that strengthening those aspects of higher education that are at the root of our success; access, innovation, and competition will be more effective than standardization, mandates, and penalties in promoting real long-term improvements.

As the Commission considers its recommendations, I hope it will ask of each suggestion, will this foster educational innovation. I've asked the Commission to help our nation to expand educational opportunity to strengthen K-12 preparation, and to foster educational innovation. In the decades ahead, American economy growth and social

opportunity will require highly innovative businesses, and equally innovative universities.

I will close with a few snapshots of what these innovative universities should look like. First, they will incorporate technology into education and research in new ways, while nurturing mentor-based teaching. Second, they will produce research that plays a catalytic role in a knowledge-based economy. Third, they will tackle our era's great challenges, from advancing medicine, to developing sustainable energy technologies. Fourth, through innovation they will be more agile as they compete on a global playing field. And fifth, they will graduate students who are capable of citizenship, of leadership, and of innovation.

Since the end of World War II, American higher education has increasingly become available to those with the ability and the ambition to draw on this valuable resource. At its best, higher education has transformed lives and the nation's economy, and has become the envy of the world. Its success has drawn on the wide diversity of institutions infused with innovation and competing fiercely in an open marketplace. The evolution of these institutions and the system in which they operate is far from complete, but as we strive to define their 21st Century versions,

let us build on their fundamental strengths.

Thank you again for offering me the opportunity to share my views with you this morning.

DR. DUDERSTADT: Thank you very much. Let's open it up for questions. Rich.

DR. VEDDER: President Hockfield, thank you for a very illuminating statement. I appreciate it very much, as do the others, I'm sure.

Let me just ask sort of a heretical question at the beginning. You said too few people are going on to colleges, and we need to expand access. I'm reading a manuscript right now from a scholar who's writing a book who argues just the opposite, that too many people go to college, that we are wasting enormous amounts of resources with people who simply don't make it through college; 30, 40 percent attrition rates. I know that doesn't apply to MIT, but it does at many schools. How do you react to that sort of criticism?

DR. HOCKFIELD: I think the attrition rates across the United States, those that you quote, are a scandal. And I don't know exactly what the challenges are that prohibit students who enter these colleges from graduating. You're quite right, MIT graduates more than 90 percent of those who enter, and I think pays a huge amount of attention to the ability

of the students we admit to succeed in the MIT curriculum; and, of course, then graduate.

The reason I say we need to send more kids on to college and graduation is the correlation between college graduation and incomes. If we want to raise the economic potential, if we want to raise the ability and skill-level of our nation, higher education is the only way to do so. And it's from that perspective that I advocate a greater percentage of students, not just going to college, but also graduating.

DR. VEDDER: To follow up just real quickly, Jim, you mentioned K-12 is key in all of this. Do you have any real suggestions for the members of the Commission of how we can nudge the K-12 establishment, if you like, make recommendations, any specific recommendations relating to K-12 and the integration into colleges?

DR. HOCKFIELD: Well, I'm not an expert in the K-12 domain, but I am a vociferous supporter of increasing the math and science abilities of our students who graduate from our high schools. We cannot be an effective nation. We cannot fuel an innovation economy if more of our students are not graduating from high school with greater competence in math and science.

My fear, of course, is that we might race to make up for in higher education what we lack in K-12. And to my mind, that would be under-utilizing our resources in a very serious way.

DR. VEDDER: All right. Thank you.

DR. DUDERSTADT: Yes, Charlene.

DR. NUNLEY: Because so many of our county's diverse and economically challenged students begin in two-year colleges, I was wondering what MIT does to encourage community college transfers and what your experience has been with community college transfers.

DR. HOCKFIELD: Yes, I don't have those data. I would guess that there is probably very little transition between community colleges and MIT. The MIT admission standards are extraordinarily high. However, I would underscore something I said earlier; that MIT admits students solely on the basis of merit. Our freshman year curriculum is enormously demanding. It's a required curriculum, somewhat out of fashion these days, that puts our students who are the best students coming out of their high schools, out of their cities, out of their states, that puts them in an academic environment that challenges even the best of them, so we can to be very careful in our admissions process that we don't admit students who

are not able to do the work, and we select only those who can.

I am certain that if a student coming out of community college has demonstrated the ability to do the work at MIT, that student would get an absolutely fair evaluation in our admissions process.

DR. NUNLEY: I might mention that we have transferred several students to MIT.

DR. HOCKFIELD: I am delighted to hear that.

DR. NUNLEY: And they've done very well. But I would just like to comment that because of the growing cost of higher education, more and more of the really academically outstanding students are beginning in our nation's two-year colleges, and you might want to give that a little reflection.

DR. HOCKFIELD: Yes. That's a very well-placed suggestion, and I will look into that. And, again, this is why MIT is so adamantly committed to need-blind admission, need-based aid. We don't give any merit aid, and we really do meet the full need of our students, which is an extraordinarily expensive proposition at MIT, but one that we feel is absolutely essential to help support the nation's further growth and economic development.

DR. DUDERSTADT: Other questions? I'm

interested in the issue of competition. It's clear that that's one of the great strengths of the American system. And institutions like MIT, that are clearly at the pinnacle of quality, are evidence of that. But there have been concerns raised that unbridled competition can also lead to cost wreckers. I mean, the kind of competition you folks have with your friends up the River Charles, an example of it, and we see it. That competition among elite institutions that are relatively prosperous probably doesn't harm your institutions, but if imitated by the broader range or research universities that simply can't compete, it can either cause them possibly to make unwise investments, or to lose very valuable people. Is the competition a stable phenomena, or is it causing problems, from your point of view?

DR. HOCKFIELD: Well, competition, of course, is always a little uncomfortable, but I believe it is at the root of the American system of success. And it is a marketplace-driven world, and one I think that has served us very well. Of course, it can get out of control, but there are natural regulators on it.

Of course, every college or university in the United States is not at the level, shall we say, of the Harvards, the MITs, the Stanfords, the

Princetons, the Yales, but I think that these institutions really do need to set a model for higher education at-large. It doesn't mean that the other schools need to follow lockstep what MIT does, how MIT uses its valuable resources, but I think that establishing a very high value of extraordinary success in our faculty, and also of our students, is something that we would be in some danger as a nation if we did not have the schools that establish that model for others.

DR. DUDERSTADT: Well, I must commend MIT because through OCW, through Technology Transfer and so forth, you really share your wealth with the rest of the world in a very real way.

DR. HOCKFIELD: Well, this is very much part of MIT's culture. It was part of our founding mission, and MIT, I'll remark, being new to the campus, only been there a year and a couple of months, one of the things that's remarkable about it is there isn't a fence or a wall, or anything that physically separates MIT from the environment, and there is a huge amount of conversation, shall we say, between MIT and the institution up the river, and the other schools in the area. And also, between MIT and industries around us. I think this is an important way in which MIT and schools like MIT serve the

nation.

DR. DUDERSTADT: Very good. Thank you very much. Our next speaker is President Jack Wilson, President of the University of Massachusetts. President Wilson.

DR. WILSON: Thank you. Good morning. I'm Jack Wilson, President of the University of Massachusetts, the other land grant university in Massachusetts, and a five-campus research university serving 60,000 students, 14,000 faculty and staff, a budget of over $2 billion per year, doing approximately $400 million annually in externally funded research. And I commend the Commission for the work you're doing to focus on access, accountability, affordability, and would like to take this opportunity to address the issue of access to what kind of an education, perhaps following on President Hockfield in that regard, accountability for what outcomes, and affordability, for whom and how.

I'll argue that affordability can best be found through a focus of the application of technology and best management practices in both educational and administrative spheres, through generation of alternative revenues, and through well-designed financial aid models.

Now my perspectives today are formed by my

experience as a faculty member at RPI before I came to UMass, where I worked with some of you, and at the University of Maryland before that, and as Chair and Co-Founder with Carol Twigg of the National Center for Academic Transformation, which was started with an $8.8 million grant from the PEW Charitable Trusts. And I cite that because they often say well, it can't be done. You can't reduce cost and increase quality at the same time, that there's a cost/quality conundrum there. And I love to refer people to the 30 case studies of major universities that have done exactly that, which was on their website.

The focus on quality, access, and cost of the Pew CAT was closely related to the goals of this Commission; although, I'd urge the Commission to give the emphasis on quality a bit more prominence in the deliberation.

Now turning to access, the question of access to what in the context of American research universities brings one face-to-face with a question of quality and mission, and you got some of that in the last testimony. While most parents and taxpayers can understand the role of a research university as a great place for their children to go to school, understanding the rest of the mission of the research university is a little more difficult.

I like to say that the path to economic and social development in Massachusetts goes through UMASS. That's a bit of an assertive statement, but I believe that I can back it up with data. In Massachusetts, we, along with MIT, and Harvard comprise the top three universities and research volume, and according to the Association of University Technology Managers, we are the top university in revenue from commercialization of our intellectual property.

Geographically, our five campuses are positioned to serve every region of the state, and over 200,000 of our alumni, of our 300,000 alumni are living and working, and as I like to remind our political friends, and voting in Massachusetts.

In today's innovation economy, as you know, we tend to find great research universities at the core of every healthy economic region. It's true in Massachusetts, North Carolina, Texas, California, the other U.S. states, and it's equally true in Tsinghua University in Beijing, the Indian Institutes of Technology, as we discussed this morning. So the question of giving a student access to a high quality education, a research university, gives that student access to experiences that are important and unique. Our comprehensive research programs allow students to

participate in undergraduate research in internationally significant projects. Incubators near our campuses give real-world business, engineering, and entrepreneurship opportunities to both graduates and undergraduates. And by the way, we share those. At our flagship camp, the University of Massachusetts at Amherst, a consortium with four small but outstanding liberal arts colleges allows their students to participate in these same kinds of programs, programs that would otherwise be unavailable, as well as allowing our students to participate in their terrific courses.

But access also demands that we take into account access for students that have been under-served in the past. We have established quite a few programs that both encourage and enable participation from under-represented groups. With $12 million in funding from the National Science Foundation, our UMass Boston campus is working in partnership with the Boston public schools to enhance opportunities in science, technology, engineering, and mathematics in minority majority schools. These are schools that have not traditionally put many students into the research universities, or into science and technology-based careers. All five of our campuses have similar programs. Boston's is the largest, in partnership

with the Boston public schools.

Five years ago, we formed an on-line university, UMassOnline, to serve another group of potential students who have not been well-served in the past. These are primarily older employed students, who need a degree or certificate, but do not have physical access to a campus. And the pent-up need in this area is demonstrated, very dramatically demonstrated by the 25 to 40 percent annual growth we had each year over the last five years. I think, in fact, the lowest I think was 29 percent, typically closer to 40 percent year-on-year through some of the toughest economic times that we've seen. And we expect to have - in fact, the number is in, I've just seen it. We're well over 20,000 enrollments in UMass Online this year, and growth shows no sign of abating in the coming year.

By the way, that also brings approximately $20 million in revenue to the campus, much welcome at a time when state revenues have decreased tremendously, which brings me right to the question of affordability. It's perhaps the most talked about, worried about, misunderstood topic in higher education policy circles today. It's not surprising, given the wrenching dislocations we've seen in public funding of higher education in the period from 2002 to 2004.

Earlier I noted that the university has a $2 billion budget, and I also noted that about $400 million of that comes from the state. That represents about 20 percent of our budget. Not too many years ago, the state provided 40 percent of our budget. We're not alone, so many of the public universities have faced that same challenge. It's happening across the country.

Our cuts came to approximately $150 million, and we responded to those by stringent cost-cutting, more on that in a moment, increased fund-raising, innovative revenue-producing programs like UMass Online and commercialization of our intellectual property. And yes, we and others had no choice but to raise student fees at the same time. Because our tuition had been kept low for a long time, the percentage increases look a bit alarming, and they make good press. You start with a small number, and you make a modest increase, and it's a large percentage, and that makes good news for the newspapers, not good news for us.

Again, we're not alone in that regard. We're all facing it. It's happening across the country, and those large increases have certainly informed your deliberations, and you've heard about that. It's a good discussion, it's important

discussion, but it also would be important to look at some of the details of what's going on under that financing arrangement, because although they were large on a percentage basis, they resulted in tuition and fee structures at our university that are between a third and a half of the surrounding private universities. And some of the increased revenues have been redirected into need-based financial aid, so we're proud to say that we meet 90 percent of our demonstrated student financial need. I didn't put the numbers in here, but you can see that our internal funding to student financial aid is rather dramatically increased. I think it's about $56 million in just the last few years. And there's no avoiding the fact that this is a significant renegotiation of the agreement between the public and the student, between the public and private part of it, between the division of the cost of undergraduate education between the public and the student.

And I'd like to say we've moved from an everyday low pricing model to a moderate cost high aid model. We've not gone nearly as far as the high aid, high cost models of the private universities, where I actually worked until recently. Each of these models endeavors to make it possible for any qualified student to gain access to a high quality undergraduate

education, but the high aid models do, indeed, transfer more of the total cost to students, although hopefully, according to an ability to pay.

Let me just say right up front that I personally wish that the public would decide to re-shoulder some of that burden for public higher education, but my professional side tells me that that's unlikely to happen given my analysis of the stress on state budgets. And there's little prospect for much improvement in that, and so that we should really manage ourselves in a situation in which, at best, revenues will be stable, and perhaps increasing with the cost of living.

I went, in fact, to our Joint Legislative Committee when I became Interim President and suggested that if they could just assure us stable funding, not an increase of the $150 million we lost, but stable funding that we could manage the university and keep the tuition and fee increases under the cost of living, and, in fact, have done that for the last three years.

Now let me raise the issue of price controls. They're often a politically popular and expedient choice. You hear them bandied about in the press to address concerns about price increases. But as we know, they rarely work. Economists have shown

that price controls will often produce shortages and decreased quality. I urge the Commission to reject price controls; instead, focus on programs that simultaneously encourage increased quality and reduced cost, and I've talked a little bit about those already. Let me give you an example on administration.

We formed a Central Services capability to eliminate the very expensive duplication of back-office functions, like finance, HR, IT, and other business functions. We once had five poorly performing payroll systems for our five campuses. We now have one, and it actually works pretty well.

When I got here, we had eight online course management systems. We're down to two, and hopefully eliminate that duplication. Three years ago, we have five inadequate student information systems. My staff made me change that word to inadequate. I was a little more dramatic than that in the past. Now we have two that are on parallel tracks, and performing much better. And just as the 30 colleges and universities of the Center for Academic Transformation database have shown that application of technology and management can simultaneously enhance quality and reduce cost, we've seen that back-office functions can be enhanced and

cost reduction. And I'll say right up front, I understand that you'll see some of our students coming. Having debated these issues in conferences and the press for over a decade, I am acutely aware that others do not accept my contention that technology and management properly applied - that's a key phrase, properly applied - can lead to cost reductions.

In fact some, perhaps even on our own campuses, argue that technology invariably increases cost. I've debated that nationally on many stages, as Nick knows very, very well. He's watched me do it. In general, their arguments are the logical equivalent of arguing that no baseball team can win a world series because the Red Sox couldn't do it for 86 years. There are many ways to fail, but the data shows that there are many ways to be successful, as well. A more careful examination of the evidence clearly shows it can be done. And I hope that as you consider new policies on affordability, you'll focus on true cost savings and quality enhancements, and upon financial aid strategies that address the needs of students.

Now I'd like to turn to accountability here. That's a key question. I heard the question on retention. I'm going to be a little bit of a

contrarian here on this one, but we have a performance management system that develops a number of accountability issues, and we welcome that. We welcome an emphasis, but recognize that metrics do, indeed, drive behavior, and also recognize that careful study is required to avoid the law of unintended consequences. Let me address that issue of retention.

I was once asked well, gee, Jack, it looks like the retention rate is fairly low at UMass-Boston. I said yes, and I'm very proud at that. And they looked at me in absolute shock and horror. How can you be proud of a low retention rate? Well, because it's a lousy measurement of what we're trying to do. First-time, full-time freshmen graduating in five to six years, that doesn't happen to be the mission of the UMass-Boston Campus, so if you want me to make the UMass-Boston Campus look very , very good on that retention rate, it would be a very different institution, and it would look a little more like UMass-Amherst, or perhaps a little more like Williams College. And we'll take traditional 17 to 21-year old students, and we will not focus on transfers - by the way, my daughter went to Montgomery College and then transferred to a four-year school and graduated. And I love to cite the famous failures that have graduated

from UMass-Boston, like Joe Kennedy, for example, or Mayor Tom Menino. And as you know, I use failure as a badge of honor in those cases considering what they've accomplished in life. So we have to be careful when we put accountability measures out there that they make sense.

Now, of course, applying that same statistic to UMass Online would be even more ludicrous, because it is not the mission of UMass Online at all. So it's just one example of a well-intentioned, but unfortunately in many cases, not terribly appropriate metric. That's not demeaning the work not against pretension, we're not against trying to make sure that students have an opportunity to graduate, if they wish to do so, but we also are not against them transferring if that's a good thing, or transferring in. And in response to that transfer question, I could tell you that transfer students into the University of Massachusetts, and we put a lot of energy into making that work and making it successful, and having articulation agreements do very, very well at our institution, as they did, by the way, at RPI when I was at RPI.

So in this regard, though, in terms of developing incentives, we commend the President and those in Congress who have called for additional

investments in science and technology education, and research with a particular focus on the physical sciences and engineering, and on the student pipeline, and so we've already created our own multi-million dollar fund, incentive fund. At the same time, we were cut $150 million, I raked another million dollars off the top to put into an incentive fund to get more students in that area, and get more attention on that. So I thank you for your attention today. I hope I wasn't too contrarian with some of my comments. Thank you.

DR. DUDERSTADT: Very good. Nick.

MR. DONOFRIO: Yes. Jack and I know each other, in full disclosure. I also went to RPI, and we've known each other for some years. Thank you. Very well done, President Wilson, on a number of fronts. And there's just so many things I wanted to question you on, but I'll try to keep myself focused. It doesn't work, trust me. I'm an engineer, as well. Maybe not from MIT, but other reasonably good engineering school.

Jack, I'd like you to talk a little bit about the application of technology. And, of course, I've seen you do this up-front and personal a number of times, but it seems to me, in general, it isn't done very well. And I'd like some explanation on your

part about what does it take to apply technology well to the academic environment in order for real productivity, real advantage, and real benefit to arrive. And I think it has something to do with transformation, right along with technology, so could you comment a little bit about that, please?

DR. WILSON: Thank you. Yes. Indeed, it does have a lot to do with transformation, along with technology. But we've seen that in pretty much every area of technology coming in. When I was first in a business where we were bringing computers into accounting, I accused the accountants of wanting to make the computer wear green eye-shades. In other words, they tried to take technology and hammer into old models, and you have to reconsider the model. But what you should do is to think then, what is it you're trying to accomplish, and how do you use the resources best. So what we did as we transformed courses, is we said okay, we've got very talented faculty. We want to maximize the interaction between faculty and students. We don't want to minimize that. It's not that we want to put the student just sitting at a computer, but how could we use technology to create new kinds of courses where instead of being responsible for sitting there and presenting information, we had the faculty really involved and

interacting with the students, and allow the presentation of information - well, actually, to move more toward a discovery method. But you're quite right that it comes down to transformation, it comes down to design, and it comes down to execution.

And I think it was Woody Hayes who said about the forward pass. He said, "With a forward pass, I don't use it very much because there's three things that can happen, and two of them are bad for your team; and incompletion and interception." And I think technology is a little bit like that, too. If you want to have an incompletion or interception, it's pretty easy to do, and so getting it right, and getting the completion. But every football team today, the forward pass is a big part of what they do, and I think every university understanding how technology transforms our business, whether it's having a decent non-duplicated payroll system, or highly engaging freshman courses is something that I think everybody has to consider.

DR. DUDERSTADT: Chuck and then Richard.

DR. VEST: Jack, you've made a couple of - well, you made more than a couple - but I wanted to focus on two very good points you made; one is, throughout this is a nice articulation of the social contract you see University of Massachusetts having

with the people of the Commonwealth, and also, a realistic statement about your outlook on long-term budget support from the state, and a lot of great ideas on how you've been able to use management and technology, and modest increases in tuition to kind of keep the system stable.

But longer term, do you think that you will have the ability to meet that social contract of providing opportunities, a wide variety of types, for young men and women here, and older folks, as well, if state investments remain flat or declining?

DR. WILSON: That's a very tough question, Chuck. I have to say yes, we will, because I think we have the management tools to be able to do it. But I really hasten to add to it that I think it would be unfortunate if that happens, because I think that the strength of public higher education has been that there has been a contract, and what I've tried to show here is the degree to which we point the University of Massachusetts at the issues affecting the Commonwealth of Massachusetts, whether it's education of the student, or it's commercialization of intellectual property, incubators and so on, and so forth. So I think that there's a strong argument for additional public investment in public higher education. But the fact is that if we have stable funding, I believe we

will be able to meet that social contract with some pain. But what it does mean is, it does mean abandoning the everyday low-price. Some of that I don't think is such a bad thing, actually, because it moves us more toward that moderate cost, high financial aid model where we're meeting over 90 percent of our student's financial aid. So I think we can honestly go to the parents of the Commonwealth and say don't worry, if your child is admitted to the University of Massachusetts, we will make it financially possible for them to attend. But it won't be by an everyday low price, it'll be by financial aid, coupled with a moderate price. Who does that disadvantage? That disadvantages the middle class and upper middle class student, and it does shift the cost sharing in that direction. And I think that we've come a long way in that direction in the United States, not just at the University of Massachusetts toward that cost-sharing.

When you hear from our students, you will hear, certainly, that they didn't appreciate it, don't appreciate it. I don't blame them. I don't appreciate it either. Just a realistic on looking at the budget and saying that I believe that we'll have to manage with some targeted investments.

The better strategy, I think, for public

higher education is, in fact, to focus on certain targeted investments, as we are, and looking in capital and certain areas, and linking it to specific outcomes that the Commonwealth, that the public would like to see. It's a painful answer to that question, which is a very difficult question.

DR. DUDERSTADT: Richard.

DR. VEDDER: I'd like to follow-up on Chuck's question, on your answer. A distinguished - well, some would debate this, I guess - a distinguished citizen of the State of Massachusetts, Robert Reich, once proposed a progressive voucher. He was talking about K-12. Given the fact that you're going from 40 percent to 20 percent state funding, and heading towards zero - I mean, that's the direction - why don't we move to a new model and simply make it zero, give the money to the kids, give more money to the more-deserving students, which is more in keeping with the egalitarian designs of our nation, and of the Commonwealth. Why don't we move in that model? We're going to have a President of a university testify in favor of that at our meeting in Indianapolis, I am told, and I just wonder what your reaction is to that approach.

DR. WILSON: Well, you're right. We're kind of headed that direction, whether intentionally

or not intentionally. That is kind of the way that the direction has gone. I think that would be unfortunate if it goes much further. I was asked the question could we manage in a stable situation, and I answered it yes, we can manage in a stable situation.

The United States has built a very strong network of very strong public universities. Although I think they can manage with a smaller percentage of their budget with that renegotiation, I think that moving to that model would be really a disaster for public higher education, because it would de-stabilize the system that is serving this country so very, very well. So I think that the idea of moving to a voucher system and kind of just pulling it out all of a sudden would certainly de-stabilize our wonderful public university system that we have created around the country, so I would oppose that.

DR. DUDERSTADT: Charlene.

DR. NUNLEY: Yes, on the same issue, I have a question if why our case is so strong for public support, we seem so reticent to make it. Secondly, I would suggest that these models may not be as advantageous for low-income students as we think, since they tend to imply an understanding of the system of how to get the money. And a lot of the lower-income students who began in my type of

institution, for example, are first generation college students who don't understand the system at all. And I guess my third question is, if low tuition, accessible higher education isn't important, why has there been a massive increase in participation as the community college system has grown across the country?

DR. WILSON: Okay. Those are all good questions. Let me start with the issue of - please do not confuse my desire for kind of my engineer's number of saying that I don't see this turning around any time soon. That's not because I like it. Okay.

Now people in Massachusetts will tell you that I've been anything but reticent about asking for a reinvestment. And, in fact, when I came in right after the hit, I was presented with a budget at its absolute low point of $326 million, $150 million from where it had been, and immediately set to work to convince our legislators to reinvest in the University of Massachusetts, and the Governor's Bill, House-1, was at about $425 million for this year, so we've seen some reinvestment, but we're not back to where we were before. So believe me, there's no reticence. I'm trying to be effective. Okay. It's one thing to have a lot of rhetoric and go out there and say we should do this, and do this, and do this. I just believe that it's more effective if we make a very hard-headed

careful numerical analysis in go in and ask for investments you have a chance of getting, and then getting them done. And I also am asking for investments in capital, because a capital investment, we can show the payoff.

I've asked for investments in matching funds. I've said that I can bring funds into the state - not I, we, the University of Massachusetts can bring funds into the state, if we had matching funds available to us. And with $5 million in matching funds from the Governor at the height of this craziness, we set up a $40 million externally funded Center on Collaborative Adaptive Sensing of the Atmosphere with the Weather Channel, and IBM actually is partner, and Raytheon, and a number of companies, which is also generating spinoffs of new businesses. So I'm not at all reticent about asking for those investments, either in operations or capital, but I am very realistic, and I try to make every one of my asks a realistic ask within their capability of delivering, and very well documented the returns that they might get for that.

DR. DUDERSTADT: Very good. I think we're going to have to move on. Thank you very much.

DR. WILSON: Thank you very much.

DR. DUDERSTADT: President Dennis Berkey,

President of Worcester Polytech. President Berkey, welcome.

DR. BERKEY: Thank you. Good morning. I appreciate the opportunity to spend these moments with the members of the Commission. As the sign says, I'm Dennis Berkey. I've been President of Worcester Polytechnic Institute now for two years. Before that, I spent 30 years at Boston University. I'm a mathematician, on the mathematics faculty, and the last 10 of which as Provost. I'm a member of the small fraternity assembled before you this morning of individuals who move within Massachusetts to leadership positions in higher education. We absolutely love this state.

Let me tell you a little bit about WPI, to begin with. I do have prepared remarks. I would ad lib with you, as has been suggested earlier, but the risk there is that I'll go on at greater length than if I simply share with you about seven or eight minutes of remarks, then we'll get into your back and forth.

DR. DUDERSTADT: Fair enough.

DR. BERKEY: Let's start with a little bit about WPI. It's a small, independent research university enrolling approximately 2,800 undergraduates and 1,000 graduate students. It was

founded in 1865 to prepare young men for engineering careers in the manufacturing industries of Central Massachusetts. WPI now enrolls both women and men in a curriculum centered on engineering, science, technology, and mathematics, with strong academic and co-curricular programs in the arts and humanities, and in management. We place a high premium on excellence in undergraduate education, with rich student/faculty interaction, and a unique approach to active collaborative learning through a project-based curriculum.

Each undergraduate at WPI must complete three major projects, the most distinctive of which addresses an identified need or problem at the intersection of technology and society, most of which are carried out in small teams at one of our 20 project centers around the world. These projects range from the design of drift irrigation systems for impoverished farming communities in Thailand, to the preservation of canal infrastructures in Venice, to the development and support of a competitive robotics team in a local high school.

This mode of learning emphasizes the development of important work and life skills, such as cooperation, teaming, appreciating differences, dealing with ambiguity, effectiveness in written and

oral communication, and working within real constraints on time and resources. This WPI plan, as we call it, is an expensive form of education to offer, but it is highly effective in preparing our graduates to be excellent employees, practitioners, managers, entrepreneurs, inventors, and leaders.

Just a couple of general observations. In his class essay, *The Aims of Education*, Alfred North Whitehead warned about what he referred to as "inert ideas, ideas that are merely received into the mind'- I'm quoting now - "without being utilized or tested. The details of knowledge", he said, "which, of course, are also important, will be picked up ad hoc in each advocation of life, but the habit of active utilization of well-understood principles is the final possession of wisdom."

Three-quarters of a century later we find similar views expressed in the 2004 book, *What The Best College Teachers Do*, by Ken Bain. "The best teachers", he reports, "say that we construct our sense of reality out of all the sensory input we receive. When these highly effective educators try to teach the basic facts of their discipline, they want students to see a portion of reality, the way the latest research and scholarship in the discipline has come to see it. They don't think of it as just

getting students to absorb some knowledge, as many other people put it. They think about what they do as stimulating construction, not just transmitting knowledge. They often want students to do something human beings don't do very well - build new mental models of reality."

Now in thinking about how to ensure the effectiveness of our system of higher education for decades to come, these proposals for *The Aims of Education* should guide us beyond mere concerns for the performance of students on standardized tests, to an ambition for higher order achievement, both by our students and by our institutions.

In asking what skills our students will need to succeed in the 21st Century, I hope the Commission will note the success of programs, such as the WPI Plan, which engage students in collaborative learning and the application of knowledge. Obviously, such programs cement received knowledge by putting it to use. They involve, as well, the higher order skills of connecting disparate components of knowledge, the creative act of synthesis, and the imaginative art of applying the marsh of knowledge to solve genuinely important problems.

Students who complete such collaborative work, when it includes requirements for written and

oral explication, assemble in the course of their education a portfolio of reports and other documents which are as revealing of the nature and the quality of their academic work as their course grades and test scores. And the record shows, at least for WPI graduates, that they make excellent employees, and experience high degrees of success in graduate and professional studies.

I, therefore, recommend that the Commission endorse and recommend adoption of higher education curricula embracing collaborative learning and problem-solving, such as that embodied in the WPI Plan, in order to better prepare graduates for productive contributions to the corporations, organizations, and communities which they will serve.

Just a remark here, the issue of competition has been raised earlier. This is a somewhat different type of learning style in education. I'm not nearly so concerned on the question of what type of student comes to WPI with standard academic credentials, such as test scores and grades, as with the question - is this student well-suited for this type of education. And I would hope in our system of higher education, as complex as it is, that we would be guided more by that type of question, than by the competition for the students

with the very highest SAT scores, or course grades.

Similarly, as Jack Wilson has bragged about Mayor Menino, and not necessarily completing his degree at UMass-Boston, I will give you the WPI example of Dean Kamen who invented the Segway, and who is now bringing purified water to Africa with amazing technologies. Dean has an Honorary Doctorate from WPI. That's no surprise to you. You need to know also that he was awarded an Honorary Undergraduate Degree, just before he was awarded the Honorary Doctorate, because Dean was quite good at soaking up knowledge from WPI faculty, much better than he was actually going to class and completing the requirements of our curriculum.

Let me say just a word now about strengthening science and mathematics education. It's such an important topic that I suspect you'll hear from each of us on it this morning. Meeting the nation's workforce requirements in our high technology life-science and other sophisticated industries requires increased numbers of high school graduates well prepared to study science, technology, engineering, and mathematics, the STEM disciplines in college.

It is both in the national interest, and in our institutional self-interest, that colleges and

universities work with elementary and secondary schools to improve curricula and support the professional development of teachers in mathematics and science. One model implemented by WPI and others is to invite school teachers to become affiliated with university science and mathematics departments, thus forming peer relationships with university faculty, engaging with them in the fuller consideration of the shared academic field, and not simply classroom methods and materials.

Another important model endorsed by such organizations as Mass Insight, is to ensure the presence of subject matter experts in mathematics and science in each school building. Such individuals serve as resources and coaches for teachers who may be teaching out of their own field, or who simply can benefit from assistance in strengthening their teaching of mathematics and science. Such positions are often viewed as luxuries and eliminated when school budgets must be cut, as has been the case in the Worcester public school system. These specialists, however, are vitally important to the goal of increasing the number of high school graduates ready for continuing study in the STEM disciplines.

Similarly, there are curricula available for adoption by the public schools that have proved

highly successful in increasing students interest and success in the STEM fields. One such example is "Project Lead The Way", an engineering-based curriculum for high school science and mathematics, which is accompanied by formal connections between high schools and sponsoring colleges and universities. Graduates of PLTW programs are not only well prepared for and successful in the collegiate study of engineering, but they have a very high success rate when pursuing other academic interests.

WPI is the affiliate university for PLTW in Massachusetts, conducting workshops for PLTW teachers, and accepting for college credit certain courses certified in the PLTW programs. We know that it works. It is relatively inexpensive to offer, and it has great potential for further positive impact. In light of these observations, I recommend that the Department of Education encourage and support efforts by colleges and universities to assist elementary and secondary schools in strengthening the teaching of mathematics and science, that the Department of Education provide funding for elementary and secondary schools specifically designated and use exclusively to provide science and mathematics subject matter experts in the schools. And that Department of Education funding be provided to enable the adoption of

innovative programs with demonstrated success in improving mathematics and science education, such as Project Lead The Way.

Just a word now on university's role in economic development. Following World War II, Vannevar Bush proposed and the federal government adopted the approach of relying heavily on the nation's universities to develop the research that would fuel America's economic development for the next half-century. The basic mechanism for accomplishing this was the Faculty Research Grant funded primarily by the National Science Foundation on the basis of peer-reviewed proposals.

The nation once again needs our universities to aid directly our economic development, this time with direct investment and involvement in the economic development of the communities which they inhabit. One important component of this engagement is the transfer of intellectual property in the forms of patents and licenses from the lab bench to the commercialization channels offered by companies large and small, including companies formed around particular promising technology.

A particular example of such developments is Worcester's Gateway Park, an 11-acre brownfield parcel at one end of the city's downtown corridor,

which has been cleaned up and made ready for development by a partnership between WPI and the Worcester Business Development Corporation. The first building now under construction and to be named The WPI Life Science and Bioengineering Research Center, is slated to house research laboratories and graduate programs of WPI's biology, chemistry, and biomedical engineering departments, WPI's Bioengineering Institute, and a start-up incubator of the Massachusetts Biomedical Initiative, or the MBI.

The applied research and faculty presence will attract companies from the life science industries into three future buildings. Housing at a range of price points will be developed in the district, and retail and other business tenants will round out this science-based mixed use development.

Gateway Park will ultimately provide one million square feet of new space for business and academic use, employment for more than 3,000 individuals, and a new vibrancy for a neighborhood important to both WPI and downtown Worcester.

The concept of Gateway Park and the particular needs for its development have been strongly supported by Senators Kennedy and Kerry, Congressman McGovern, State Senator Augustus, and the City's Mayor and City Manager. WPI stimulated the

actual construction with $40 million in financing, and a commitment to lease 75 percent of the space in the first building for its Life Sciences Center. It is a true partnership anchored by WPI and involving the city, the business community, and the state and federal governments.

The fruits of Gateway Park will be more than jobs and real estate improvement. The research and graduate training carried out in its facilities, and the collaborative relationships developed across constituencies in this park will strengthen our labor force, fuel our life science companies, and enhance WPI's research capabilities.

Reflecting on this example, I recommend that the Department of Education encourage universities to support local and regional economic development, build research collaborations between academe and industry, make strategic investments in neighborhood development, and actively solicit local, state, and federal support for such partnerships.

Finally, let me say a word or two about access and affordability. We share the concern of the Commission, the Congress, and the public over the rising price of college education, and the corresponding concern for access, especially for economically disadvantaged students. Residential

undergraduate and graduate education is expensive to provide, especially in the engineering and natural science disciplines, where the cost of laboratories, instrumentation and technology are high and rising faster than general inflation.

Universities are working assiduously to control cost, to raise endowments, and to provide direct support for student scholarships and general financial aid. At WPI, our most recent entering class received institution-based financial aid equaling approximately 41 percent of gross tuition charges. We've also developed a cooperative agreement with Quinsigamond Community College, whereby students who successfully complete a two-year pre-engineering program can transfer to WPI as juniors, thus benefitting from two years of significantly lower tuition, and in some cases, and just as importantly, overcoming deficiencies in their academic record which might have prevented them from being admitted to WPI's freshmen. Many other colleges and universities have similar programs, but these efforts are not enough.

As it did with the National Defense Education Act following the launch of Sputnik, the federal government needs to make a greater investment in the education of the next generation of America's engineers, scientists, and teachers of science and

mathematics. From the point of view of national economic competitiveness, higher education is less a private good than a national need and a high priority. While all qualified and needy students should be provided greater amounts of financial assistance, those intending to study in areas most directly tied to the nation's economic development and competitiveness represent a compelling opportunity for investment. I, therefore, recommend that the federal government increase the amounts allocated to student financial assistance with special support for students studying in the STEM disciplines, and especially for those students intending to teach these subjects at the elementary or secondary level.

This completes my comments, and I appreciate the opportunity to share these thoughts with you.

DR. DUDERSTADT: Thank you very much.

MR. DONOFRIO: Excellent, President Berkey. Thank you very much. I'm very, very impressed with you view of the WPI Plan. In fact, you said many words that ring incredibly true and clear to me, as you talk about collaborative learning, problem-solving, and all those skills, so I have two questions for you, given the potential of this plan to really be something incredibly valuable for this country as we

move to innovation in the 21st Century.

How do you choose the students in order to know, if it's not through testing, as you indicated in your testimony. How do you choose the students to know that they're going to do well in this plan, and how do you know that this plan really does as well as you think it does in terms of outcomes? So if you have outcome measurements, tell me about both, please.

DR. BERKEY: The outcome, the second question first - the outcome measurements is to look across the body of alumni where they wind up. Alumni from WPI are heavily represented as leaders of organizations, as entrepreneurs especially. There is something about the project-based experience that enables the young person to be confident in relying on a broad cross-section of what they have learned and abilities, and not to think within the confines of particular disciplines. And that seems to produce a high percentage of entrepreneurs, but still these students are successful in more conventional pursuits, graduate and professional study.

How do we select the students? We make it very clear to them what the nature of the program is at WPI, so they select us. We then work with them very carefully as the enter the institution, breaking them down in small learning communities, and stressing

inter-disciplinary approaches and creative approaches to problem-solving as quickly as we can, so that those students who will prosper and excel at it can move ahead, and those students who need extra help, especially through peer counseling-kinds of activities, can receive it quickly.

MR. DONOFRIO: One follow-up question. Is there much turnover in the beginning with the freshman class?

DR. BERKEY: No, our freshmen to sophomore retention rate is about 91 percent.

DR. VEDDER: I'll try to make this a yes/no answer, because we're running behind schedule. This is kind of a provocative question, I guess. Would the elimination of colleges of education and the reallocation of the resources by colleges and universities towards subject-based science instruction and other forms of instruction be a constructive, positive step in improving K-12 science education in the United States?

DR. BERKEY: I'd look at it differently. I would say should those colleges of education producing teachers require of those students the completion of the equivalent of an undergraduate major in a liberal arts college as part of their preparation. I wouldn't necessarily pin it on whether

or not the colleges of education should continue to exist.

DR. DUDERSTADT: Very good. Thank you very much.

DR. BERKEY: Thank you.

DR. DUDERSTADT: President Robert Brown, President of Austin University.

DR. BROWN: Good morning, and thank you for the opportunity to address the Commission. I have remarks that are being distributed, I think, as I speak, and I think I'll follow President Berkey's lead in that use those pre-prepared remarks as the basis for a short statement, and then open the floor for questions.

First, I want to thank all the commissioners and Secretary Spellings for focusing your attention on recommendations aimed at improving the higher education system in the United States. Your deliberations are timely for the future of our universities and colleges, and for the continued prosperity of the country.

This morning I'd like to speak from two perspectives. First as a person who has spent my professional life in higher education, beginning as a professor and a researcher. I am a Chemical Engineer by trade, and most recently as a leader of a large

urban private university. After 26 years at MIT, I began serving Boston University as its President last fall.

A word about BU. BU serves 15,000 undergraduates, another 14,000 full and part-time graduate students, and professional students. It is also a major research university doing over $300 million of sponsored research annually. Our annual budget is approximately $1.7 billion per year - give you some sense of the scope of the university.

I also have consulted for a number of foreign governments over the last years on the development of research universities, and on the creation of government-sponsored research institutions. Because of these parts of my career, I've spent considerable time thinking about universities, and about the models for their development, and I'd like to use these perspectives for my remarks.

I want to begin with the perspective that comes from outside this county, and I think it's important for this Commission to hear this. The American higher education system of public and private universities and colleges is the envy of essentially all nations. Others recognize that we support an incredible diversity of institutions with faculties

and academic programs that are tailored to varying student needs. Moreover, international leaders in higher education realize it is the competition between these institutions that is ultimately responsible for the excellence of our schools, and for the overall quality of our higher education system.

The competition I speak of is not across all of the institutions in the system. There are several different markets at work simultaneously, ranging for the competition between small local colleges for commuting students, to the nationwide competition for the very best faculty students, and for the support of research between our large research universities.

Within our system, the large role of private university and colleges is essentially unique in the world. Only from the United States do privately operated universities appear on a list of the very best universities in the world.

This outcome has been noted by others, and it's behind moves in several countries to emulate our institutions. Examples of change are the move toward more public university autonomy in the Japanese system of state-owned institutions, and another example would be the establishment of the International University of Bremen in Germany on the model of an American

private university.

Change also is occurring rapidly in Singapore, a country known for the excellence of their K-12 education, and for international leadership in mathematics and science education. Singapore is now turning its attention to higher education, and has been studying United States institutions carefully. Their government has moved to give their three public universities autonomy, complete with private boards of trustees, and has recently announced the establishment of a National Research Foundation with the goal of drastically increasing competitively distributed academic research funding.

The Singapore government's goal is to give the universities the freedom to respond separately, as do private United States universities to demand of their student constituencies, and to create the competitive environment between their schools that is needed to develop academic excellence on an international scale.

As Singapore moves to do this, their leaders fully understand the impact of the quality of research excellence on education, where the value proposition for the undergraduate student rests in the creative classroom environment established by faculty members at the frontiers of their disciplines, and by

the special opportunities outside of the traditional classroom available for ambitious students. These are the benefits that other countries are looking for in their drive to establish research universities like our's.

I believe that the Commission should recognize that the American higher education system has produced a competitive environment that fuels the excellence of our institutions, and the quality of the educational experience for our students. I hope that the Commission will strongly endorse maintaining this diversity, and resist recommendations that normalize institutions toward any standard. I also hope that the Commission recognizes the very special role of the American private research university in our economy, in our educational options for our students.

My second point revolves around the variety of educational programs in our large research universities. As an example, Boston University has developed a system of undergraduate education based on a quality liberal arts education, potentially coupled with opportunities for professional education in a range of fields, including engineering, management, journalism, occupational therapy and conservatory-like experiences in theater and music. All students within this curriculum can complete requirements in writing,

core humanities, and mathematics.

The markets for our graduates judge the quality of these programs, and the preparation of our students to enter either the job market, or to attend professional and graduate programs. The popularity of our university and of our programs with students and parents is related to these outcomes, which also strongly impact the reputation of the university. Reputation and outcomes are obviously coupled together, and one can rightfully ask if the feedback of the quality of education is direct enough. Are there outcome-based metrics that can realistically gather and be reported to help students in picking institutions?

Surely, comparisons are valuable between institutions with like programs, but data average across the university is less relevant. For example, when looking at employment data, how can one compare the job possibilities for new graduates from the School of Engineering with those furnished an aspiring actress or musician graduating from the College of Fine Arts? Disciplinary-based comparisons of outcomes across universities do have some merit, but are difficult to interpret without detailed analysis of individual programs.

Using standardized testing of graduating

undergraduates to measure outcomes has the same difficulties. Unless reduced to considering the most basic levels of knowledge, university-wide testing will not capture advanced learning, or measure the value of the university experience. Testing of basic skills can easily be reduced to being another attempt at evaluating the effectiveness of K-12 education in preparing a student for a rigorous college education. It would seem best, to me, to put the emphasis on improving the preparation of our high school students for higher education. Universities can and are helping with this challenge.

Catalyzed by our federal programs, and by a deeply held sense of engagement between our campus and the city, we have seen growing faculty involvement in working with our public schools to improve teaching in mathematics and reading. Through our School of Education and in collaboration with faculty and science engineering, we are moving to organize these efforts at Boston University into a common theme. The continued emphasis of federal programs on the support of these programs will be necessary for sustained success.

The final point I would like to make may be obvious to the Commission, but I also think it is important; the point is that private research

universities are not all alike in the financing of their operations. Most importantly, the budgets of most private institutions are driven by the tuition and fees paid by their students, and not by endowment income or annual giving. For the largest private universities, tuition and fees paid by students usually compose at least 50 to 60 percent of the gross annual revenue; while endowment income and annual giving by alumni amounts to 10 percent or less. This is not the financial model that comes to mind when people read about well-known private universities with large endowments.

Institutional reliance on student tuition for financial support of the university must be balanced by financial aid for needy qualified students, and for grants to attract the very best students to our programs. The commitment to undergraduate financial aid is substantial within private research universities. It is not uncommon for the average financial aid given to an undergraduate student to be greater than one-third of the tuition.

In this fiscal year, the one in which we're operating, Boston University's undergraduate financial aid budget is approximately $165 million. The amount would be significantly larger if the institution tried to meet full financial need for all

of our undergraduates.

A related realization is that typically the majority of this financial aid comes from the operating budget of the university, and not from the income from endowment or from gifts. Consider a simple calculation for a university with an operating budget of $1 billion. Most budgets for universities with medical and professional schools are considerably larger, and consider that the university had a billion dollar endowment. Although this sounds like substantial funding would come from the endowment, it does not in reality. Income from the endowment, which has generated 4 to 5 percent of the endowment total, amounts to 4 to 5 percent of the operating budget of 40-50 million dollars annually.

Assuming tuition for a student roughly costs $30,000 annually, the financial aid for 4,800 undergraduates or a class of 1,200 students a year will exhaust the income from the billion dollar endowment. You can sense the magnitude of the challenge of funding financial aid for a university with 15,000 undergraduate students. Federal financial aid for needy undergraduates appropriately indexed for inflation is critically important to helping qualified needy students have access to all universities, especially private universities.

Private universities in general, and private research universities in particular are a unique, American creation that have and will continue to play a critical role in higher education and the prosperity of our nation.

I hope the Commission will support the continued success of these institutions. Thank you for the opportunity to talk with you today.

DR. DUDERSTADT: Thank you very much. Richard.

DR. VEDDER: You seem to be somewhat skeptical of the ability to come up with outcome-based metrics on some sort of national level. I can understand the skepticism, but let me just ask a question. How do you know if students at Boston University who are graduating have learned during the course of their three, four, six years there anything about -- how do you know how much knowledge they've learned, how much skills they have acquired, critical thinking abilities, or even enhanced citizenship - how do you know what the outcome of a student going to Boston University is?

DR. BROWN: At a university's core, it must rely on the judgment of its faculty, and hopefully the faculty discussing across whole colleges and schools in the university about what the core

attributes, the core curriculum of the university should be. And then relying on the delivery of that core curriculum and on the grading system of the university, to basically authenticate that that curriculum has been delivered to the students, and the students had passed that curriculum. This is an age-old process, and this is why this is the role of the faculty within the university.

One of the discussions when you have a broad university, as Boston University, is how you actually generate that concept of the core, how do you generate that concept of the core in terms of what is a literate, well-informed citizen coming out the other side? The value of the liberal education, balanced with the professional education in the profession that the student has chosen to be in.

We have delegated that traditionally to the faculties in our university, and that's what's caused the richness and variety of the university system within the United States, ranging from the very structured undergraduate curriculum that you heard Susan Hockfield talk about, to the other extremes of self-generated curricula that you'll find in some institutions.

What we know at Boston University is that we have rigorous grading, and we have rigorous

discussions about what those standard core subjects are in the different disciplines. And what we know is our students have passed those subjects, and as long as you really believe your grading system and faculty is working correctly, I think that you have to fall back on that basis.

DR. DUDERSTADT: I was quite interested in your very strong appeal for the importance of private higher education in this country, and the recognition of that around the world. Clearly, important programs, federal programs like financial aid, are key to that. Clearly, tax policy is key to that, which most other nations do not have.

What about the whole issue of autonomy in governance - do you sense intrusion from government, state, federal governments on the autonomy of private institutions to control their own destiny? I think of a Supreme Court decision of last week, for example, that affects our law schools.

DR. BROWN: Yes, but I do not see this as from an operating principle -- a set of operating principles for private universities to be a substantial issue. I think that probably the biggest issue that is actually affecting private universities, I decided not to dwell on that today, is the shift away from a true cost-basis of sponsoring research on

our universities, but I don't believe this differentially affects private universities versus public. Both are struggling under this basis.

The private universities have the challenge of, especially tuition-based universities, of how to stay research universities when the federal government is not actually on a true cost-basis supporting the research that you're trying to do, because what it forces you in that situation is subsidizing that research effort, subsidizing that part of your excellence off the basis of tuition, which is very, very difficult to do with the financial aid requirements that we have.

DR. DUDERSTADT: That's a good point to get on the table here.

MR. DONOFRIO: Just a brief one, President Brown, kind of a follow-up on Rich's in some sense, back to this outcome, if we might. Your interaction pleas with industry from BU's perspective, and what role should industry play in determining what the real ultimate success measurement is? And more importantly, what interactions do you have with industry to kind of keep yourself honest, if you will, on an ongoing basis in terms of changes?

DR. BROWN: Well, you have to -- hopefully, we're defining the word "industry" broadly

enough to actually impact Boston University.

MR. DONOFRIO: You can pick it.

DR. BROWN: Okay. We have, for example, an intern program in Los Angeles in the Communication and Fine Arts industry, if you will, that places 300 BU students per semester in Los Angeles to do interns. This is a very important issue within the School of Communications and the School of Fine Arts, in terms of helping our students get a foothold in the industry, and also understanding the perspective in public relations, journalism, media communications about how the industry actually acts.

We have a Board of Visitors in the School of Communication made up of people that are a mix of people that are Boston University graduates and from the industry, and that's the way we get feedback, as do many universities in terms of the placement of our students. But if you take that part of the industry, if you will, it's a very different kind of industrial model in some ways, in terms of placement and job possibilities than it is in my previous experience in the engineering professional world, because the range of possibilities, the range of firms people work in is just vastly different. Okay. So we have good feedback in those kinds of programs.

Probably the place where the feedback and

the word "industry" decouples is when you start thinking about humanities in arts in the traditional College of Arts and Sciences concentrations, where people do not believe, at least coming through the university, that they're necessarily preparing themselves for a particular job in a particular industry, so that concept doesn't exist.

DR. DUDERSTADT: Okay. Thank you very much. President Richard Miller, President of your youngest college, Olin College.

DR. MILLER: Good morning. It's a privilege to be here. It's especially a privilege for such a small and unknown, and experimental institution as Olin to be included with this large group of distinguished institutions with a long history.

Because Olin is so unusual, let me start and spend a couple of minutes sort of outlining what Olin is, and what it's about. Olin College was founded in 1997 by the F.W. Olin Foundation from New York City. That foundation is well-known for philanthropy in higher education primarily through its program of building grants over a period of about 50 years, where it funded the full cost of the construction of 78 buildings on 58 university campuses. This foundation is not to be confused with other foundations that also have Olin in their title.

The Olin Foundation ended their Building Grants Program in 1997, and decided instead to devote the remainder of their resources to the founding of Olin College. The mission and charge to Olin College was rather ambitious, and somewhat irreverent to change the paradigm for undergraduate engineering education. This conclusion of the Olin Foundation to devote their resources to this task was the result of large effort over several years of conversations with the National Science Foundation with the Accreditation Board for Engineering and Technology, many college presidents, and with representatives from the industry.

It was their conclusion that a great deal of unhappiness existed with the current state of affairs in the preparation of engineering leaders. And although progress was being made with varying degrees of success at many colleges and universities, the best way to accelerate the process of change was to create an entirely new institution.

The Foundation didn't do this without a great deal of thought, and without high expectations, and to ensure that Olin would not just be another small college, they created a set of founding precepts which are unusual. Included in these are, first of all, the faculty at Olin College will not be offered

tenure. Olin College will not organize itself around academic disciplines. All students at Olin College will receive eight semester tuition scholarships, and the focus at Olin College will always be on undergraduate engineering education in a residential environment. And possibly, and most importantly, the college will try to develop a new culture based on continuous improvement and innovation.

Engineering education is important for the national competitiveness, as many have noted, particularly the recent book by Tom Friedman, The Council on Competitiveness Report, The National Academy of Engineering's recent report, and even President Bush in his recent State of the Union Address.

A few facts about the current status of Olin College. It's located in Needham, Massachusetts adjacent to, but completely independent from neighboring Babson College, a business school. Olin occupies 70 acres, about 400,000 square feet of attractive all new buildings. It's chartered to offer three degrees, all engineering degrees, Bachelors of Science in Engineering, Bachelors if Science in Electrical and Computer Engineering, Bachelors of Science in Mechanical Engineering, and its current enrollment is 288 students. It has a faculty of 34,

and a staff of 70.

The students that have been attracted are exceptional by all traditional metrics. Forty-five percent of the students, and 40 percent of the faculty are women. Students come from 45 states and a few foreign countries. Ninety percent of the operating revenue of the school, in contrast to the testimony that was just given by Boston University, 90 percent of the operating revenue at Olin College is provided by income from an endowment, which is provided by the Olin Foundation for this purpose.

The curriculum was invented during a unique two-year process involving students as partners in this invention process, something which has marked our program from the beginning. *The Wall Street Journal* ran an article on December 20th, which provides a good overview of the educational approaches used at Olin, if you want more detail.

The first commencement of the college is scheduled to take place on May 21st of this year, so we have not yet graduated any students, so this is very much a preview of a work in progress, rather than a report to the country.

Olin College obviously is still in its infancy, and as a result, there hasn't yet been enough time to conduct controlled experiments to formally

evaluate the many ideas that have been developed here. The task of invention from a blank slate requires simultaneous decisions on the selection of literally hundreds of important variables, and intense efforts to coordinate and balance these effects during the initial deployment.

In contrast, the task of careful evaluation requires conducting controlled experiments, of which only one variable at a time is varied and assessed. Therefore, at this stage in our development, most of what we have to report is in the form of early observations, rather than assessment of the results.

I'd like to make a few observations now about the experiments that we've had in place. The first one is that we believe students are fundamentally more capable than we expected, and I think this may be a generalizable principle to other institutions, as well. Of course, that's speculation.

Perhaps the most important conclusion we've reached in our experimentation with bright engineering students is they're far more capable of independent learning in truly challenging situations than we expected. During the Olin Partner Year, when 30 students worked closely with our founding faculty on educational experiments, we found that students

rarely failed to achieve specific results under pressure when challenged to do so in small teams. Team work is a really important concept.

We also found that they make highly responsible remarkably mature, insightful colleagues in making important fundamental decisions on many aspects of the educational enterprise, not just in the classroom. We suspect that students are frequently under-estimated as partners in the educational process and other institutions. Furthermore, when students are better challenged and given real responsibilities, they appear to become much more engaged in their own learning process. They appear to learn faster and more authentically, and they become more committed to the completion of their program, which has been a problem in engineering.

The principle of engaging students in learning by discovery is now deeply woven into the fabric of everything that exists at Olin. Furthermore, student involvement in designing and shaping many other dimensions of the institution has also been institutionalized to a greater extent than many others would think is either possible or wise. Students are routinely invited to serve on nearly all major administrative committees. They even are involved in the selection of incoming freshmen and the

admission process, as well as the selection of new faculty during the interview process. In fact, when recruiting our first several classes of incoming students, we told them when people ask you where are you going to college, tell them you're building your own.

Another observation, not having tenure did not seriously hinder our efforts to recruit faculty. Tenure is such a deeply embedded aspect of faculty employment that we worry deeply whether the decision not to offer tenure, combined with the absence of graduate programs, would make it impossible to attract faculty candidates with recognized national achievement. Our primary criterion for the selection of faculty members is the demonstrated ability or the potential to provide truly inspirational teaching at the undergraduate level.

Of course, engineering is a rapidly evolving field, and you can only teach what you know. Therefore, it's essential that faculty members in science, math, and engineering maintain a serious lifelong commitment to continue the intellectual vitality in their field. It's not just about teaching. So Olin College also requires all faculty members to develop an individual program of research, invention, entrepreneurship, artistic endeavor, scholarship or

other creative activity that will lead to nationally visible achievement in their field.

In spite of these concerns, our experience for the first six years in faculty recruiting has shown that we were able to attract distinguished and capable faculty without offering tenure. Although nearly all of our faculty appointments are in some area of engineering, science, or math, where competition from industry is substantial, we've averaged more than 100 resumes per faculty position in our recruiting efforts.

It's important to note that the success has not been obtained by simply providing excessive compensation. We benchmark our faculty salaries and benefits with highly competitive engineering schools across the U.S., and our average faculty salaries are less than 5 percent above the benchmark. The largest barrier to faculty recruitment at Olin College is one which all of my colleagues here share, and that's the high cost of living in the Boston area.

Another principle which we have had some experience with and I'd like to share is that continuous improvement in innovation requires a culture change, an attitude shift and continuous assessment. Few things are more predictable about the next few decades than the accelerating rate of change

that we can expect. This change comes from many sources, including the rapid development of India and China and the world economy, and the increased speed with which technological advances are changing our world, including the way children learn. Both of these trends appear to be inevitable, and both are likely to affect our lives in profound ways. Preparing students for this new world is a great responsibility.

In my 25 plus years as a faculty member at four institutions in three different geographic locations, I've come to appreciate the special contribution that higher education makes to our society. The pursuit of truth, no matter where it leads, aided by academic freedom and the responsibility to share new knowledge openly and freely has enormous power for good. The very survival of our democratic society depends on an educated and thoughtful population. Our system of higher education has done a better job of providing this foundation of knowledge and critical thinking than any other throughout history, as my colleagues have already mentioned. However, at Olin College, we have undertaken to apply these same principles of free inquiry and critical thinking to the very organization and operation of the college itself in an attempt to

explore the potential for opportunities for improvement.

While the traditions of higher education have generally served us well, only through questioning and experimentation are we likely to determine whether further improvements are possible. The scope of our efforts and our seriousness of this undertaking are illustrated by our decision to form multi-disciplinary faculty groups, rather than discipline-based academic departments, and to use renewable faculty contracts rather than traditional tenure system to explore change.

We are, perhaps, the only undergraduate college in America with a Vice President for Innovation and Research to lead our efforts in innovation assessment, and continuous improvement. Innovation and continuous improvement require certain cultural attitudes and commitments. First, an implicit humility is required to embrace the notion that improvement is always possible, and that we can always learn from others outside of our community. Listening to those outside of academia has not always been the strong point in higher education.

In addition, continuous improvement is only possible if continuous assessment is employed to guide our process. We must be willing to expose

ourselves to review and measurement, and to take the time to learn from our mistakes.

Finally, and perhaps most importantly, continuous improvement requires openness to change. At Olin, one of our five personal core values is openness to change. We've already found consistently that it's the most challenging of our values.

Another observation is that not having departments improved the focus on education and promoted real diversity of thought. One of the founding precepts of Olin College is that it will not organize the faculty into departments focused on academic disciplines. Currently, all of our faculty members meet together as one large group, and they discuss issues and make decisions as a single body. In addition, this large group usually also involves a wider group, including the Dean of Student Life, the Librarian, the Registrar, all the laboratory technicians, and any additional adjunct or teaching personnel and administrative staff in the academic program. There is an effort to reduce barriers between members of the community based on status or rank, and to treat all members of the community as colleagues. This is not the norm in higher education.

I'd like to talk for a minute about the selection of the right people in this process.

Selecting the right people is central to changing the outcomes. It's been noted that the American economy is likely to be shifting towards a service economy rather than strictly being focused on technology itself. And, therefore, the development of soft skills is becoming more important in the engineering community. Better soft skills among graduates, we believe, will likely be the result, an increased result if it is given higher degree of emphasis during the admission process, so looking for people with a higher likelihood of having soft skills is an important criterion.

As a result, we believe, just as industry does, the best way to select students for this capability is to meet them and to interview them, but we haven't found anything in writing yet, any written exam. Certainly, the SAT verbal score doesn't correlate very well with this, any substitute for actually meeting people and interview them, so we invite all candidates for freshmen to attend a two-day candidates weekend for an intensive set of interviews. It's not about the SAT scores.

We do something similar in selecting our faculty. Faculty selection process involves two presentations, one of which is intended to identify their ability to be inspirational in the classroom.

Often, they are assigned to teach a course in the exact same discipline that they will be hired to teach later, and judged by the students in that class who are in process with another instructor, so the student involvement in selecting inspirational teachers is important.

In another presentation independent from that, faculty members are asked to describe their intellectual activities. Students are also used to help evaluate faculty candidates because inspirational teaching matters to undergraduates. It really does at this level, and it is also difficult to mass produce inspiration.

Let me end this. There are a number of other observations that I could make if we had more time. Learning occurs primarily because of the culture, not because of the curriculum. Creativity is essential to our next generation of engineers, and it's not something that receives a great deal of specific attention. Entrepreneurial thinking is absolutely critical to producing technology innovators. Being smart is not enough. The culture of core values is quite important, character development. Educational experiments are expensive. We've been noticing that, but the most important innovations are not.

I think a recent book by Richard Light, that talks about making the most of college, has a number of very important insights in there that are quite transferable at low cost.

Finally, the mission of a research university is usually to create new knowledge, to preserve new knowledge, and to disseminate that. At the undergraduate level, our focus is more on teaching, which is critical if we are to improve the effectiveness of undergraduate education across the country, especially in science and engineering where about half of all freshmen fail to graduate nationally.

So I'll end this with a quote from William Francis McDowell, addressing the many college presidents who gathered in 1915 in Chicago to form what was then called the Association of American Colleges. He stated, "Your men and women who are teaching are not fundamentally teachers of subjects. They are fundamentally teachers of persons, and the great passion of the teacher should not be the passion of the language he teaches, or the literature that he teaches, but the passion of the life that he is shaping with that language and with that literature."

Thank you very much for the opportunity to address you.

MR. DONOFRIO: So, President Miller, great testimony. Olin is just an incredible college. I disagree with you, it actually is a research institute. Everything you're doing there is one big research project, just by the shear way you've put everything together, and you're to be complimented for that. My only fundamental concern or issue here is actually the scalability of Olin College, and how can you grow it given the wonderful model that you put together. Could you give us a few comments on that, please?

DR. MILLER: Sure. Obviously, not everything that we're doing is scalable, but again, as is true in the principles that are outlined in Richard Light's book, a lot of the simple ideas are quite scalable. Simply the engagement of students more in the development of their own academic experience is a principle which I think does not cost very much. It does not cost a great deal to include students on committees that have to do with curriculum. It does not cost a great deal to include students on the selection of faculty members. This idea of engagement of students I think has a great deal of potential.

Project-based learning is another concept which many of my colleagues here are already deeply involved in. And I think having the courage to

increase that principle and increase the number of opportunities that students have for project-based learning, not just in the senior year, not just in the end of the program, is also very important.

DR. NUNLEY: Congratulations. Who said that there's nothing new in higher education, and it must be wonderful to start with a blank slate, kind of be able to create something. The question I have is, how are you building programs to assess student learning outcomes and their environment?

DR. MILLER: That's a very important point. We do actually quite a lot to try to assess what we're doing. This is outlined in the written testimony in some depth. For example, every student has to develop a portfolio of project-based activity. This is a continuing thing from the time they are freshmen until the end of their program. And at the end of every semester after final examinations, every student is required to give a public presentation of some of their project work to the entire community. This is something that we call the "Olin Expo", so at our place it's about 300 public presentations over a two-day period. We invite 50 corporate visitors who are given some background and training to try to help us assess competencies that are demonstrated in these presentations.

Every January we have a retreat where all of our faculty assemble for the sole purpose of reviewing the curricula outcomes, and using outside assessment data as a measure of how well we are doing.

Frankly, we're having some trouble finding what we consider to be well-tested solid metrics from outside the academic community in measuring things like team work and communication abilities. We know how to compare our own students with each other, but we don't know what the standard should be, and we're looking for help in that area.

DR. DUDERSTADT: I think a marvelous presentation, and I would agree, one of the most interesting research efforts in higher education today. But just a caution - I had the experience last year of chairing the accreditation visit for Uncle Clark's Summer Camp, which is the other name they gave the University of California - Santa Cruz, which was built with enormous public support at another time when Greenfield experiments really could be done, an extremely innovative institution that now 50 years later sees itself evolving into a full-fledged research university campus with 25,000 students, just like all the rest of our institutions, so hang on to the innovation and uniqueness. Thank you very much.

DR. MILLER: Thank you.

DR. DUDERSTADT: The next speaker is President Lawrence Bacow, President, Tufts University.

DR. BACOW: Thank you very much, Mr. Chairman, and I appreciate the opportunity to participate in this dialogue. I'll try and quickly summarize my remarks. I think a number of the comments have already been made by my colleagues. I'd like to thank each of them.

Clearly, the United States is blessed, I think, with a higher education system with extraordinary diversity; 4,000 colleges and universities that come in all shapes, and sizes, and flavors, and we get a little bit of a sense of that this morning from the description of the various activities going on just in the Commonwealth of Massachusetts.

Our institutions compete for students, we compete for staff, we compete for faculty, we compete for resources. Indeed, I would argue that the competition in higher education is every bit as intense as the competition that one would find in any sector of the economy, and competition, as we all know, produces innovation.

We've heard a lot from Bob Brown, from others about how this is, in fact, the envy of the rest of the world. And like others, I would just urge

the Commission not to do anything that would in any way stifle this innovation, to resist the temptation to make us all pass through the eye of the same needle, which I think would only stifle some of the creativity that exists in this sector.

Last month at the annual meeting of the American Council on Education, I chaired a session for University Presidents, College and University Presidents, that was entitled "What Keeps Us Awake AT Night". I notice that brings a smile to the two former university presidents. And I found that I was not alone in my worries about the cost of higher education. This was the theme that everybody wanted to talk about. They wanted to talk about cost, they wanted to talk about access, especially among the neediest in our society.

My own university, Tufts, is breathtakingly expensive. Tuition, room and board, and fees total just slightly in excess of $42,000 for this past academic year. Now at the same time, I happen to think that a Tufts education is a wise investment. I wouldn't be here if I didn't. We provide substantial financial aid resources to those who come to Tufts to study, and guarantee that if we admit a student, we will meet the full financial need so that they can attend Tufts regardless of the

ability of their families to pay.

The average financial aid award at Tufts is in excess of $25,000 per year, and we are also committed to raising sufficient financial aid resources so that we can make this offer to every serious student who applies to Tufts. To become need-blind in admissions will cost us, we estimate, at least $200 million in incremental endowment, but we are committed to doing so.

Now I must confess to a personal bias which affects my concern about access. Like many others who have gone to college in the United States, both of my parents were immigrants. In fact, they were refugees. There are very, very few countries in the world that provide the kind of opportunity that I and many others have enjoyed, where people can literally go in one generation from being fresh off the boat with the shirts on their backs, to achieve at the highest levels of our society. While there are many factors that contribute to this in this country, the kind of opportunity that we enjoy in this country, I believe that higher education is a key component to it.

Now I'd like to speak as an economist for a few minutes on the issue of cost in higher education. Usually, competition in most industries

tend to drive costs down, and companies compete to be profitable, and usually the lowest cost provider has a competitive edge. In higher education, in many instances, competition, as has already been observed, drives costs up. And, in fact, students and their parents are looking for smaller class sizes. Nobody pounds their table when they come to Tufts for the college tour and says show me how many big classes you have. They're looking for more student/faculty contact, not less. They're interested in more hands-on learning, learning, in fact, of the kind that's going on at Olin and at other institutions, as well.

They are not interested in classes that have 300 students sitting in a lecture hall being lectured by one faculty member. They want more interaction between faculty advisors and students, and the pressure for smaller class sizes and more personal contact from an economic standpoint actually reduces faculty productivity. It does not increase it. Remember, productivity is output per hours worked, and we know that that actually -- the pressure in our business is to reduce it, not to increase it. Not to say that there aren't other ways that we can't make faculty more productive, but at least in terms of the educational product, it's going in the opposite direction.

Now I don't think that smaller class size or more student/faculty contact is bad. I think these produce an educational output which is, in fact, quite terrific and which we can be proud of. But it also is one that's very, very expensive.

I also note that many of the costs which we are all grappling with are completely beyond our control. The Tufts budget, 65 percent of our budget is related to personnel costs, directly or indirectly. As has already been described by Bob Brown and others, what we deal with is trying to hire people in a very expensive place to live. Moreover, we are trying to hire people whom we compete with for industry, as well. And what we find is that salaries and costs for this sector is increasing faster than the Consumer Price Index as a whole.

We're also subject to all the other things that industry deals with, rising energy costs, healthcare costs. Rising energy costs at Tufts this year alone will constitute an increase to the budget of $5.1 million. Another way to look at it is the distributable income on $100 million of endowment. And I also want to note that there's been tremendous cost shifting at research universities from the federal government back to our institutions through, as Bob Brown already described, under-recovery of

indirect costs.

When we say to institutions like our's that the federal government will no longer pick up its share of certain capital costs, those costs don't go away. The only place, in effect, to support those costs is through the educational budget, another driver in tuition.

In the 2005 academic year, we at Tufts awarded $35 million in need-based undergraduate grants. These are just strictly grants and aid funded by the institution. Our total financial aid budget, including student loans and others funded by Tufts is $63 million. If you take a look at the net cost of attending Tufts for families, net of financial aid, which, by the way, we have been growing at double digit rates. The fastest growing component of our budget is our financial aid budget. The net cost to families receiving financial aid has basically kept pace with inflation. If you take a look at the return to that, as measured by expected income streams, it's out-paced that quite dramatically.

Why do we all see increased numbers of students trying to attend our colleges? It's a good value. We talk a lot about the cost of higher education, we spend less time talking about the value as measured in the marketplace by the future earnings

of our graduates.

Now what I think is unfortunate, however, is the growing number of institutions that are devoting scarce financial aid resources not to students who need it the most, but rather to those who would attend college under any circumstances. I am speaking of merit aid, financial aid that's awarded to students simply because they're either at the top of their high school class, or because they've scored well on various standardized tests. These students are going to go to college, usually very good colleges, regardless of whether merit aid is provided. And it's far from clear to me how society as a whole is better off if we expend scarce financial aid resources merely to redistribute the brightest kids among our institutions. That is doing nothing to improve access, so the College Board Reports on Trends In Student Aid 2005 signals what I think are some very troubling shifts in student financial aid, where merit-based awards at both public and private institutions are growing, and merit aid is likely being used within segments of the private sector to influence enrollment patterns for families that really fall into the highest income quartile. And I think, candidly, this is a scandal, and it's something which we ought to think about.

I encourage the Commission to refocus attention on our students whose need is greatest, and to help ensure that their access to higher education and their opportunity to achieve their potential is expanded in what I think has really been the great tradition of higher education in this country. And I would encourage the Commission to consider recommending to the Congress that we do some experiments to take a look at how differential financial aid policies might influence access.

Susan Hockfield when she was here noted that MIT will double Pell Grants, will match Pell Grants. Maybe Congress or the Department of Education should experiment by picking a group of students in a few states and saying that we're going to have different levels of Pell Grants, double, maybe even triple, and see the impact that that might make on access of certain student populations to acquire education.

The third point that I would like to make has to do with the role of higher education in preparing our students for society. Now the Commission has been, I think, appropriately concerned with how colleges and universities are educating students for a 21st Century education, 21st Century workforce, and you have focused a lot of time and

attention on how we're preparing the next generation of scientists and engineers, as well as the role of research institutions like Tufts in generating new knowledge for the benefit of society.

However, I would like to suggest that this tells only a small part of the story. We have a much, much broader role to play as institutions than merely preparing our students to be part of the nation's workforce going forward. Historically, our role is that we have prepared students to play important roles in our society, as active citizens in a democracy, in helping students to develop the critical reasoning skills that allow them to participate effectively in public debates about the great policy issues of our time.

I think like many others, I am deeply concerned about the quality of public discourse on important policy issues. Now some of these are clearly grounded in science and technology, and we want to make sure our students are well-educated to participate in discussions about issues like climate change, for example. But it's equally important that they be well-educated, critical participants in discussions about things like the future of the Social Security system, or universal access to healthcare, whether or not this nation should adopt policies which

encourage more immigration or less immigration. These are important policy questions, which, candidly, are not going to be influenced by how well we teach science and math in colleges or high school, but rather by how we develop broadly critical reasoning skills, how we develop communication skills, how well we teach our students to read and to write. It is more than just helping to ensure that the next generation of scientists, mathematicians, and engineers are well prepared. Clearly, we need to do that, but we need to do far more than that, as well.

I think our institutions should be motivating our students to become active, engaged, effective students in the communities that they are going to inhabit. I think this is the role of the liberal education, not just to convey knowledge, but to convey values, and also to encourage our students to get involved and not just sit on the sidelines. And when I'm speaking of communities, I'm not just talking about neighborhoods. I'm talking about our professional communities, I'm talking about our religious communities, I'm talking about our social communities. Indeed, the entire social fabric which makes a society possible.

This nation at this point in time is investing a tremendous amount in order to make

democracy work abroad, indeed throughout the world. I think it's equally important that as you think about higher education, as you try to understand the contribution that our many institutions make to society, that you also focus on the role that we have to contribute to making democracy work at home.

I appreciate the opportunity to share these thoughts with you, and I want to wish you well in your deliberations. Thank you very much.

DR. DUDERSTADT: Great. Thank you. Rich.

DR. VEDDER: Great testimony. Of course, I'm a fellow economist so I think like you do, which may be bad for both of us.

DR. BACOW: We've both managed to overcome that handicap.

DR. VEDDER: Yes. We're both worse off for it. I was struck by the statement, which I think is absolutely correct - that the pressures are great in higher education to actually lower productivity, and I'm wondering if you have any thoughts, can we change the rules of the game, how higher education is done, so that we more, I guess, closely emulate the private sector, which has a tendency to have productivity rise over time. Is there anything we can do about it?

DR. BACOW: Sure there is, and we're doing

it. First of all, remember, this is not one size fits all. I've described things from the perspective of a small, private, elite research university, which is relatively well off. And what we see is a great diversity of teaching, a great diversity of strategies that's being adopted in many places, so I don't mean to suggest that what we're doing is the only way to do it, but these are the pressures that we are feeling.

At Tufts, one of the things which we've done is very systematically we have taken a look at how faculty members spend their time. Faculty time is the scarcest resource in any university, and we have taken a look at how they spend their time outside of teaching and research, and we've tried to be creative in the way in which we use technology to reduce the demands upon their time for the way in which they enroll students, the way in which they advise students. And I could provide the Commission with examples, as I'm sure many of my colleagues could who are here about things that have been effective in that dimension.

DR. VEDDER: One follow-up. I was struck with what you said at the end, and I'm glad someone here - we have all the science and engineering techies here, starting with our chair and this whole panel, practically, except for Charlene and myself. And I'm

all for enhanced science education and so forth, but no one has said a word hardly at all in all our hearings about the humanities and so forth, and I'm glad to see you at least putting in lip service. I'm troubled --

DR. BACOW: Lip service?

DR. VEDDER: I am troubled by the decline that the Department of Education recently released a survey showing a sharp decline in literacy among college graduates, the Adult Literacy Survey. Do you think that there has been -- is there serious problems with what we're teaching the students in college? Are we actually getting worse college graduates than we used to? I mean, that's what the data suggested.

DR. BACOW: I don't think so. And again, my perspective, though, is shaped from where I sit and what I see at Tufts. I also have to add that this passionate appeal that I've provided for a liberal education comes from somebody who was an MIT undergraduate, so it speaks to the value of a technical education broadly defined.

I don't see that. It may be an issue elsewhere. The students that I've been privileged to teach, and I spent 24 years prior to coming to Tufts five years ago, at MIT. The students only seem to be getting better. That was true in my prior life, it's

certainly true now. They have a broader set of interests, they are much more citizens of the world than certainly we were when we went to college, and they seem to want to soak everything up, so I have not seen that personally.

DR. DUDERSTADT: Let me raise another question with respect to cost for a minute. One of the unusual things about American higher education is the degree we assign the responsibility to our colleges and universities to socialize young people, a role that in most of the rest of the world is done in secondary schools. As Lord Rugby used to say, the British public school transformed savages into gentlemen. I worry that our socialization transforms students into savages, at least at this time of year with the final four, of course. That's a very costly enterprise. And while the assessment of learning that comes out of the curriculum and so forth is something that we're adept at, do you have a sense as an economist on some of the worries about cost, of how we begin to measure the massive investment we make in the socialization of young people from residence halls, to intercollegiate athletics, to all of the other things that we populate on these campuses?

DR. BACOW: Well, the biggest socialization I think that occurs on any college

campuses occurs through the admissions office, which seeks diversity in multiple dimensions. And that's another thing that nobody really has talked to here, but in fact, I think one of the great accomplishments of higher education is if you were to look at our campuses, you see students that represent vastly different experiences coming to all study in a residential experience. And what we have represented today is largely a residential experience, with the exception really of UMass-Boston. And what we do is that we take these students and we confine them under temperature and pressure for four years, and we get very interesting catalytic reactions. And I think that is where much of the socialization occurs that is profoundly healthy, and there's a tremendous amount of learning that occurs outside the classroom. And I think partly what we see - you know, we certainly see other pressures which, candidly, we've tried to resist at Tufts. You won't find climbing walls at Tufts. You won't find athletic facilities that look like the best health clubs. And I tell the kids that's not why you should come here. If that's what you're looking for, go someplace else. It's not about the buildings, it's about what goes on inside of them. But the pressures are very real, and unfortunately, what's happened is that we've seen an increase in a

consumerist approach to higher education, where this is, in fact, how people are evaluating the institutions. And we can talk about some of the other pressures, some of which have come from, in some cases, regulation, but in other cases concerns over liability. If you take a look at how much all of us are spending on mental health services these days to student life professionals relative to 20 or 30 years ago, as you know, it's astonishing.

DR. VEST: Larry, you mentioned something close to my heart, of course, which is the issue of need-based financial aid, and merit financial aid. Actually, I think the largest numbers in which the federal government is involved that influence all this are in the form of tax breaks.

DR. BACOW: Absolutely.

DR. VEST: And I wonder if you could comment on how you would view or advise the federal government in that regard.

DR. BACOW: Well, in fact, in my written testimony I've addressed that a bit, and most of the federal financial aid that's distributed through the tax system is regressive. It benefits the wealthiest in our society, and I think it's problematic. Again, I think that we should be focusing our attention on providing access to the neediest in our society.

I spent a year on a sabbatical living in Europe, and I was struck - I tell our students, the reason to live in another country is that you understand your own much better when you do so. And we accept social mobility in this country. Of course, it exists. It's the American Dream, and that is not the case in much of the rest of the world. And it exists, in part, here because we provide opportunities for kids to get a great education, which they can get at a variety of different kinds of institutions, and then we provide them with economic opportunity based upon that once they graduate. And I think getting people into that system is important.

There was a question that came earlier about graduation rates. As an economist, I want to note that the mere fact that somebody does not graduate does not mean that there hasn't been value conveyed from having attended college even for one year. And, in fact, if you take a look at the data, you see that there are actually very substantial returns to one-year of college, two-years of college, even for people who don't graduate, so obviously, we'd like to see high graduation rates, but don't assume that there's not value to people who just spend a year or two in our institutions.

DR. DUDERSTADT: Thank you very much.

DR. BACOW: Thank you.

DR. DUDERSTADT: The next speaker is President Mary Fifield, President of Bunker Hill Community College. Welcome.

DR. FIFIELD: Thank you. I've had the privilege of being President of Bunker Hill Community College here in Boston for just about 10 years now. And, in fact, have been honored to have served at three other community colleges before Bunker Hill, so I bring you remarks this morning based upon those experiences, and also speaking on behalf of the American Association of Community Colleges.

I'm reminded, as I reflect on my experiences and my association with the American Association of Community Colleges that, in fact, community colleges, unlike other sectors of higher education, are uniquely American institutions. From their start as junior colleges in the early 1900s, these two-year institutions signaled a very dramatic change that expanded educational opportunity from the affluent to the poorest, and the most disadvantaged among us. With the basic philosophy that everyone deserves the chance to go to college immediately following World War II, two-year colleges proliferated and made real another commission, The Truman Commission's concept of a community college that's

geographically accessible to everyone.

Today there are more than 1,150 community colleges across this great country. They enroll almost half of all students who go to college. We train students for high demand jobs. We educate for transfer to baccalaureate degree institutions. We help the under-prepared get ready for college level work. We teach English as a second language and basic literacy skills. We introduce international students to the American system of higher education. We provide valuable community service offerings to support business and civic interests, and we forge multiple partnerships with K-12 schools. In short, we aspire to, and in many cases I think we meet the total post-secondary needs of our population, just as the Truman Commission long ago envisioned.

Our institutions attract a greater diversity of students than any other sector of higher education. Consider that in community colleges, about two-thirds of all students are part-time, compared to about a quarter of students in baccalaureate degree granting institutions. Fifty-four percent of our students work full time, 34 percent have dependents, 16 percent are single parents, and 23 percent spend six to twenty hours a week commuting to their college classes. More than 45 percent of community college

enrollees are first generation college students, and almost 44 percent of community college students are 25 years or older.

As Kay McClenney observes in an essay that she titled *Keeping America's Promise: Challenges for Community Colleges*, and I quote her. "Going to college isn't what it used to be; that is, an 18-year old leaving home to live on or near a campus, attending classes full-time, and typically earning the degree four years later at the same institution where she or he started. In fact, the term `traditional' and `non-traditional' students has undergone a role of reversal of sorts. For a good part of mainstream America, a non-traditional student is now the norm. " So it's within this context of a changed definition of college student that I present the following issues and the recommendations as they pertain to affordability, access, accountability, and quality of our nation's higher education system. And particularly, as these issues affect the more than 12 million students who attend community colleges annually. I'll begin with affordability.

According to the Education Commission of the States, more than 12 percent of the population lives below the poverty line, nearly 34 million people. These and other low-income people have a

little more than a 20 percent chance of going to college. For African-Americans and Latinos, the percentage is even lower. For low-income students, the availability of financial aid becomes a deciding factor affecting college attendance. Yet increasingly, both static amounts of aid, such as the four-year freeze of Pell Grants, and the policies governing eligibility of grants, such as the new Academic Competitiveness Grant, serve as disincentives to low-income students.

Further, federal programs designed to provide pathways from high school to college, especially important to populations unaccustomed to considering college as an option, are under-funded or slated for elimination. As evidenced by the fiscal year 2007 budget, that deletes programs, such as GEAR UP, Upward Bound, and Talent Search. What then are some recommendations for you?

Essentially, there are four that I'm presenting now. The first is obvious; break the four-year freeze on the funding for Pell Grants; create Pell Grant eligibility for stand-alone English as a second language programs; revise policies governing Pell Grants so that the grants for college are committed to students while they're still in middle and in high school, rather than wait until they go to

college; establish a sustained commitment to fund pre-college enrichment programs, such as GEAR UP, Upward Bound, and Talent Search; provide incentives for dual enrollment programs to give high school students who don't have a vision of college early familiarity with the college environment; and finally, expand eligibility for the Academic Competitiveness Grant from exclusively full-time enrollment to include the two-thirds of community college students who are part-time.

My second issue as it pertains to affordability addresses need-based grants and merit-based aid. Increasingly, federal grant opportunities for students are shifting from need-based to more exclusionary merit-based aid, and while need-based aid such as Pell decreases in real value, the new academic competitive grants, for example, require recipients to complete, and I quote "a rigorous high school program". Many low-income students frankly simply don't have the option of selecting their high school, and could be ineligible for this aid through no fault of their own.

Similarly, the proposed Pace Act provides four-year competitive scholarships to students who obtain Bachelors Degrees in the sciences, engineering, or mathematics, and concurrent certification as K-12

mathematics or science teachers. These merit-based funds are to be awarded, and again I quote, "on the basis of national examinations". In short, merit-based financial aid programs appear to help students who need financial assistance least.

There must be a federal policy that makes need-based grants the primary aid for low-income students, and need-based grant opportunities must be expanded.

Accessibility. Federal adult basic education programs at this point don't reflect the large scale of community college involvement in this area. Community colleges offer literacy training, as well as English as a second language course as prerequisites to enrollment in workforce education certificate and degree programs. Similarly, these courses are provided to employers on-site.

Our recommendation is that adult basic education should be explicitly linked to the workforce training mission of community colleges. Federal grants with a required match should be considered to motivate greater state and private investment in adult basic education and literacy training.

Another issue of accessibility involves our undocumented immigrant students, and their ability to obtain an education. Passage of the federal

legislation to assist undocumented immigrant students continues to face obstacles. Immigrants today account for one of every 20 employees in the workforce. Generally, they occupy jobs in service and blue collar occupations. Lacking a college education, they're disproportionately located in these low-skilled and low-paying jobs. Many prospective college students who are immigrants have spent most of their lives in this country. They've been educated in our public schools. Prohibiting their access to public higher education results in a waste of talent, and exacerbates the already alarming shortage of skilled workers in our nation. And again, our recommendation is probably obvious; put post-secondary education within reach of undocumented immigrant students who have grown up and gone to high school in the United States by passing the Dream Act. Federal and state financial aid should be made available to most categories of undocumented immigrant students. We believe it's in the national interest to do this.

On the issue of accountability, two issues, and two recommendations. And the first one has to do with the new information collection data system. And I know that there's an effort to obtain more information about institutional activities, including graduation rates, and I know that there is a

new information collection system being explored, in which data would be submitted by institutions on a student-by-student basis. Students Social Security numbers or other identifiers would be used to match data files. The new system would include data on tuition and fees paid, as well as individual loans and grants.

We believe this proposal has serious implications for student privacy, and should be examined with skepticism. Use of individual Social Security numbers or other identifiers by colleges is dangerous, due to the possibility of identity theft or other release of the data. Finally, we're really not convinced of the argument for collecting individual data, rather than aggregated institutional data, as is currently the practice.

Another issue as it relates to accountability has to do with IPEDS, the Integrated Post Secondary Education Data System. Since 1997, the standard measure of success for community colleges used by IPEDS is based upon the number of first-time full-time students who complete a degree within three years. This, in fact, was the subject of a front-page news story on *The Globe* just a little over a month ago. Since the majority of college students in community colleges are part-time, these data capture

only a fraction of our students. They're further skewed by the fact that a significant number of first-time full-time community college students transfer before graduation or cut back to part-time status due to family and job responsibilities. In both cases, these students are counted as failures, and they contribute to what's referred to as a lower completion rate for community colleges.

Our recommendation is that there needs to be recognition, that community colleges are open-door institutions, enrolling a majority of part-time students with many differing goals that may or may not include degree completion.

Further, community college students differ in their degree or academic preparation, and frequently need developmental education that prolongs their time to degree completion. In addition, many are low-income students with both family and job responsibilities that disrupt the continuity of their education.

Public policy, then, for measuring student success should incorporate multiple indicators, and include learning outcomes, licensure, exam pass rates, individual student goal attainment, transfer rates, employment success, and results of surveys such as the Community College Survey of Student Engagement.

And finally, on the issue of quality, the Science and Engineering Indicators 2006 Report underscores the need to improve and expand science and mathematics education from K-12 levels. This is both an issue of world competitiveness and emerging workforce requirements pertaining to science, mathematics, engineering and technology, or what we've come to know as STEM.

Community colleges' roles include course work for preparation of K-12 science and mathematics teachers, as well as two-year degrees and certificates in these areas. Because more students are enrolled in community colleges than any other segment of higher education, it's imperative that community colleges be included in STEM initiatives. Our recommendation, then, is to expand programs, such as Tech Prep, that introduce and interest high school students in STEM fields, and link these programs explicitly to community college programs of study, provide federal incentives for the development of STEM programs at community colleges, as well as professional development opportunities in STEM fields for our faculty.

The American Association of Community Colleges and American Association for State Colleges and Universities characterize community college

students, and I quote, as "the most vulnerable members of our society who already face significant financial and social challenges, low-income, limited expectations, and uneven preparation, yet this is the real majority. This is the future of our country. This is the workforce of America who will make the difference between a prosperous economy and one that falters."

In a report issued by the Education Commission of the States, Center for Community College Policy titled "Closing the College Participation Gap: A National Summary", author Sandra Ruppert offers what might well be the ultimate measure of accountability for Federal Public Policy in higher education.

We agree with Dr. Ruppert when she says, and I quote: "Ultimately, the goal to build a nation of learners will be measured in terms of how well the nation is able to educate those most difficult to reach. These are our community college students."

I appreciate the opportunity to address you today, and I'd be glad to answer any questions.

DR. DUDERSTADT: Thank you very much. Charlene.

DR. NUNLEY: Mary, very fine testimony. I think we met when you were at Harrisburg area community college some time ago. I have two

questions. You mentioned the issue of remediation, which is something that all of us in the community college sector deal with, and particularly as we need to broaden the participation rates in higher education, I think that's an issue that isn't going to get any less challenging.

Do you have anything you think the Commission should recommend to try to address the issue of preparation coming into community colleges?

DR. FIFIELD: Well, I think the issue of preparation and developmental education starts long before one enters a community college. And I think that programs that assist middle and high school students to become more familiar with the collegiate environment go a long ways towards helping younger students become accustomed to what they might experience in college, and also aspire to it.

I think at the same time we need to recognize that an integral function of our country's community colleges is not just developmental or remedial education, but basic literacy. There is a strong proportion of our population that is really in desperate need of adult basic education, and federal policy could go a long way in providing additional funding to community colleges to support that.

DR. NUNLEY: And then the second question

I guess deals with two of your recommendations that I see as, perhaps, in a bit of a conflict. You talk about under accountability how it's very difficult to evaluate the performance of community colleges because it's based on graduation within three years, and that our students transfer out early, they shift from full-time to part-time, they come in and out of the environment. Wouldn't a system that followed students based on a unit records basis give us more capability to gain an understanding of that aspect of the community college student attendance pattern?

DR. FIFIELD: That may be the case. We feel that the risks of that kind of system outweigh its merits. We think, for example, that because of our multiple populations in community colleges, that there are also multiple ways that we can measure student success. We can, for example, in my institution, we have a college-wide initiative right now that not only establishes learning outcomes by course, but by academic program, against which students are measured. And that's put in place regardless of the student's aspirations.

Certainly, in our healthcare fields, we have licensure exams that students must pass. And certainly, a measure for us is the extent to which our students are successful in obtaining employment or in

transferring. We're concerned about the unit data method specifically because it provides information on individual students, individual people. And frankly, there's some skepticism as to where that information may ultimately go, through a benign effort, not necessarily anything that's deliberate or calculated.

DR. VEST: I would like to take what you've just said about the unit records as a challenge in the following sense. I honestly believe that virtually all we understand about what the role of Affirmative Action has been in higher education, how it has influenced larger society, and what the role of athletics has been, all these things we know. We know only because we've had the ability to track individual students.

What the Commission has tried to do, and one of the challengees over here is Nick Donofrio, we are absolutely convinced that there's good technology out there that can provide the privacy guarantees. And I just want to point out that two of our industry members have agreed to take on the challenge of demonstrating that to us.

MR. DONOFRIO: Every chance he gets in public, he recommits me. Well, we agree it is so important, and I suspect you'll hear more from us about unit record. And we think there are better ways

to both secure it, as well as make it more private. We understand what the issues are, and we understand what the consequences are of failure, but I think you also would understand that for us to make real progress, true progress - I mean, it's always difficult when we start these debates and discussions over what's the real data.

DR. FIFIELD: I would hope that if this direction is pursued, that every measure is taken to safeguard individual privacy rights, and that there is an aggressive stance taken against the release of that individual data to any party that may not need it for educational purposes.

DR. DUDERSTADT: Yes. Go ahead.

DR. VEST: I am always struck by your phrase "limited expectations". That is so much at the heart of everything that we have to worry about, and I realize that in response to Charlene, you explained some of your thoughts on this. Anything you can do to help us understand how to raise that level of expectation in view of opportunities on the horizons out there for these incredible young people that are served quite non-linearly or out of proportion by community colleges would be welcomed.

DR. FIFIELD: We have a number of programs at Bunker Hill Community College that enable students

from the Boston public schools to come as cohorts to our institution. They sit-in on a class. They go well beyond just taking a tour of our facility. We have a program right now that I'll briefly describe, that's funded by the Mayor's office that addresses race-based health disparities, and essentially we've identified ten students at each of five Boston public schools for a total of 50 that have as their career aspiration the field of nursing. And we're involving them in a very intensive program. They're paired with one of our nursing students as peer mentors. They're also paired with a nurse in an area hospital as a professional mentor. And they're guaranteed entry into our nursing class if they complete this particular program, which is a semester in length. That's no small thing, because our waiting list for our nursing program right now is upwards of 400.

DR. DUDERSTADT: Thank you very much. That's very good. We'll invite our next two speakers up together, Steven Reno, Chancellor of the University System of New Hampshire, and Valerie Lewis, who is Commissioner of the Connecticut Board of Governors for Higher Education. Is Valerie Lewis here?

DR. RENO: She is coming.

DR. DUDERSTADT: Oh, she's here. Okay. Great. Then I'll let you get started.

DR. RENO: Thank you very much. Mr. Chairman, members of the Commission, good morning. In the interest of full disclosure, a couple of introductory remarks. First of all, I am not an economist, nor an engineer. Indeed, I was once a Professor of Comparative Religion, so we'll see what light that throws on my comments this morning.

The other is to say that in the days when I was a campus president, I had a habit, and that was every time I went out to meet a major donor, or I was to appear before the State Legislature to give testimony, I spent the last hour on my campus talking with students. And I did that so that when I sat in this chair looking at the donor or the legislative committee, I would have those students clearly in my mind, and their interests in my words. I wasn't able to do that last night, so I brought a picture, and I'm going to explain this picture in just a few moments.

I thank you very much, we thank you very much for this opportunity. Our hope in addressing you this morning is that we find common ground and affirm a common purpose. Access, affordability, accountability, and quality, these issues not only characterize this and the other public hearings that you are holding across the country. They are also the oft expressed concerns of policymakers, business

leaders, the media, parents and students of all ages.

If this is to be a candid and ultimately useful national dialogue, let's begin by acknowledging that many today are asking whether our institutions of higher education are more interested in their own preservation and prerogatives than with the admission, support, and successful graduation of students. Fair or not, such perceptions are increasingly setting the tone, and shaping the current national debate.

We come before you today as representatives of the Six New England State Higher Education Executive Officers, SHEEOs, and we come to suggest that our states, indeed all states, need to speak directly to these concerns. We believe that an increase in the number of citizens graduating well prepared from our nation's colleges and universities is both a moral and an economic imperative. The evidence of this need is compelling and deeply troubling. You know it, we know it, and we all cite that evidence.

Commissioner Lewis and I would report to you this morning the recent commitment of our Six New England States to work as one to meet the urgent demand for more and better prepared graduates, but let us illustrate why we know this must be our focus as a Six-State region. Indeed, this is the face of our

work.

In the picture to my left, the proverbial picture worth a thousand words, you see hundreds of faces representing the youth population of our New England States. Our cohort is not growing like that of a California or a Florida, but is increasingly and stunningly becoming more diverse ethnically, culturally, and economically.

Consider this set of facts. Of every 100 first-year high school students in New England, only 75 currently make it to graduation, and possess a diploma that in today's marketplace is worth less than it was even a decade ago. Consider further that of these 75 high school graduates, only 44 immediately enter college, and this despite the fact that we in New England has an especially high density of colleges, as well as a long tradition and appreciation of higher education.

Of these 44 entering college students, however, only 34 will be enrolled in their sophomore year. And finally, please look carefully at the representative 25 faces of those who will actually earn a college degree.

While we may congratulate those who are graduated, we must be shamed by the talent that has fallen by the wayside. The other 75, many of whom

have missed the chance to acquire the habits or heart and habits of mind to secure a productive and satisfying future. It is for all those faces that we have peeled off of this picture that we commit publicly to the steps that we are taking as a region.

Working within the New England Board of Higher Education, we unveiled last month College Ready New England, an unprecedented region-wide alliance that has a P-16 vision to increase the number of high school graduates and GED completers, who aspire to, and are ready for college, and to increase the percentage of those who enroll in and graduate from our colleges and universities.

This project has just begun, but it has the full support of all six of our governors, and in many ways parallels the purpose of your Commission. We are developing shared data sources and measurements to assess our progress across an agenda that includes the following; securing from each of our governing boards a public commitment that its priority is affordable access to higher education, especially for low to middle income students of all ages. Second, partnering with K-12 in success tested programs, such as Middle School Mentoring, and Dual Admission for high school seniors. Third, reallocating resources to increase funding need-based institutional financial

aid as a supplement to, but not a substitute for, federal financial aid. Next, developing incentives that challenge our institutions to improve retention and graduation rates, and encourage students to graduate within shorter time periods. Next, sharing those best practices across our six-state region that assess student learning en route to graduation, student performance at graduation, and alumni and employer satisfaction out after graduation. We need to know, not just assume, that our graduates leave with the knowledge and skills critical for success in today's global economy and society.

Rewarding innovative and successful institutional efforts to improve productivity by reducing the cost of instruction, while maintaining quality, including single point of contact for program and financial information, online and hybrid instruction, and flexible scheduling. And lastly, providing for ease of transfer from two-year to four-year institutions, including the development of block transfer articulation agreements, dual admission, and timely and effective advising across the sectors. That is what we have committed to do.

What best practices we identify and then try to expand across our region will be worked out in the coming months. What is noteworthy is our resolve,

once again, to work together as a region. Fifty years ago, these six states formed a compact establishing the Regional Student Program. And by so doing, recognized the impact of collaboration to expand access. Today, through the College Ready New England program, we again agree to address access, affordability, quality, and accountability as a region. We set a high standard 50 years ago. We need to set a high standard today.

We would ask that the federal government support this commitment by the following, and you have heard much of this in earlier testimony this morning. Provide financial aid to low and lower-income students. We are concerned that the trend toward private loans is increasing the debt load of our graduates, and is creating an undue burden on our next generation of workers. And I believe later this afternoon you will hear first-hand from students who will tell you of their situation.

Second, support the establishment of a national student unit record system with failsafe privacy safeguards, so that we can assess the actual cost of and student progress through higher education. And I did not write that between the last testimony and now. Next, provide incentives to higher education to partner with business leaders and policymakers to

increase graduates in critical shortage areas, including creative and flexible measures to support the transfer of community college students, the education of older students, and those wishing to change careers. And lastly, continue this dialogue.

The recommendations you ultimately frame, and you have had many suggestions offered to you this morning, drawn as they surely will be from this and the hundreds of other testimonies you will have received, should help us all to set a common agenda, one that is not divisive, but one that truly unites us, all of us who share responsibility for the education of our fellow citizens. The faces no longer in the picture across from us should be more than sufficient incentive, I believe, for us to find that common cause. Thank you very much.

DR. DUDERSTADT: Commissioner Lewis, did you have comments?

MS. LEWIS: We speak as one, so the testimony is from us both. But I would add, perhaps, a couple of examples from my state emulated in the other six states that cause us to come together in this kind of collaboration. First, let me speak to the data issues that you have heard different testimony about today.

We must become data driven in higher

education, just as our business partners are. We must use information to best advantage, and we cannot do that without the kind of information that goes beyond our borders, which are becoming more and more invisible by the day.

I will tell you about one project funded by the Nellie Mae Foundation that we completed, where we tracked 37,000 high school graduates in Connecticut from the year 1998. We correlated their test results on our mastery test given in 10th grade to the SAT examinations, finding that both tests were good predictors of college retention, each predicting in separate validity areas.

We further followed those students through six years, hopefully to their college graduation, finding that, of course, that was not the case for the majority of students who entered, but we were able to use the National Student Clearinghouse to follow students wherever they went in both the public and private domains. And then further, with the cooperation of the Connecticut State University and its four institutions, to look very specifically at whether the courses taken in high school contributed to the grade point average in that freshman year and retention in the sophomore year. And further, how the students who had to have developmental education were

able to succeed, or did not succeed in those settings, and whether any and all of those students persevered to graduations and in what fields.

We are able now to take that kind of information done now on a snapshot basis, and take it back to the contributing school systems to tell them about how their students succeeded with us. It seems to me that's one of the very big things we can do to connect K-12 and higher education in fruitful ways where we help each other know what constitutes success for our students.

A second and small example I would give you is in terms of partnership. Recently, we had some monies provided by the State of Connecticut and by the Board of Governors for Higher Education who are designated to try to create systemic change, create cultural interest in change across the system of our 47 public and private institutions, just a rich array of institutions on our small landscape. Two and a half million dollars, not much to invest in this case in trying to build the Allied Health Workforce that we so desperately needed. To put that out as straight competitive dollars would get us not very far, so instead, we went first to New Haven where we did not have a community college AS degree in nursing at our Gateway institution there, and where we had four

primary health partners sitting in the neighborhood, Anthem Blue Cross, Saint Raves, Yale New Haven, and the Rehabilitation Hospital, brought them all to the table and said could we do something together.

What has resulted are multi-year contracts, contracts signed by the institutions of education, in this case the first in New Haven, Gateway, signing along with its Allied Health partners, and with the state matching a direct contribution from those private health providers for a term period in which the hospitals will contribute talent, laboratory space, direct dollar commitment, teaching help from adjunct folks, which is hard to get in the community colleges, as I think President Nunley knows, where the state has given the matching dollar, but more than that is also providing assistance in respect to the building of support services for the retention of those students to graduation, and where the institution has reallocated positions, increased seat space, and has committed across the system of its 12 community colleges to building one nursing curriculum to the best quality we can manage.

It seems to me that kind of collaboration is the only way we are going to manage resources into the future, and manage the best quality simultaneously. And it does seem to me, again, that

the federal government can appreciate how that mix of attention could be to its benefit. Heretofore, most of the funds coming out of the federal government have been either in direct student aid, which we need as you have seen today, dramatically in all our parts in higher education, but secondarily, it has been to institutions separately. More and more we need those funds to promote collaboration, to connect the silos, and to put the states in the equation, because the states' interest is in the public good. And the states' interested simultaneously in the quality of our institutions.

Like Carol Emerson said long years ago, "It's our job at the state level to be loving critics of higher education, and to help move it forward." Thank you.

DR. DUDERSTADT: Well put. Questions?

MR. DONOFRIO: If I could just start by saying amen, that was terrific testimony.

DR. RENO: That's what happens when you have a Religious Studies Professor.

MR. DONOFRIO: Must be.

DR. RENO: I wasn't sure today whether we were the caboose or the benediction.

DR. DUDERSTADT: Well, these regional efforts are extremely interesting, and extremely

important. And those of us that have it at one level, are trying to take your lead and propagate it much more broadly. You're right on target.

DR. RENO: Absolutely.

MR. DONOFRIO: I applaud you on this issue of collaboration, Ms. Lewis. I would only encourage you as you're thinking about all of this and this outreach from higher education to K-12, I really think there needs to be the opposite or the other side of that outreach is from industry to higher education. You're trying to get people better prepared for higher education, and I salute you for that. But it's a constantly changing world out there, and if all we do is continue to presume that what worked in the 20th Century will work in the 21st Century, we're going to be some of the most disappointed people in the world when we wake up in a global environment only to find out that the world wasn't really flat at all, it was round. And in the process, what went around, came around. So I would encourage you to think what you can do to kind of get more input from industry, as well.

MS. LEWIS: I couldn't disagree with you, one word spoken. We are imagining more ways to make those connections. And, in fact, we're very fortunate in my state to have two very strong collaborations of

our industry-base, where we're looking at 10,000 businesses in one collaboration, and 13,000 in another, and each holding education foundations that have a distinct role in connecting those businesses to us. We need to take advantage of that.

DR. RENO: If I might add to that, and I do so because I'd be in trouble with some of the people sitting behind me if I didn't make reference to the fact that in New Hampshire six years ago we established the New Hampshire Forum for Higher Education, which specifically sought to bring together policymakers, higher education leaders, and the business community to discuss our common interest. And over time, that has evolved really into what we now call New Hampshire Forum, and it meets on a regular basis, but essentially brings issues of statewide, indeed national, if not international importance to the fore so that we can then have a good discussion and begin to develop an agenda. Thank you.

DR. DUDERSTADT: Very good. Chuck.

DR. VEST: I guess this is more an editorial comment than a question, but in some nebulous way, it seemed to me from the very beginning that if this Commission is to earn any respect for its work, it's somehow going to emerge from the fact that around the table we have represented virtually every

sector of higher education, community colleges, research universities, to for-profits, to distance education, as well as our colleagues from industry and so forth. And I am simply in love with your plans and your common agenda for us all who share responsibility for the education of our fellow citizens. I think that's really a great load stone for this Commission, and it strikes me that it would be very interesting for the different parts of this as we've all celebrated this morning, the great diversity of approaches in tanks and institutions, visitor students and so forth. It would be very interesting to have us think about each other, what the community colleges see as the most important part of that agenda for the research universities and so forth. I thank you for that phrase, and I hope it becomes an inspiration for us.

DR. DUDERSTADT: Very good. We're going to take a recess now until 1:00. At 1:00 sharp we will reconvene with those scheduled for public comments. Thank you very much to all the participants today.

(Whereupon, the proceedings went off the record at 12:04 p.m. and went back on the record at 12:58 p.m.)

DR. DUDERSTADT: If I can bring the

afternoon session of our hearings to order, some quick background for those of you who were not here this morning. This is a Commission on the Future of Higher Education in America formed by Secretary of Education Margaret Spellings last Fall. The Commissioners have the assignment through dialogue with people such as yourself to find out more what the belief is about the needs of the nation for higher education, as well as individuals, and to see whether higher education or colleges and universities are really adequately positioned to meet those needs which are changing and then to make a series of recommendations to the federal government which will be due early in August in a report from the Commission.

We're holding hearings around the United States. The most recent one was in Seattle. This one is in Boston obviously, which is kind of the epicenter of higher education, of very high quality education in the United States.

We'll have further hearings and meetings of the Commission in Indianapolis and in California and elsewhere.

Perhaps the best way to get started is to introduce those Commissioners before you who have come here today to listen to testimony, and so I'll turn to Richard.

DR. VEDDER: I'm Richard Vedder. I'm a Professor of Economics at Ohio University and also work at the American Enterprise Institute, wrote a book called *Going Broke By Degree*.

MR. DONOFRIO: Good afternoon. I'm Nick Donofrio. I am the Executive Vice President for Technology and Innovation at the IBM Corporation. I'm a graduate of Rensselaer Polytechnic Institute many, many, many years ago. I have a double E degree, and I have a Master's degree in electrical engineering from Syracuse. I've been with IBM for over 40 years, and I spend most of my time worrying about our technical strategies, our technical people and how to compete innovatively in the 21st Century.

DR. NUNLEY: Good afternoon. I'm Charlene Nunley. I'm President of Montgomery College, which is the largest two-year undergraduate college in Maryland. I'm really looking forward to hearing from a lot of students today.

DR. VEST: I'm Chuck Vest, the former President of MIT. I'm a mechanical engineer. I was educated at West Virginia University, and the University of Michigan where I spent 27 years in public higher education before coming to MIT in 1990.

DR. DUDERSTADT: And I'm Jim Duderstadt, former President of the University of Michigan where

I've been on the faculty for about four decades; educated at that boy's school in New Haven as an undergraduate, and then at Cal Tech for graduate work in nuclear engineering.

It's very important since we have a large number of speakers who have asked to speak to this group this afternoon that we follow a very careful process, and I've asked Cheryl Oldham, who is the Staff Director for the Commission, to give you the background on how this will work.

MS. OLDHAM: Thanks, Jim.

I'm just going to call numbers. Everybody who is registered to provide testimony, if you haven't done so already, do register with our folks out front. I think we probably have maxed out at this point.

I will start calling numbers. I will only call a number, ask that you come up. You introduce yourself and where you're from, and then I'll begin the timer. You'll have three minutes. You'll see the green, yellow, and red. It will turn to yellow when you've got about 30 seconds left, and then it will turn to red when three minutes is up, and it will beep, and we'll just try and keep everybody on track to three minutes so we can get to just as many people as possible. We have got quite a response.

And as I go through the numbers if you're

not here and I call your number and nobody comes up, I will make note of it, and if we have time at the end and we haven't reached four o'clock, I'll go back and call those numbers again.

So why don't we start with number one?

MS. BRITTINGHAM: Good afternoon. My name is Barbara Brittingham, and I'm the Director of the Commission on Institutions of Higher Education for the New England Association of Schools and Colleges.

And thank you for the opportunity to be here today.

Our commission accredits 225 institutions, including independent colleges and universities of great variety, wealthy and struggling, faith based and secular, along with land grand universities, state colleges, community colleges, and institutions serving the U.S. military.

Membership includes for profit institutions, both publicly traded and investor owned. Our smallest institution enrolls 18 students, and the largest has over 30,000. Some institutions are world class leaders in research and others intensely focused only on teaching.

Accreditation is not responsible for this extraordinary diversity of institutions, but it has provided the conditions that let innovation and

competition flourish.

In a September 8th, 2005 issue, the Economist advised countries trying to create successful higher education systems to "let 1,000 academic flowers bloom." They conclude that "America's higher education system is the best in the world because there is no system."

Regional accreditation traces its roots to 1885 beginning here in New England. Today American accreditation is mature and still changing, focused on quality improvement and quality assurance. And while accreditation is a fine system, it is not a perfect one. Paraphrasing Winston Churchill's comment on democracy, we may say that accreditation is the worst form of quality assurance, except for all the others.

Recently our commission revised its standards for accreditations. Our new standards are stronger along five dimensions.

One, information and technology reflecting changes in libraries, teaching and distance learning.

Two, assessment, understanding what and how students are learning and using the results for improvement.

Three, quality of the academic program. The core of our work in recognition that awarding credit is the academic equivalent of printing money.

Four, responsibility and integrity. To succeed, institutions need an engaged and talented governing board committed to fulfilling its fiduciary responsibilities writ large.

And five, public disclosure. Insuring that institutions provide easy access to information on resources, services, costs, and outcomes for students.

Publishing the revised standards is the easy part. Insuring the necessary changes takes longer work, and we're happy to be in gaged in that.

Finally, a word about testing. We all want better information on what students are learning. How to get the information in a reliable, valid, and useful form is one question. How to get it so colleges and universities will find the results useful for improvement is a better question.

Last week Boston hosted the New England Flower Show. The competition there is intense, but roses are not judged against orchids, and the cactus is not compared with the daisy. As we let 1,000 flowers bloom in our academic garden, we must insure we judge the results based on our mission and how well the institution's own students are served. This is a complex question, and it deserves complex answers.

Thank you very much.

MS. OLDHAM: Number three.

MS. BUDRO: Thank you.

My name is Catherine Budro, and I'm President of the Massachusetts Association, which represents more than 100,000 public education employees and 29 of the 28 public higher education institutions in Massachusetts from pre-kindergarten through graduate school.

Today I am also testifying on behalf of our national union, the National Education Association, which represents 2.8 million education employees. We appreciate this opportunity to share our broad vision of the future of higher education in the United States.

In addition, NEA will be submitting additional written materials on the issues I will cover and some recommendations.

One, support the concept of higher education as a public good, not just as an individual benefit. We all benefit from public effects of education. Members of an educated society are more likely to vote, raise healthier children, volunteer and provide skills to the community. Higher education should not be reduced to just a career training or just to responding to work force demands of industry.

Two, insure that higher education is

accessible and affordable. Higher education has never been more important. Yet at a time when more and more worthwhile jobs require post secondary education, only about 25 percent of our adult population has Bachelor's degrees, and only 60 percent of high school graduates go on to some form of higher education.

We need to increase the government's role in the funding of higher education. Low income families have been losing economic ground and have found it increasingly difficult to send their children to college. Student grant aid has not kept up with the increasing price of attendance.

One important financial aid resource for the poorest students has been the Pell Grant program. When it was created, the maximum grant covered 84 percent of the cost of a public four-year college. Today only 39 percent.

The President's budget for '07 freezes the grant maximum so that the current level of $4,050, that level has been in existence for five years. This is the fifth year in a row.

The budget also makes the largest dollar cut to federal education funding in the history of the education. These trends need to be reversed. As our society becomes increasingly diverse, we need to make sure that opportunities for higher education are

available to not just high school graduates, but to all citizens from all segments of our society.

I do not have to tell you how crucial higher education is to our nation. According to Shaping the Future, the economic impact of public universities by the National Association of State Universities and Land Grant Colleges, the average return on every dollar invested in a state university or land grant college is five dollars, and every hundred dollars spent by an institution generates another 138 additional individual spendings.

Thank you very much for this opportunity.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number five.

MS. PIERCE: My name is Kristi Pierce, Associate Executive Director of College Access Programs at TERI, the Education Resources Institute, a national non-for-profit organization in Boston that facilitates access to educational opportunities through education loans and college access programs targeting students traditionally under represented in higher education.

My remarks will address accessibility of higher education based on my experiences working with low income and under represented groups participating in TERI's programs in Boston and Brockton.

High school graduation rates for the targeted schools for our federally funded TRIO and GEAR UP programs rate from 36 to 57 percent, resulting in fewer numbers of students entering college than was the case a few years ago. While our target schools for TRIO and GEAR UP report college going rates of 44 to 81 percent, the actual rates when looking at the number of students who began Grade 9 four years earlier were only 29 to 51 percent. These low college going rates are particularly troublesome in Massachusetts where the majority of jobs require post secondary education.

Providing early awareness programs and outreach to low income use in adults is essential. Students and their parents need help to understand the relationship between rigorous course work and college preparedness. Research shows that taking rigorous college prep courses is the most important predictor of college success.

In general, low income and under represented groups are less likely to take the courses needed to prepare them for college. Early awareness programs provide information on school course selection, college admissions criteria and financial aid availability, allowing students to make informed choices that will prepare them to pursue higher

education.

Two of our college access programs provide early college awareness in middle school students in Grades 6 and 8. Kids to College pairs a college partner with a sixth grade classroom and provides weekly sessions on college awareness, culminating in a day on a college campus.

Last year 3,100 sixth graders, 50 schools and 51 colleges participated.

Get Ready for College brings teams of college area admissions and financial aid officers and TERI college access advisors into every eighth grade classroom to talk with students about the benefits of higher education and what they need to do to be prepared. In one week we reach of 3,800 students.

TERI collage access also provides outreach services to adults and students through our access centers located in public libraries and community agencies in low income neighborhoods.

The advising staff for the centers is multi-lingual and public information is produced in languages that are prevalent in the community.

Several programs currently funded by the U.S. Department of Education that address issues of accessibility for low income students are Pell Grant, TRIO, and GEAR UP. Two of the TRIO programs, Talent

Search and Upward Bound and the GEAR UP program have been recommended for elimination, and the maximum Pell Grant would be kept at $4,050 for the fifth year in a row.

These proposed cuts are short sighted and far reaching. Rather than eliminating or flat funding these programs, continued investment would insure that those who have the greatest need and fewest resources are provided the help they need to pursue higher education.

I urge the Commission to recommend increasing investment in these programs so that many more students have the opportunity to realize their dreams.

I want to express my gratitude to Secretary Spellings for establishing a Commission to consider the future of higher education, and for the commitment of the Commission members to provide the best possible higher education opportunity for all Americans.

Thank you.

MS. OLDHAM: Number six.

MR. PRAMAS: Okay. Four minutes in three. Apologies to the sign-up.

Good afternoon. My name is Jason Pramas, and I'm a senior in the Community Media and Technology

Program at the University of Massachusetts, Boston. I'm also chair of the Committee on Higher Education of our undergraduate Student Senate.

I'm here today to tell you what students at my predominantly working class, multi-racial commuter college need from the federal government and what we don't need.

We don't need huge cuts to the federal higher education budget of the type that the Bush Administration is currently prosecuting. We don't need a higher education system that dumps public money on the relatively small private colleges while giant public university systems starve for funds, as is certainly the case in Massachusetts where the bulk of federal funds goes to private colleges, despite the fact that the bulk of students go to public colleges.

We don't need an expansion of the already out of control national standardized testing regime that saps resources from public education at all levels in the service of the questionable goal of proving students' ability to take standardized tests.

We don't need a continuation of the structural transformation of higher education to an increasingly corporate model where students are viewed as units to be moved, products to be produced. Faculty and staff are subjected to endless attempts to

destabilize their job security and their control over curriculum and governance, and administrators believe themselves to be managers and CEOs who rule the roost like feudal autocrats.

What we do need is simple. We need a fully taxpayer funded higher education system, extending our existing K through 12 public school system to become at least a K through 16 system. Pretty much every other industrialized nation in the world has this kind of system and reaps the benefits therefrom.

Protestations that we, the richest nation in the world, couldn't possibly afford such a system are ludicrous, especially given that studies show that could be done for well under $100 billion a year at a time when our nation is spending over $100 billion a year on the occupation of Iraq.

Beyond such a public K through 16 educational system, we need a solid education that does not narrow itself to meet the needs of fashionable industries of the moment, for example, the biotech industry, and we need good jobs when we graduate.

It's worth mentioning that the members of this Commission speak at length about the dire need for more education and training for Americans,

particularly in the sciences, at precisely the moment when the contingencization (phonetic) of our labor markets for the past 30 years has destroyed the very idea of a good job in this country. Job security, decent wages, and benefits are things of the past for most Americans, a problem which is perhaps outside the purview of this body to deal with. More is the pity.

Higher education itself is dependent on a subsidy from the hidden majority of its teachers, namely contingent or part-time faculty who have poor pay, little job security, few or no health care benefits, and yet are charged with the most important aspect of higher education service delivery: teaching.

At the same time, the Commission's makeup does not represent this core constituency of higher education. In this vein, needless to say, we're skeptical about the Commission. It seems staffed with corporate representatives, conservative think tanks, Bush appointees, and the light sprinkling of academics, but has no representation of the vast majority of participants in our higher education system.

The giant memberships, organizations, and unions and faculty, students and staff, the AAUP, NEA, AFT and USSA are nowhere to be found in your

ranks, which seems a rather startling omission, given the gravity of the Commission's mandate. And holding a bare handful of meetings and small public hearings like this one seems a rather poor way of taking the pulse of American higher education.

In any case, the needs of the students of the University of Massachusetts and, indeed, the needs of students across the United States can only be properly fulfilled by a fully taxpayer funding public higher education system, and that will only happen if the need for higher education is once again seen as a public good.

I thank you. My remarks are available.

(Applause.)

MS. OLDHAM: Number seven.

MS. WALKER: Hello. My name is Priscilla Walker, and I'm a student at the University of Massachusetts at Boston. My major is community planning, and I am here this afternoon to represent the needs for higher education for all.

In the 21st Century, basically to accomplish success for yourself and your family a degree higher than a high school must be obtained. The financial aspect of continuing your education after high school is becoming a serious threat for the middle income, disabled, important applicants of

America.

I am particularly affected by the problem because tuition and fees at my university have gone up by over 400 percent in the last 20 years, and my college, the College of Public and Community Service, is constantly having its budget cut.

Public universities have had their normal channels of revenue eaten away by state and federal budget cuts and by the alarming amount of grants that the government is awarding private institutions instead of the public. The voice of the taxpayers hasn't been crying for government support as loudly as in the past because there has been a trend among students and their families to seek private schools that have the name that is synonymous with success even though it's monetarily over their heads.

State legislatures in the federal government follow taxpayers' voice. If they do not insist on increasing their educational budget for public institutions of higher learning, then the politicians will place the money elsewhere.

Borrowing money has become an unhealthy vice. Students and their families are becoming encouraged to overextend themselves, forcing themselves deeper into poverty instead of out of it. Loans are not the answer. I believe a new program

should be put in place to change the situation on how to pay for higher education, and that is to legislate a K through 16 public education system.

This new system will require a stronger government and taxpayer commitment to public education, but it will alleviate the swallowing up of our public universities by big business and other private entities whose agenda only profits themselves. It is of monumental urgency that Americans stop taking these educational loans and pressure their state legislature and the federal government for higher education for all.

Thank you.

DR. DUDERSTADT: Thank you very much.

MS. OLDHAM: Number eight.

MR. JEAVITTS: Hello. My name is John Jeavitts, and I'm a member of the University of Connecticut undergraduate student government, and I'm originally from Hartford, Connecticut.

I want to thank you for the opportunity to testify before the Commission, and I hope you will listen carefully, especially considering the lack of a student on the Commission.

Before I begin, I would like to say in no uncertain terms that tuition defeats the mission of a public university. The best way to insure access is

to return to a system fully funded by the taxpayers, the system in Connecticut had before it allowed the public constituent units of higher education to charge tuition for the first time in 1973.

However, given that we do not live in a perfect world, I would like to address some alternatives. In February of 2005, Connecticut Governor M. Jodi Rell presented her first budget as our state's chief executive. Contained within her proposal was a broad based plan to freeze tuition at all public colleges and universities in Connecticut. She justified the proposal by citing the burdens many Connecticut families face in paying for a college education.

Every year tuition at UCONN and at the other two public systems in Connecticut is raised higher than the rate of inflation.

However, her plan had a critical flaw. On the money side, her plan continued the agonizing trajectory of the state's gradual divestment from public higher education and is symptomatic of the federal government's divestment also.

Because of this, her tuition freeze plan was met with considerable resistance from students, administrators, and other advocates of public higher ed. Although I agree that the trustees of the three

public systems in Connecticut should keep a more watchful eye on what they are charging students, putting institutions into a box is not the way to do it.

One way to more productively address the issues of access and affordability is through financial aid on both the state and federal levels. The State of Connecticut sponsors three major grant programs. Of the three, the Connecticut Aid to Public College Students Program, or CAPS, is the only program which is strictly need based and intended for public university students, meaning it speaks most clearly to access. The program "provides grant assistance to Connecticut residents attending state supported colleges in Connecticut."

The annual requested appropriation matches the 15 percent tuition set-asides at Connecticut public colleges. Funds may be awarded to needy students at the discretion of the institutional financial aid directors for grants and part-time work opportunities. In 2004, this program funded an average award of $1,500 to a little bit over 11,000 students.

In short, because a certain percentage of tuition revenue is set aside for need based financial aid, public college and university students in

Connecticut pay their tuition in accordance to their income. CAPS money is funds from the state which are designed to match that money which is set aside by each institution for financial aid. Money from CAPS may take the form of tuition remission, tuition waiver, grant and work-study, with the first three being most preferable.

Recently because of budget decisions by the federal government concerning student aid, in this state legislative session, Connecticut students are advocating an expansion to the CAPS program, an endeavor we hope to be successful, as UCONN students pay the ninth most expensive in-state public university tuition in the nation.

Because of expected increases in student loan interest rates, we hope to be successful in alleviating the many drastic student loan burdens many UCONN students, including myself face after graduation.

Is that three minutes? Okay. Thank you.

MS. OLDHAM: Thank you.

Number nine.

MR. CORL: My name is Adam Corl. I'm from UMass-Amherst. I am an intern for Mass PERG (phonetic), and I just have a really short, more personalized --

(Laughter in response to buzzer.)

MS. OLDHAM: That was short.

MR. CORT: There you go.

MS. OLDHAM: I'm sorry. I knew this was going to happen. Okay. Go ahead. Sorry about that.

MR. CORT: I'm pretty much speaking from experience here. I'm an anthropology major, in addition to being a nursing major, and I'm an intern from Mass PERG, and I also have to kind of hold down a part-time job to be able to go to school in the first place.

My main point is that I feel like we need to increase grant aid in placement of loans so that students are given the opportunity to have really important additional academic experiences, like internships, which I feel a lot of working students aren't able to do.

In addition to that, working students are also slightly penalized in terms of like FASFA because our salaries are actually counted against us. We wouldn't be working if we didn't have to. I think that's a slightly unfair occurrence.

Another just main point is that coming from a nonprofit sector, it's kind of daunting to realize that even though I have a strong interest in working a nonprofit job which I feel is really

important towards society as a whole because we're kind of taking up the responsibility where the government left off.

In terms of community service, I'm involved with hunger and homelessness. When I graduate, I would really like to be able to help out my community, but with the idea of so much loan debt kind of lingering over my head, it kind of limits what I'm able to look for in terms of career placement.

So that's my short of it. Sorry I don't have like pie graphs or something, but I thought a little personal testimony might do some good.

Thank you very much.

MS. OLDHAM: Thank you.

(Applause.)

MS. OLDHAM: Number 11. Number 11?

Okay. Let's do 12.

MR. MENDEZ: Good afternoon. My name is Elvis Mendez. I am the President-elect of the Student Government Association at UMass-Amherst.

It's my understanding that we as students are here to speak about our personal experiences regarding the rising costs in higher education. In the last few years, tuition and fees have risen sharply. In my school, from the total cost of attending the university hovering right under $12,000

for the 2002-2003 academic year, to its present cost of attending the university being over 17,000.

Additionally, this state ranked 49th in the nation in terms of funding for higher education. The university I attend, like many, applauds and congratulates itself for increasing the fees in a manner that is under or parallel to the rate of inflation. By today's dismal standards perhaps this is some sort of achievement, but have we forgotten that the wages in America have not risen?

What we have is a generation that is about to enter the work force with an insurmountable amount of loan debt. With the cuts to Pell Grants, many underprivileged students and students of color will be unable to afford higher education. We must again make institutes of higher learning a priority on the nation's agenda and restore the funding of these grants.

With but a fraction of the $250 billion it costs to wage war in Iraq, we could pay for all the students currently enrolled in colleges and universities across America.

I believe we are all well acquainted with the numbers and statistics surrounding higher education. What students are here to do with our testimony is to provide a face to these numbers. So

speaking from personal experience, I would like to say that in the past four months, three of my friends have joined different branches of the Armed Forces in an attempt to either pay for their college education or find a cheap alternative to attending a university.

One of my best friends, unbeknownst to his parents is actually taking a semester off from school so that he can work a full-time job and with that money enroll in the fall.

I have several other friends who are not eligible for financial aid, and this coming semester may very well be their last at Amherst, not due to academic deficiencies, but rather, because universities across the nation are taking steps to price out the middle class.

In Amherst, as early as the fall, we conducted a project where students volunteered to stand with a sign showing the amount of loan that they had accumulated. The line that formed was tremendous as almost every student that passed by our table wanted to approach the rising cost of the university.

And this, in short, is what statistics do not show, the human aspect. I am a part of the Free Higher Education Movement. I hold the belief, as do many in this room, that education is a right. It should be accessible to all and as a country, we are

doing a great injustice to our youth by not giving them the resources needed to remain competitive in the world.

I urge you all to stop this trend, to help work with students to make higher education accessible once more for all people regardless of race, gender or socioeconomic background.

Thank you

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Number 14.

MR. CHAISSON: Good afternoon, Honorable Commissioners.

Thank you for hearing the urgent message that I bring before you today on behalf of all State of Maine college students. My name is Joshua Chaisson, and I serve as the student body president at the University of Southern Maine.

In my state and across the nation students are witnessing a terrifying trend. Every year we, the future of America, are vulnerable to an average eight to ten percent tuition hike while federal financial aid programs are being slashed instead of increased as students need them to be.

Two facts scare me in this trend. One, according to a report published by the State PERGs in

2002, 39 percent of all student borrowers are graduating with unmanageable debt. Today that number is on the rise as more students are being forced to take out more loans.

Students are no longer entering an economy with endless opportunities. They are, instead, entering an economy, a slave, a slave to Sallie Mae.

(Laughter.)

MR CHAISSON: You laugh, but it's true.

If this trend continues, I'm afraid that higher education degrees will only be accessible to the most affluent students. You cannot allow this to happen.

Financial barriers need to be broken down instead of built up. There is a clear correlation between education and less poverty, more education and a stronger economy, more education and more opportunities.

As a first generation college student in my family, I must pay for college all on my own. My family, like most of America, lives paycheck to paycheck and cannot afford to send either me or my brother to school. For this reason, students like myself have become highly dependent on affordable college loans, work-study funds, and grants.

I am currently awaiting my financial aid

award letter. This letter is the most anticipated mail I will receive all year long. It will determine whether or not I will continue on with my education. It will determine whether or not I am the first person in my family to graduate from college.

I have here in this folder 100 other stories similar to mine that I've collected from the University of Southern Maine, 100 stories, and I did this in one day's time. I sat out in a desk and collected 100 stories that are very similar to mine.

I ask that the federal government and the state take dual responsibility, dual responsibility, in making higher education more accessible and more affordable to students. The students within the State of Maine plea that the Commission, in developing your comprehensive national strategy for post secondary higher education recommend investing more in grant aid and cheaper loans for college students.

You, the Commissioners, have as Secretary Spelling said in North Carolina the responsibility to make sure that our higher education system continues to meet our nation's needs. You, the Commissioners, have the ability to shape not only higher education, but the overall direction and success of our country.

Thank you very much for the responsibility that you are taking on today.

DR. DUDERSTADT: Thank you very much.

(Applause.)

MS. OLDHAM: Number 15.

MS. LAFLAMME: My name is Jessica Laflamme, and I'm an honor student at Salem State College, and I just want to thank you guys for the opportunity to hear what I have to say today.

In my first semester at Salem State College, I made the Dean's list, and I'm also the first member of my family to go to college, and I am paving the way for my younger brothers and sisters to go to college with an easier entrance into a higher learning institution.

I hope I'm some day helping other kids just like me make it into higher forms of education despite lacking the natural resources, such as money and reliable guidance counsellors at the high school that are so vital in what can be considered the most difficult years of your life.

My plea to this conference is to think twice before supporting cuts to grant money and raising interest rates on student loans. The students that suffer from poverty or graduate from inner city high schools mostly equipped with a smaller student-to-teacher ratio are among some of the strongest, most driven individuals. The students that just make it

into college with the help of extra grant money or a last minute loan are often the kids that have learned to become self-reliant and mature. They have the most comprehension of what a college education can offer them. The personal struggles they endure make them more versatile human beings and ultimately better employees in the future.

In my own experience, I know I'm lucky to be in college. If my family had not been able to take out a low interest loan and had I not been awarded grant money, I wouldn't be at Salem State today. For me every year is a struggle. I know my financial stability is not too good. I take my education seriously, and am somebody assumes like myself that we are going to ultimately make the best employees after graduation, dedicated to their jobs, knowing that that can change at any moment, that are grateful to be with that graduation cap on.

My goal here is not to downplay anyone based on their economic security and emphasize those who come from a more humble background. I'm not here to slander anyone or to, you know, make anyone -- give guilt.

I am surrounded with some of the most dedicated, self-aware students in this state. They are just getting by and every semester poses a new

problems of books to buy, a meal plan, amongst many other things that pop up, from buying food. You know how it is to be in college.

(Laughter.)

MS. LAFLAMME: We have to be dependable. Aren't these the type of people companies want to hire in the future? Well, if you take away grant money and up loan interest rates, a college education will become a delicacy that is not appreciated or worked for, but merely expected for those with the economic position to pay the bill. By keeping the students out, the companies, hospitals, and schools of America are missing out on the most versatile, creative, among many other things in students who have faced adversity.

I hope that this influences your decision in the future, and just like what the other kids had to say.

Thank you.

DR. DUDERSTADT: Thank you very much.

(Applause.)

MS. OLDHAM: Number 16.

MR. GUY: Good afternoon, Commissioners. It has been a rather long morning. So I promise I'll be brief.

My name is Mubarak Guy, and I'm currently

a senior student leader at Rutgers, the state university of New Jersey, North Campus. When I'm not in the classroom, I serve as the president of my student government, the Vice Chairman of the New Jersey Student Advisory Committee, a voting board member to the New Jersey Higher Education Student Assistance Authority, and a lifetime member of Golden Key International Honor Society.

As a Board member, it is my duty to help determine the policies, procedures, and programs for student aid in my state, ranging from grants to loan programs and family assistance. But I'm not different from the students that I serve. I'm among them, and with over a $12 billion cut in federal aid, it will significantly damage.

As a student official, we believe in small victories. So I came here with very specific things, not just talking objectively.

One thing, the State of New Jersey is very outraged about the Perkins Loan federal capital contribution. This proposal is very important because needy students benefit from the low five percent interest rate, the nine month deferral in capitalization of interest after the student leaves school or drops below half time status, the loan redemption for certain professions like nursing,

teaching, and social work. It will most certainly contribute to increased use of non-federal education loans that carry higher interest rates.

Students may incur greater indebtedness or possibly not be able to afford college at all and won't simply go. But more specifically, the Perkins Loan, it is proposed for elimination, and in the State of New Jersey, every year we award $137 million -- I'll repeat that again: $137 million -- through this program. And by removing this award from students, you're taking that away.

Another thing that we're interested in is the leveraging educational assistance program, and this matching program is used to fund awards for students with family income below 15,000. In some states eliminating this lead program will eliminate the state grant programs targeted to the neediest students in their entirety, in their entirety. Some states depend on that.

Another issue of concern is the Pell Grants. The budget proposal calls for the fifth year, which we already heard, of eligibility without increasing the maximum grant of $4,050. Grant funds are the backbone of student aid and everything else is a supplement, and by removing this, we found that 75 percent of the students on my campus graduate with

loan debt of at least $15,000.

Now, this may sound small to some students across the country, but to students who want to work in the public sector, $15,000 suddenly sounds a whole lot bigger.

But the problem is that the bottom line is that students are becoming discouraged, and as we know, the private sector is very important, but it has no security without the public sector, and students are becoming discouraged to work in the public sector because they have to think about issues of how am I going to even pay back, you know, these debts.

So I ask you to invest in loan programs for students that will keep the Perkins Loan alive and push for increase in federal Pel grants.

Thank you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 18.

MR. PEACH: My name is Scott Peach, and I'm the Vice President of the PERG organization at the University of New Hampshire.

I thank you for hearing the student voice at this extremely important meeting. It definitely means a lot to us.

As a student, I'm very concerned about the financial burden of higher education. With tuition

increasing annually and federal aid money becoming less available, students today are at a disadvantage. Due to budget cuts, one can clearly see that priorities have shifted in America, namely focusing on defense, the War on Terror, democratizing Iraq. Why are billions of dollars being poured into reconstructing a whole nation at the expense of the middle and lower classes of America?

To put it bluntly, we as college students need help. Fifty-eight percent of students at UNH have loan debt at an average of $22,354. While I was working on the Radon Student Aid Campaign, I met with some students who complained of loan debt up to $80,000. There were 60,000, 70,000, you know. They were all up there. And this is a state school.

So people go to college to get ahead in the work force, not to be held down by massive, long-term debt. These extensive loan payments are limiting the opportunities students may have upon graduation, and becoming a teacher or a social worker may be out of the question because of the financial burden of going to college.

The reason I am up here is because I'm worried about my future. When I graduate, I plan on joining the Peace Corps to help out where help is needed. As a young person I believe this is a perfect

time for me to experience the world, but will I even reach that goal just because I went to college to expand my opportunities because of the $25,000 burden that will be looming over my head? That's how much I'm going to have when I get out, depending on, you know, when I graduate.

So, I mean, please, when making decisions about our future as college students, keep us in mind. Don't only rely on statistics and numbers. Keep the person behind it all in mind.

I would also hope to see students on the Commission for the Future of Higher Education because your decisions will directly affect our lives. I think it's very important to get feedback from the people you are representing, and I appreciate you taking the time to listen to us speak here today.

So thank you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 19.

MR. KIM: My name is Jahantab Siddiqui Kim from the University of Maryland.

Thank you for giving me the chance to speak on behalf of students at the University of Maryland, College Park.

I would like to ask you to please include in your final report the need for an increased grant

and loan aid from the federal government.

I would also appreciate it if you'd note in your report that cutting loan programs as Congress did earlier this year when it cut $12 billion from the budget from the student loan programs hurt students.

Students in Maryland have seen an increase in the past few years. Our tuition increased dramatically because of cuts to the state's higher education budget, and we are at a point where students who enrolled three years ago will pay double their first year tuition for the next academic year.

Tuition has gone up 46 percent over the past three years, and it is expected to go up even more over the next decade simply because of limitations on how much the state can provide to the university system.

But the problem is not with how much funding we get. The problem is how much students and their families can afford to pay because household income does not go up at the same rate tuition and fees go up, much less inflation.

I was down in the State Capital of Annapolis last week, and students have been lobbying for a tuition freeze for next year simply because the state has a budget surplus which was achieved on the heels of cuts to higher education. So we have been

lobbying for that, but that's only a short-term solution, and we need a more long-term solution which is why we're here to ask this Commission and Secretary Spellings to prepare a report that serves as a long-term solution for students.

The government must take an active role in making sure that those who cannot afford to pay for school on their own are given the opportunity to get a college education. We all know that a college education can more than double a person's salary and help them get a better job. But if families cannot afford it, they will never have the same opportunity as those who might be better off financially.

At the University of Maryland, 39 percent of graduates graduate with an average of over $15,000 in debt, and that's a public university. Fifteen percent receive Pell Grants, while 52 percent apply for aid every year.

I personally know students who are either in debt or have dropped out of school because they could not afford to pay because higher education was a burden on their families.

Students must be encouraged to get a college education, not discouraged. A strong economy needs strong graduates to enter the work force, and unless we graduate satisfied graduates, we won't have

a strong economy. Unless there's a strong pool of graduates every year, how will we continue making advances as we have over the past few decades.

Paying for college should not be a burden, and to make sure it is no longer the reason families are discouraged to send their kids to school, I ask you to recommend additional funding for student loan and aid programs.

After Congress cut financial aid earlier this year, financial aid is no longer a system that students can rely on to help with education costs. We can no longer doubt merit based scholarships or loans because those only help a small proportion of students and stop short of helping those who want a college education but cannot afford it.

We are competing with kids in India and China now, not with Berkeley and Howard anymore. So I encourage you to take our considerations into account and prepare a report that is student friendly.

Thank you.

(Applause.)

MS. OLDHAM: Number 20.

MR. SINCLAIRE: Good afternoon. My name is Chad Sinclaire, and I am a sophomore at the University of Maryland, and I would like to personally thank you for the opportunity to speak to you not only

on behalf of the students at the University of Maryland, College Park, but on behalf of the students all across the country.

As you well know, tuition is on the rise nationally while federal funding for higher education is on the decline. Three weeks ago several of my peers and I testified before the Maryland House Appropriations Committee in support of a bill that would freeze tuition for next year for the university system of Maryland.

Bills like this that freeze tuition and permit additional increases are mere stepping stones in a battle against student debt that is becoming more and more noticeable. By slowing tuition hikes along with increased federal funding and reform of student loan laws, higher education can once again become more affordable.

It is estimated that nearly 200,000 college eligible high school seniors forego any form of higher education due to financial constraints on their families. Is it right as a society to place such importance on higher education when the affordability of such an education is becoming out of reach?

I believe it is time we look at the true importance of higher education and define for

ourselves the means through which students will pay for it. As a senior in high school, I was searching for a college that would provide me with the best educational opportunity for my future. The University of Maryland is a Top 20 public research university filled with some of the most promising students and faculty America has to offer.

However, it is also becoming one of the most expensive. As a sophomore I personally have already accrued over $43,000 in debt through student loans, and I estimate that by the time I graduate, I will be in debt in excess of nearly $100,000. With my sight set on law school, it is discouraging and disheartening to think I may not be able to go because of my family's financial burden.

The $12 billion Congress cut from the student loan program could certainly benefit students like me, as well as others who have aspirations of attending graduate schools. However, you need not look at my situation to see that reforming the student loan program should be a top priority. During the 2003 school year, the total dollar amount of money spent on tuition at the University of Maryland, College Park students reached over $237 million. The total government funding for the university was just over $70 million, leaving $167 million in tuition

unaccounted for.

That burden is being placed directly back on the students' shoulders. What is so staggering about this example is this is only one school in a country filled with hundreds of colleges and universities and hundreds of thousands of bright talented college students.

Now, I did not come here today to gripe, complain, or ask for pity. I came to inform you of how real this situation is. Students across the nation are having more and more trouble affording a quality education. The leaders of tomorrow are asking you, the leaders of today, to stand up and help us. Student debt has spun out of control, and you have the ability to change the course of higher education through your recommendation.

Now is the time to make a change. Now is the time to give college students a chance to better afford higher education, and therefore, I ask you on behalf of students all across the country to include in your final report policy recommendations that will increase grant and loan aid at the federal level.

Thank you very much for your time.

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Number 21.

MS. KOFIE: Good afternoon. My name is Precious Kofie. I'm a junior, pre-physical therapy major from Chicago, Illinois, and I attend Howard University.

And I am here today. It's my pleasure to sit before you on behalf of the United States Student Association and to give my testimony on how federal aid has really impacted my life as a college student and how it is very important that it remains accessible to students.

As a low income, first generation college student, the idea of paying for college up front was not an option for my parents and me. Upon preparing to attend college, the FASFA form was my only hope at an equal chance at quality education. As a student at Howard, I received a Pell Grant, a federal work study, and federal student loans. Without any one of these aspects, I would not have been able to attend Howard.

I am a first-hand witness to the importance of the federal role in funding post secondary education. In addition to Pell Grants and work study, it is very important that many of the loans that students are offered remain manageable after college. I know that I have many friends that fund their college education solely through student loans.

Personally I will only have approximately $50,000 worth of loans, which is a very small amount compared to the students who have over hundreds of thousands of dollars' worth of loans. And I still look to the Commission, look to the federal government to make sure that the policies of repayment remain in may favor and remain in order to help me make repayment of my loans as stress free and as controllable as possible.

The allocation of these loans is extremely instrumental because oftentimes outside loan programs have higher interest rates or are more tedious to manage, but if the loan rates or the interest rates do not remain low, this would not be true any longer.

Effective planning and loan repayment schedules and interest improvement is essential on the part of the federal government in order to insure the debt of recent graduates does not become out of control or overwhelming.

The importance of the federal government also goes deeply into the allocation of federal funds to universities such as HBCUs. As stated earlier, I attend Howard University and know that without the significant funding from the federal government, our tuition will be almost twice as much as it is now and students would have almost approximately half as much

scholarship money to be allocated to students.

Federal funding for many students is a lifeline that provides that much needed support that they need in order to continue their education. In order to impact our future, we must make an active choice to invest in our future. Divesting in post secondary education is not the way. There are so many future ambassadors, teachers, scientists, ministers, and politicians calling on you all to help them research their maximum potential.

Organizations such as the USSA give students a voice. It is our hope that you will listen.

Thank you.

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Number 22.

MS. PAE: Good afternoon. For those Commissioners I have not yet met, my name is Jennifer Pae, and I'm the elected Vice President for the United States Student Association.

We are the nation's oldest and largest national student association, representing millions of students nationwide. From the Commission meetings in San Diego to Seattle, we are here once again to let you know and express our concerns for the future of

higher education.

I speak on behalf of millions of students from across the country that would like to succeed and receive their college degree, as well as the millions of future students that hope to be able to access higher education and not be deterred because of costs.

From Oregon to Pennsylvania, from Michigan to Texas, and from California to Florida, I have here a small sampling of testimonials that we have received among the thousands of students that want to share their story. They hope that the Commission will not leave students behind when drafting their recommendation for Secretary of Education Margaret Spellings.

We are in a state of emergency in regards to higher education. While tuition and college costs play a significant role in the affordability of college, as we see continual tuition hikes and increasing costs of living, the federal government plays an extremely vital role in the priorities of our country.

The continued federal divestment for higher education is more apparent now than ever before. Recently, as we have all heard, the federal government has made the largest cuts in the student loan programs in its history, as well as targeting key

higher education programs for elimination or reduction, programs such as the Pel grant, the Perkins loan, LEAP, Stafford loans, Parent Plus loans, programs that I have benefitted from, and I have worked and paid my way through college every year and every year and every summer, and yet I still have graduated with $30,000 in debt.

As a first generation college student and the oldest of four, I'm worried and terrified that my sisters will be among the thousands that will not be able to go into college and be deterred because of costs. We are facing a dramatic shift in priorities and jeopardizing the success of college students. Federal grant aid and loans are key components of financial aid for students around the country.

However, as the balance between grants and loans continues to slip, excessive loan debt will become a greater hindrance to students attempting to complete in the global economy. We are in a state of graduating an entire generation of educated youth in debt. Education is the backbone to our country, to our society. How can our country expect to stand up in a rapidly evolving and highly competitive global market if we as a country have chosen to deny the most fundamental right to education?

We are here today to stand up for access

to higher education, to stand up for grant aid now, to stand up for our futures and insure that education is a right instead of investing in the future of our country, the future of our economy, and the future of our success, the federal budget will greatly limit access to higher education for millions of students and families.

This is why I'm here, again, today, in solidarity with students from the New England region. As the Commission on the future of higher education, your role is extremely important for the success of students across the country. We hope for your support and to reaffirm the federal role in higher education and to expand grant aid to make loans manageable, and to invest in our nation's future.

We are here asking you today to keep the doors of higher education open to all students.

Thank you again.

(Applause.)

MS. OLDHAM: Number 23.

MR. ALLEGRA: Excuse my voice. I'm getting over the flu.

Good afternoon. I'm Richard Allegra. I'm the Associated Executive Director of the Association on Higher Education and Disability, or AHED.

The International Association of College

and University Professionals who work with and promote educational opportunities for college students with disabilities.

AHED has nearly 2,200 members, representing approximately 1,600 institutions of higher learning in the United States. The unemployment rate of adults with disabilities is regularly reported at 32 percent as compared to 81 percent for nondisabled adults. This indicates that we need to do more to facilitate post secondary education for individuals with disabilities so that they, too, are positioned for employment and self-sufficiency.

The Department of Education's condition of education 2003 report indicates that nine percent of all college undergraduates identify as having a disability. The majority of these students require various accommodations to fully participate in their academic programs.

In addressing the Commission's question on access to higher education, AHED focuses on two key areas: policies on transition to post secondary education and affordability. Too often students with disabilities are missing crucial information as part of their transition planning from high school to college. It is often not until they are admitted to

college that they learn the difference in the level of services they will receive.

Instead of operating under an entitlement program, such as IDEA, college students need to prove the extent of their disabling conditions and request accommodations themselves under the ADA and Section 504 of the Rehab Act. This is usually a shock to them, and they find themselves scrambling to address these requirements, often causing them to fall behind their peers.

While ADA in Section 504 obligate colleges and universities to provide academic accommodations, students with disabilities often have additional higher than average medical and equipment costs that they incur. Despite their eligibility for financial aid, disabled students are often left with unmet need due to medical costs. Others are unable to carry a full-time academic course load because of their health conditions, and they are thus ineligible for a number of federal aid packages.

AHED believes strongly that we can do better for students with disabilities and post secondary education. We turn your attention to the recommendations outlined in the printed copy of the statement, and AHED appreciates having this opportunity to enter the dialogue on the future of

higher education.

On behalf of our members and students with disabilities, we ask that the Commission recognize and advocate for this group of under represented students.

Thank you.

(Applause.)

MS. OLDHAM: Number 24, 24. Twenty-five.

MS. O'LEARY: Good afternoon. I'm Eileen O'Leary, and I'm the Director of Student Aid and Finance at Stonehill College, and I thank you for providing me the opportunity to present testimony before the Commission.

As a financial aid administrator with over 20 years' experience working with students and families, I'm at the front lines of the access issue, and I believe that we are approaching the crisis stage. We all understand the financial value of higher education to individuals.

What we often fail to acknowledge, however, is that the higher education of its citizens accumulates benefits to our country that are undeniable and even more valuable to the common good. It is these greater societal benefits that create the imperative that government support and encourage its citizens in their pursuit of higher education.

Demographic studies show that the college

students of the future will be increasingly poor. We cannot afford to ignore these qualified and motivated students allowing them to either opt out of higher education or borrow themselves into unmanageable debt that precludes their ability to have families, buy homes, save for retirement, or opt for those lower paying jobs like teaching, public law, and government service that we so vitally depend upon.

Current federal grant programs provide proportionately less for needy students today than they did when initially created. The Pell Grant has not kept up with general inflation, let alone that of higher education.

The President's fiscal '07 budget states that the federal government will spend nearly 13 billion on Pell Grants assisting approximately 5.2 billion students. However, the amount spent on grants is far eclipsed by the monies allocated to leveraging student loan funds in the federal family education loan program, FELP.

The loan-grant balance has tipped unfavorably to the side of student loans. My students are feeling this imbalance. They are frightened and unsure of their financial futures. I have seen good students forego college because of the debt levels that they face.

However, within this crisis lays an opportunity. The FEEL program provides an intricate and complicated wealth of subsidies, special payments, and incentives to private lenders that are extremely costly to the federal government. As President Bush's 2006 budget explained, "the federal government assumes almost all of the risk for the loans while the federal subsidies to intermediaries, lenders and guarantee agencies are set high enough to allow the less efficient ones to generate a profit. These problems lead to unnecessary costs for taxpayers and prevent the program from achieving the efficiencies the market is designed to provide."

The alternative federal direct student loan program is significantly less expensive for taxpayers. Yet it's being legislatively and administratively strangled. Corporate interests in FEEL provide a constant barrage of misinformation about direct lending to frighten Congress into distrusting the savings numbers given them by the Government Accountability Office, the Congressional Budget Office, and the Office of Management and Budget.

The media reports that these same corporate interests provide significant contributions to the election campaigns and PACs. Using

Congressional Budget Office figures, the Center for American Progress states that if direct lending were the single long delivery method for fiscal '07, close to six billion would be saved. This translates into an increase in Pell Grant funding from 13 billion to nearly 20 billion. This loan delivery method changed to 100 percent direct lending alone, would allow an increased Pell funding by 46 percent instead of leaving students with the fifth straight year of level funding.

Access requires increased investment in grant assistance. We have a way to do this in difficult financial times without costing taxpayers additional money, but it does take political courage. I urge the Commission to recommend that Congress choose student access over lender profits.

Thank you.

(Applause.)

MS. OLDHAM: Number 26.

MR. JAITLY: My name is Rishi Jaitly, and I'm coordinator of public policy and government affairs for College Summit, a national nonprofit organization based in Washington, D.C. I am also a current trustee of Princeton University and former Commissioner on the New Jersey State Commission on Higher Education..

In my few minutes I will give you a brief overview of College Summit and our national program to increase the college enrollment rate of low income students, and I will finish by telling you about a policy initiative we have been leading in Washington with the Secretary's colleagues at the U.S. Department of Education and appropriate members of the U.S. House and Senate.

As you work to develop a natural strategy for post secondary education, I believe both will be of interest to you as you think about access.

First, College Summit. Two data points frame our work. First getting a lot income student through college is the most cost effective way to end poverty in that family line forever. Among high school seniors students from the low income quartile who score 80s on achievement tests enroll in college at the same rate as the students from the top income quartile who score Ds on achievement tests.

So even when the student is aware of higher ed., which occurs at all stages of the education spectrum, prepare for it, which is the core work of K-12, she is not making the actual transition from Grades 12 to 13. America's college transition system is structurally flawed.

How big is this problem? More than

200,000 students per year. Every year in America more than 200,000 low incomes students graduate from high school ready for college, but do not enroll because college transition in America is close to impossible unless you have the proper guidance.

Each year our nation is entering the global economy without 200,000 talented resources. Over one decade more than one million of our nation's best resources are working in the local retail store when they should be making five times that salary in the industry of their choice.

While there is much talk about students not staying in high school and failed public school programs, we are neglecting to focus on the students who, despite the challenges of poverty and being first generation Americans, are not only completing high school, but are demonstrating with their grades, test scores, and life experiences that they have what it takes to succeed in college.

Our transition systems at the high school level lag behind and deny these talented students a chance to go to college. Reversing this under enrollment should be of critical importance to the U.S. in this increasingly competitive.

College Summit works with high school and colleges in seven states across the country to

increase the college enrollment rate of low income students. We provide high schools with the tools, curriculum, technology, structure, and training they need to insure that every student that can make it in college makes it to college.

We are the only organization in the Untied States concentrating on increasing college enrollment rates among low income students school-wide and multi-state. But in our work we've encountered one huge policy challenge. As we know, in education it is impossible to innovate without data, and today in America no government, educational institution, or non-governmental organization, nonprofit or for profit, can measure actual college enrollment rates of all secondary schools across the country on a regular basis.

Until we see this data, we will not know if our high schools are accomplishing one of their major goals, the preparation of students for productive post secondary lives. We are working with policy makers on Capitol Hill and at the U.S. Department of Education to find a way to make this data available. Put simply, in a 2006 America high school principles should know each year how many of their students are enrolling in college. High schools should be a launching pad to productive post secondary

life, not an end destination.

At another time I'd be happy to go into more detail about our proposal, but for now, I want to thank the Commission again for its time. I truly believe that College Summit's model to increase school-wide college enrollment rates and our policy work to make available college enrollment rate trends by high school should be of utmost interest to the Commission.

Thank you for your time.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 27.

MS. BIBEAU: Good afternoon. My name is Jessica Bibeau. I'm here as the co-president of the Higher Education Student Association of the Graduate School of Education at Harvard University.

If you ask any student, parent, taxpayer, legislator, or educator what is a higher education, you will receive widely varying answers. this is because institutions serve diverse individual needs, as well as broader national needs. Such returns to higher education, however, differ by person and are thus difficult to measure.

Because each institution seeks to fulfill its own unique missions, whether it be to get 70 percent of its students to transfer to a four-year

school or to enroll a class with high SAT scores or to have a high percentage of graduates obtain jobs, the missions will be as varied as the schools themselves. At times these missions may be in direct conflict. So the question becomes: how do we know if colleges are best serving our private and public interests?

This is the part where people usually cry for accountability. We are aware of this growing demand stemming from a concern of taxpayers and legislators regarding the quality of higher education. They want to assure, and rightly so, that their investment is paying off.

This resounding voice as well as what we've seen on the K through 12 level is causing those of us in higher education to wonder if we are headed toward a national accountability system, and if this is the case, we have some recommendations for you.

In trying to account for the successes and failures of institutions, we must be careful not to oversimplify the standards by which institutions are measured. The ability for each institution to set its own parameters for success is of utmost importance.

We agree with Patricia Graham who wrote, "Assuring the presence of effective internal processes through external audit provides the best hope of achieving that balance between autonomy and public

responsibility that true accountability requires."

We recognize that there may be broad categories that the government ask that all schools can address in their accountability measures, such as inputs, who is going to college, outputs, graduation rates, and process, advising or integrated technology in the classroom. But the onus for deciding acceptable standards for these categories needs to be on a smaller, more local scope.

We envision an accountability system where institutions are asked to define and publish their short term strategic plans. This plan should cover the categories of inputs, outputs, and processes, but with an eye toward the mission of the institution. Specifically, the plan should call for definable short-term goals, obtainable measures, and concrete data speaking to these measures. After a given period of time, the external board should look at the data collected on the categories and compare it to the goals that were set by the institution in order to come up with a grade of sorts.

These grades should be required to be made public in a user friendly format in language that the average college applicant can understand. It is extremely important that government appropriations are not tied to these grades.

The purpose of this accountability system should not be to penalize a one size fits all definition of poor performance, but rather to allow institutions to focus their efforts toward meeting their stated goals and to provide transparency, thus gaining stronger public trust in higher education.

Thank you for your time today. We hope that a commitment to higher education will continue to be supported through national and global agencies such as today's Commission.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Twenty-eight.

MS. SCHMOTTER: Good afternoon. I'm James Schmotter, president of Western Connecticut State University, and I'm here to provide a case study of a successful initiative on our campus that's decreasing cost and increasing access to higher education.

In 2002, we recognized approximately 52 percent of freshmen at our institution required at least one remedial course at the time of entry. Students' academic progress was being delayed and costs for remedial education was rising.

We collaborated to address this with our top two feeder high schools to build a bridge to improve student success. Our goal was to decrease the

number of students needing remediation by providing high school students with a clear idea of college expectations.

To do this we tested the high school juniors in English and mathematics using our own placement test. In both academic areas individualized feedback was provided to students and teachers so they could identify specific strengths and weaknesses.

Secondly, faculty from both our university and the high schools worked together to implement curricular changes for the high school students' senior years, and we continue the testing of the next cohort.

The results of this are very promising. For the first cohort of juniors 61 percent tested into remedial English and 62 percent tested into remedial math. After one year of collaboration and change in senior level high school courses, students' placement rates improved dramatically. Only 37 percent needed remediation in English and 41 percent in math, a reduction of 24 percent and 21 percent, respectively.

These positive results have continued among high school juniors in the project. The results were juniors test in the second year of the collaboration were vastly improved over the juniors' results the first year. In both math and English a

change of almost 20 percent was made prior to the students' senior years.

It appears there's a trickle down of the teaching techniques to get these students ready for the college experience.

What we believe has made the building the bridge project so successful is the collaborative approach we have taken with our high school colleagues. This was not a top-down lecture from the experts at the university to lower status high school teachers. Rather, it was a genuine collaboration of co-equals with mutual respect going to each other's campuses and facilities. We've come to understand each other's worlds better, and I think that's why the results have been so positive.

This program which is, we think, scalable and is now self-sustaining, improves access to higher education, identifying students who need remediation while still in high school and providing the opportunity in their senior years to improve their skills reduces the cost involved in college level remediation and reduces the likelihood that parents will have to pay for courses sometimes more than once that are non-credit bearing.

These better prepared students enter the university ready to take full advantage of the

opportunities we afford.

Thank you for letting me share this story with you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Apparently we missed Number 24. So we'll go back and call. Is Number 24 here now?

MR. BURSE: Good afternoon. My name is Ron Burse. I'm the chief operating officer at College Solutions Network in Hyannis, Massachusetts, and it is indeed a pleasure to speak to all of you today.

In the words of President John F. Kennedy, a free nation can rise no higher than the standard of excellence set in its school and colleges, and I wish the Commission very much success in the years and months ahead.

My brief comments today focus on how can we insure that students, families, and the nation and its colleges can afford each other. In order to adequately begin the process of answering this question, there are some fundamental points that need to be reviewed.

First of all, business of education is absolutely unique, more so than in any other economic enterprise. It's impossible to adequately value its end product.

What price do we put on a life saving drug developed by university trained students at a major research institution? How can we possibly measure the worth of a first generation college graduate lifting their family to a level of security and fulfillment never before imagined?

Secondly, there needs to be general knowledge that some things are expensive because of their perceived value while other things are simply because they are worth it.

Third, if it's an irresponsible conceit to imagine ourselves qualified to judge value for others, it's equally irresponsible not to provide a framework and the tools that can assist every family contemplating the investment in education to confidently make that choice for their own.

At CSN we have created and brought together a variety of companies to prepare students for college success, improve their SAT scores and increase college access and affordability. We're doing our best to deal responsibly with these critical national issues.

We speak to thousands of families and students every year. We hear their stories of being unprepared, of not knowing where the money is going to come from and how daunting the process of preparing,

applying, and paying for college can actually be.

CSN works closely with college and university presidents, enrollment offices and the like to help them help themselves in making sure that they can afford both their schools and their students.

All of these things have taught us four things here that I want to talk about very quickly. The first one is a recommendation that we think that schools should be mandated to provide some type of basic investment guidance and develop a reasonable set of objectives, criteria rates for four years, five years, et cetera, the average cost of financial aids after awards or whatever.

We need some kind of outcome information, and we applaud what the University of Texas is doing in their model.

Number two, we obviously need to do better in terms of fostering additional financial literacy on the part of those making the college investment decision. One of the things you might want to take a look at is requiring colleges and universities to give families tools that can help them develop and compare funding strategies that make the financial aid award process more consultive and open, and at CSN, we're developing a partnership with the American Education Foundation, which is committed to reducing college

attrition and expanding access and affordability by offering community education seminars, workshops and financial literacy programs to help families better prepare and pay for college.

The alliance operates in nine cities, but similar efforts across the nation are needed, and we urge the Commission to foster a similar partnership building to improve financial literacy across the land.

As a member of the alliance, CSN provides education, financing sources in the form of Web tools and education loans to help families better afford college costs, but we also have CSN Financial Services which trains and certifies financial advisors at Lincoln Place and other places.

I have left a statement, and I will stop right here. We appreciate your thoughts now. Thank you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 29.

MS. HART: Good afternoon. My name is Deborah Hart, and I am the Education Coordinator for the Institute for Community Inclusion at UMass-Boston.

I thank you for the opportunity to speak with you today on the topic of access to post secondary education for individuals with intellectual

disabilities.

I'd first like to present some results of a national survey that the institute conducted that identified 110 post secondary education programs that support students with intellectual disabilities. The data I am reporting on is based on 52 respondents of the 110 programs.

The programs fell into one of three categories of post secondary education models. The majority were in a mixed or hybrid model, meaning there was a separate program base where students with disabilities were all congregated together, but they were supported if they so choose in taking typical college courses.

The second most prevalent model was a substantially separate program that really had nothing top do with the academic side of the college campus or university they were on.

The third model that we uncovered was a totally inclusive or individual support model that had no program base and was totally inclusive and supported students with intellectual disabilities to take college courses either through auditing or for credit, but with the necessary supports to be successful.

These programs are listed on a Web site

that is devoted to the topic of post secondary education for students with intellectual disabilities, and it's called thinkcollege.net. I've given you some propaganda on that.

One of the barriers that were identified overall, the majority of the programs identified attitude and low expectations as the most significant barrier to overcome to establishing or gaining access to post secondary education for students with intellectual disabilities.

Additional barriers in order of significance were funding, including access to student financial aid for students with disabilities without a high school diploma, transportation and entrance requirements, including the limitations of the ability to benefit tests.

Next I will discuss one inclusive post secondary model called the college career connection. It is a dual enrollment model that was funded under the U.S. Department of Education, Office of Special Education Programs from 1998 to 2001, and it specifically looked at supporting students with intellectual disabilities in taking college courses either through auditing or for credit related to their career goal with the necessary supports.

And what I'd like to highlight are the

study we did on this particular model that looked at the effectiveness of that. We looked at 40 students. It was a matched cohort study that looked at 40 students, 20 of whom did not have a post secondary experience and 20 who did, and those that did were much more likely to obtain competitive employment, require fewer supports and earned higher wages.

Some recommendations. Exiting high school is an exciting and tense time for all students and their families. When conserving what will happen next, the possibility of college for students with intellectual disabilities is usually not promoted as a viable option, and it needs to be.

Keeping college in the mix of possibilities as students with intellectual disabilities explore which steps to take after high school says that we believe in their potential for success.

To this end, the following recommendations are two recommendations I'd like to make. Research the effectiveness of current approaches to determine the relative success of each model in assisting with intellectual disabilities in achieving improved post school outcomes, and to strengthen the language in the Individuals with Disabilities' Education Act of 2004 to encourage use of IDEA funds to support dual

enrollment of students with intellectual disabilities in post secondary education.

I've included additional recommendations, but my time is up.

DR. DUDERSTADT: Thank you.

MS. HART: Thank you.

MS. OLDHAM: Number 30.

MS. ROACH: Good afternoon. I appreciate this opportunity to speak today on the important topic of post secondary opportunities for students with intellectual disabilities.

My name is Jerri Roach. I'm the transition specialist for the Wooster Public Schools.

Five years ago we received a federal grant from the Department of Education better enabling us to work with students with intellectual disabilities between the ages of 18 and 22 on planning for their future.

Students have individualized schedules and participate in typical post secondary activities, such as working, attending college, studying, enrolling in adult ed., engaging in social and rec. activities just as peers their own age would be doing.

One of the major components of a student's schedule is college. We've established a collaborative working relationship with Quinsigamond

Community College. We provide educational coaches who assist students in gathering the documentation for accommodations, meeting with disabilities coordinator, registering for classes, arranging placement tests, coordinating billing, and supports in and out of the class.

Here is one of my students' stories. Jeremy loves being a college student, the freedom of being on campus, doing what his older brother is doing. He wants to do what kids his own age are doing, and he is. He hangs out in the college cafeteria with friends. He uses the library and the fitness center, and he actually does take class, too. He attends college three days a week and has an internship at a hospital two days.

Last semester he took a computer class using his adaptive keyboard. This semester he took a sign language class. By the way, Jeremy is mentally retarded, a non-reader and writer, and is non-verbal. He uses a Dynamite box to communicate along with gestures and some sign language. His professor adapts writing classroom quizzes with pictures and symbols.

Jeremy got a 75 on his first quiz.

By taking college classes we have seen an increase in student self-esteem, level of independence, social skills, study habits, decision

making, self-determination skills, and employability. An individual with a significant disability going in for an interview, he answered on a resume that not only describes the various internships and responsibilities they had, but notes the college courses they completed. This shows a level of experience, knowledge, commitment, and success that many young adults don't have yet.

It puts a student with a significant disability in a valued role, something they don't often experience.

Some students in the Wooster public schools and the families that have the opportunity to dream and work towards those dreams, dreams not unlike that of their peers. College fund, a good job of interest, career plans, it would be wonderful if more students with intellectual disabilities could have those dreams.

My recommendations today, at this point the Wooster public school assumes responsibility for college tuition until the student is 22. Unfortunately at that point many students are not able to afford this and are still interested in college.

I ask the Committee to support amending the Higher Education Act to allow students with intellectual disabilities access to financial aid so

they continue to live their dreams.

I ask the Committee to develop a committee of post secondary and special education and voc. rehab. staff to identify and fund research, training, technical assistance to support transition in post secondary services for students with intellectual disabilities across the country.

And I ask for all to get the word out to colleges, to secondary ed., to high schools, that students with intellectual disabilities can succeed in a college environment through sharing example of best practices occurring on campuses across the country. This success benefits us all.

Thank you very much.

MS. OLDHAM: Number 31.

MR. FOLEY: We have 31 and 32 here, combined together. We'll take our time if we can.

Mr. Chairman and members of the Commission, thank you for this opportunity to speak today. My name is Jack Foley, and I am Vice President for Government and Community Affairs at Clark University in Wooster, Massachusetts. I am also an elected member of the Wooster School Committee.

But today I am honored to speak with you as the proud father of Lindsay Foley, a student at Quinsigamond Community College through the program

with Wooster Public Schools.

Lindsay is 20 years old and happens to have an intellectual disability. She was included with her peers in middle school and high school, and has now made that natural transition to an inclusive post secondary education with her peers at Quinsigamond rather than remaining in a holding pattern in her high school with students much younger than herself.

This next step for Lindsay into the least restrictive environment has provided her with a challenging academic and social setting, just like her peers, where she is actively enjoying daily encounters with people of all ages in her community.

Lindsay's enrollment at Quinsigamond has given her the chance to develop a greater sense of independence while she learns the skills necessary to be successful in the work place.

She navigates the campus with ease, utilizing the library, the cafeteria, the gym, the track, of course the classrooms, and the supports of the Disabilities Services Department. Lindsay's classroom work is helping her develop the computer skills that represent the beginning of technology based employment, perhaps in data entry or digital storage tasks.

This opportunity is being reinforced through her work at Quinsigamond's library and data entry. Technology also plays a crucial role in Lindsay's academic work where she reads a class assignment using Kurzweil reading software and keeps her personal schedule on her palm pilot using voice software.

In order for students with intellectual disabilities to participate fully in our society and become essential members of this country's work force, we must be sure that they have the academic, technical, and social skills to be successful.

It is imperative that the United States Department of Education take a leading role in encouraging and supporting the development of strong, meaningful transition and post secondary programs for students with intellectual disabilities.

As we are making great progress with inclusive settings in the K through 12 educational world, there is much more still to be accomplished in post second education. Access to higher education is the first step in opening that door for all students to be successful.

Please consider including language in the IDEA 2004 regulations that school districts can use their IDEA funds in support of these options. A

blending of vocational rehabilitation dollars and IDEA funds could make all of the difference for Lindsay and her fellow students as they strive for economic self-sufficiency and independence.

Thank you.

DR. DUDERSTADT: Thank you.

MR. FOLEY: If I could begin Number 32 if I could.

MS. OLDHAM: Sure.

MR. FOLEY: And I'm going to actually ask Lindsay to give a sense of some of her experiences at Quinsigamond prompted by some of my questions if you can.

Would you state your name, please?

MS. FOLEY: I'm Lindsay Foley.

MR. FOLEY: And where did you go to high school?

MS. FOLEY: Dougherty.

MR. FOLEY: At Dougherty High School, and what city is Dougherty in?

MS. FOLEY: Wooster.

MR. FOLEY: Wooster, the great City of Wooster, and where do you go to college now?

MS. FOLEY: QCC.

MR. FOLEY: And what is QCC? Is that Quinsigamond?

MS. FOLEY: Yeah.

MR. FOLEY: How many sweatshirts and teeshirts do you have that says Quinsigamond right now at home?

MS. FOLEY: Eight.

MR. FOLEY: Eight.

(Laughter.)

MR. FOLEY: Do you have friends that followed you to Quinsigamond from Dougherty?

MS. FOLEY: Yep.

MR. FOLEY: How about other high schools as well?

MS. FOLEY: Yes.

MR. FOLEY: Such as where? Can't remember? So you have kids from all over the city and all over the other area?

MS. FOLEY: Yeah.

MR. FOLEY: What do you like about going to college? Right here. What do you like?

MS. FOLEY: The track.

MR. FOLEY: Track.

MS. FOLEY: And the campus.

MR. FOLEY: Better than your father, right?

What about some of the courses that you're taking at Quinsigamond?

MS. FOLEY: Computers.

MR. FOLEY: Computers, and what are you working on in computers right now? What's that called?

MS. FOLEY: Typing.

MR. FOLEY: Typing and some of the data entry?

MS. FOLEY: Yeah.

MR. FOLEY: Okay. How do you read your class notes and the newspaper?

MS. FOLEY: Kurzweil.

MR. FOLEY: Kurzweil. Reading software, right?

MS. FOLEY: Yeah.

MR. FOLEY: What other activities do you participate in while you're on campus? What do you do when you're there at Quinsigamond?

MS. FOLEY: The library.

MR. FOLEY: The library?

MS. FOLEY: Yeah.

MR. FOLEY: What else?

MS. FOLEY: Walking the track.

MR. FOLEY: Walking the track. What else do you do?

MS. FOLEY: That's --

MR. FOLEY: What's that there? What do

you eat?

MS. FOLEY: Cafeteria.

MR. FOLEY: And who do you hang out with in the cafeteria?

MS. FOLEY: My friends.

MR. FOLEY: Like all college kids, right?

MS. FOLEY: yeah.

MR. FOLEY: And the last couple of questions. Where do you work now?

MS. FOLEY: At the Y.

MR. FOLEY: At the Y, and what do you do at the Y?

MS. FOLEY: Scan cards and greet members.

MR. FOLEY: Scan the cards and greet the members as they come in, right?

MS. FOLEY: Yep.

MR. FOLEY: And finally, Lindsay, at your graduation from high school when your friends were asking you what your plans were for next year --

MS. FOLEY: Yeah.

MR. FOLEY: -- what did you tell them?

MS. FOLEY: I'm going to QCC.

MR. FOLEY: I'm going to QCC.

A very powerful message for all the students just to be able to tell their friends that they're going to college as well.

Thank you very much.

MS. FOLEY: Thank you.

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Thirty-three.

MS. SHEA: Good afternoon. My name is Suzanne Shea, and I am president of the Massachusetts Downs Syndrome Congress, and I'm representing here today our statewide organization as well as the two national organizations, the National Downs Syndrome Congress and the National Downs Syndrome Society. Together we represent over 350 families across America. Our impact is broad.

Our children and young adults with Down's Syndrome want to grow up to live independently, to work in an inclusive environment with competitive pay, and to have friends and neighbors and contribute to their community.

To accomplish these goals, we need to have the best education possible with the opportunity to obtain college and to attend as their brothers and sisters do. Students with Down Syndrome have made a significant progress in education due to the impact of IDEA. A generation ago many children with intellectual disabilities were not even allowed to attend school. Today that bar has been raised.

I'd like to introduce my daughter, Caroline. She's ten years old, attending our neighborhood elementary school in the third grade. She's following the Mass State curriculum guidelines for every subject. For example, she just completed a science unit on the solar system, a project on Venus, and participated in a class play in the role of earth.

Right? Plant earth. Yeah.

Attached to my written testimony, please find a letter from Caroline.

I request that the Commission consider recommending the following:

To clarify in the Individuals with Disability Act regulations that is permissible for school districts to use IDEA funds to support transition services on college campuses and dual enrollment in college programs for students that are still eligible for services.

To clarify in the Department of Education guidance that it is permissible to use vocational rehabilitation funds to support students in post secondary programs for students with intellectual disabilities.

To create a coordinating committee within the U.S. Department of Education, that includes the Institute of Education Sciences, Office of Post

Secondary Education, and Office of Vocation Adult Education, to identify and fund research training, technical assistance and outreach and to support amending the higher education act to allow students with intellectual disabilities to access student financial aid, including loans, grants, and work study funds.

Based on my experience with the Mass Down's Syndrome Congress, I have seen how our organization has made education a critical element of our mission and goals. Again, the bar has been raised.

Having started as a grassroots group 23 years ago, the focus is continuing on improving and evolving. Each year there are more high school students who have intellectual disabilities who are ready to transition to post secondary education. We need to make sure that these transitions happen and are successful.

These students need the support of IDEA funds to help transition services, access to student aid, and access to loans, grant, and work studies. These students need more opportunity to participate in the model degree and certificate programs. By implementing the above recommendations, the opportunity will be realized, and the next generation

of students will raise that bar even higher.

Thank you very much.

MS. OLDHAM: Thank you.

(Applause.)

MS. OLDHAM: Number 34.

MR. DeFELICE: Good afternoon. I am Jonathan DeFelice and the President of St. Anselm College in Manchester, New Hampshire, and I'm delighted to be here today on behalf not only of myself, but of the National Association of Independent Colleges and Universities, which represents nearly 1,000 independent colleges and universities across the country of just about every type.

My testimony is coming to you in print. It has been sent electronically already. So I'm not going to read it to you. I do thought want to comment on some of the things that were talked about this morning by my distinguished colleagues, who unfortunately there were none who represented the sort of mid-range liberal arts colleges of the type many of which belong to NAICU.

As you saw today, the tapestry of higher education is rich and colorful and complex, and I would ask that you keep that complexity in mind as you think about why students choose particular institutions and how they are accountable.

There is, it seems to me, room certainly for appropriate accountability for every institution, but there are reasons why institutions were founded and why people continue to choose certain kinds of institutions, particularly in the independent sector of higher education.

We need to be accountable to our various constituents and want to be. We want to be accountable to the public, and we think that accreditation works. One of the things that I've done in the years that I've been president is had the marvelous experience of serving as a Commissioner on the New England Association where I experienced the work that is involved in an institution seeking to continually improve itself.

I think that if we look for uniform benchmarks or finite sets of measures against which all institutions can be judged, we will lose the beauty of the tapestry. There is no doubt in my mind that we need to focus on institutional mission as we look at that because if you look at a liberal arts college, it isn't so much about earning as it is about learning, and our institutions are not simply gateways into employment but are there to help develop intellectual taste of our students hopefully and to prepare them for life and to give them the skills for

jobs that may not even exist today.

And I think certainly all of us if we look back at least the last 30 years and see what has happened, we know that there will be plenty more jobs yet ahead that don't even exist today.

I'd like to say a word against the student unit record. I think equating security of data with privacy is a mistake, and I think we should, as I say, stay away from that because I don't think we all fully understand what this data could be used for.

Is that the end or is that a signal for --

MS. OLDHAM: You can wrap it up.

MR. DeFELICE: Okay. Just one last very quick point to say that I think federal investment in terms of financial aid for students in both public and private institutions is something that the country needs desperately to increase not simply for the good of the students but really for our democracy if we're going to continue it.

Thank you.

(Applause.)

MS. OLDHAM: Number 35.

MR. DOHERTY: Good afternoon and welcome to Boston. For the record, my name is Richard Doherty, and I serve as the president of the Association of Independent Colleges and Universities

in Massachusetts, NAICUM, and Massachusetts, as you may know, is the only state in the nation in which more students are educated in independent colleges and universities than in our public institutions. And, in fact, our independent colleges here award more than 70 percent of our Bachelor's degrees and more than 85 percent of our graduate and professional degrees. And we are justifiably proud of this unique contribution, and our 55 member institutions, as was articulated by the previous speaker, really span the full spectrum of schools from renown research universities, nationally recognized liberal arts colleges, faith based institutions, and specialty colleges focusing on the music, the arts, business, engineering, and other critically important disciplines to our economy.

From the perspective of the independent colleges in Massachusetts, I would like to underscore comments made earlier this morning about how concerned we are with the overall retreat in funding from both the federal government and from our own state government need based financial aid programs.

If we want to send a message to the brightest, most talented students no matter their financial status, that the outstanding colleges and universities at this stage in this country are accessible and affordable to them, and our public

policies and student aid programs must reflect that priority and that commitment.

We are also deeply concerned with the rising loan indebtedness, which the students before me so articulately stated, and some of that loan indebtedness is hidden loan indebtedness. It's in the form of home equity loans and things that don't show up on public databases, and it is something that I am hearing more and more frequently from presidents and student financial aid directors at our colleges and universities.

I'm also concerned that our country's relevant stagnant rate of persistence on to college reveals that the current policies at the federal level, in particular, do not reflect the commitment to accessibility and affordability that I think we all espouse, and we urge the Commission to use its influence to reset those national priorities.

NAICUM colleges are doing everything in their power to remain true to the ideal of accessibility and affordability. We sponsor a terrific early awareness to college program, which was touted earlier as something critically important, and last year alone our member colleges and universities awarded well over $275 million in institutional need based aid. That's nearly ten times the amount of

state financial aid to Massachusetts students attending our institutions, to Mass. residents attending Massachusetts independent colleges.

But that increasing level of support is not sustainable in the long run and does not fully fill the widening gap between the real cost of college and the declining levels of federal and state grant aid.

I in my written comments also have some comments on the issues around accountability, and one thing that I just wanted to mention. Commissioner Nunley, you had asked the question earlier this morning if the case for higher education is so strong, why isn't the support there, and I think that that is a challenge really to all of us that have testified today and to the Commission, that we need to make the case better that higher education is not a private good. It is a public good, and that the investment in student financial aid and programs that support people through higher education are, in fact, investments pay handsome dividends and pay back the public support that we've brought to the -- and payback that the public support that we're making in these programs.

Thank you very much.

MS. OLDHAM: Number 36.

MR. SHARMA: Good afternoon. I'm Mahesh

Sharma, president of Cambridge College.

It is very important to realize the role of this Commission at this junction in higher education. When we look at the history of higher education, there are three junctions where it has reformed, reshaped the higher education: the G.I. Bill, the community colleges, National Science Foundation formation, and today, this Commission.

The three Commissions before you, they have done the expansion of higher education to new populations, new groups. And I think you are also in the same role that you have to look at your role from the expansion of higher education opportunities to yet new groups.

And those new groups I want to identify students of Cambridge College as an example. Cambridge College is an institution for working adult. The average age is 41 years old, and we have three graduate schools, School of Management, School of Education, School of Psychology, and undergraduate school.

These students represent four groups: poor white, African Americans and Hispanics, displaced workers because of the changing economy, and new immigrants.

This Commission has to look at not just

all the students who are facing difficulties, but these new groups, and these new groups have special problems. Access to higher education has been achieved by higher education institutions and by federal grants and state grants to a great extent, but that access is being now eroded. It is being eroded by financial constraints on students. It is being eroded by the old laws which are not in favor of working adults because when you look at the financial aid their income is included as a benchmark for deciding their financial aid.

These working adults, they are joining higher education after ten, 15 years of working. Their academic skills are not at the level that they can take real advantage of higher education. They do need some developmental work, remedial work and preparation for higher education.

The new immigrants, they face even more challenges: English as a second language, acculturation, and introduction to technology. Institutions of higher education have to keep that in account.

I'm also looking at American higher education from the perspective of a person who was educated outside of the United States. Many data say that China is training 400,000 engineers, India

200,000, and United States only 70,000. But those 200,000 and 400,000 are not being trained by the money of individual students. They are by the government.

When you want to make a shift in higher education, then a GI Bill committed $5 million to start with; NSF, same kind of bold statement has to be taken by this Commission to expend and also face the globalization impact on higher education in America.

Two side points. Retention is a major problem today for working adults. They move. Their preparation for higher education is not adequate. If we want to keep more students in college, then we need to provide for these services which we have identified.

Now, the single identity data is not just going to help to track students, but it will also track the work of those students. If MasterCard can track all the purchases in the country, why can't we have a single identity and tracking of their work, learning activities, and others?

Similarly, one more point, and that is the banks have broken the barriers of states, interstate commerce. Why can't higher education can also be in the same situation? That means that universities must go and find the loci and the groups of students and provide that service rather than footed by the states

and by local conditions.

We should keep the accreditation by the voluntary basis, and the government must keep only the access.

Thank you very much.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 38.

MR. SLOAN: First I'd like to know how come the tourist folks upstairs get tote bags and we don't.

(Laughter.)

MR. SLOAN: But don't count my joke against my three minutes.

My name is Wick Sloan. I'm here as a citizen with the simple belief that everyone in the nation deserves an education as good as the one I have. My perspective is to speak for the people who are just as bright as me who aren't in college and may never get there.

In three minutes there's not much to do, but I've done hard time as a state university chief financial officer and gotten some stuff done. I've done four years on a public school board of education, and I've sat on your side of the table in public hearings, and the mileage and time all of you are putting in here is impressive.

Two quick ones first. If you do nothing else, there's no greater barrier to access in higher education in America than the FASFA form. We have so many hard challenges ahead of us. Let's pick off an easy one. There is nothing more intimidating to a poor student or a poor family than that form.

Certainly IBM and their designers can get some normal people together and figure out how to make that less intimidating.

One false move on the FASFA form can change your award by $100, which is life or death.

Second, I urge you in the private sector not to belief the fox in the henhouse stuff this morning about the inevitable higher cost of higher education. I've been on both sides of the coin. There's no greater higher education issue than that it takes four years. That is from the 14th Century, the University of Bologna when the pedagogical constraint was the scarcity of books. There is no reason, not one, and the life expectancy was half of what it is now.

A piece of that that I urge you to study is the miracle happening in pedagogy in the community colleges. There is more learning going on in community colleges in a week than in a semester at any of my schools, which are Williams and Yale. It's a

miracle, and it needs to be studied and codified and celebrated.

But I challenge my schools to teach half as much in twice the time.

Now, I urge you in my fast talking to take a hard look at our current national policy of higher education, the one we backed into. Our policy is that we ignore the poor. Our national policy is to believe that the founders who didn't mention education in the constitution left higher education to the states. We let Medicare kick the poor out in state schools, and we wring our hands about appropriations and budgets, while ignoring the tax policy deals that are happening out the back door.

And I'll illustrate by picking on my schools, Williams and Yale, because they can take it.

The implied federal tax subsidy by a tax policy at my schools is 25 to $35,000 per student. As you know, Chairman Nunley, this is two or three times the cost of a student at a community college or about five Pell Grants. I'm doing this by taking the untaxed endowment income of those schools and the foregone tax revenue from their tax deductible donations, divide that number by the number of students, and there you have it.

And as you know from your own financial

work, you can make any assumptions in a hypothesis like this, but you cannot assume a low number. Our national policy then is that the indoor gold driving nets at Williams College are worth more to the nation than the Pell Grants are for the students at community colleges.

Now, my challenge to all of you is you have a bully pulpit, which is our bully pulpit, and what's it going to be? Pell Grants or golf nets?

(Applause.)

MS. OLDHAM: Number 39, 39. How about 40? Forty-one? Forty-two.

MS. GANZ: I want to thank you for giving us the opportunity to speak today. My name is Laurie Ganz. I am the national co-chair for the Campus and Higher Education Affairs Division of the Anti-Defamation League of the B'nai B'rith. With me is Robert Trestan, ADL's eastern states civil rights counsel, and we're delighted to have the opportunity to speak today.

The Anti-Defamation League is one of the nation's oldest civil rights organizations, founded in 1913 to combat anti-Semitism and to advance the goodwill and mutual understanding among Americans of all creeds and races, and to combat all forms of prejudice in the United States and abroad.

In this increasingly competitive and diverse world. it's essential that our universities and colleges provide students with an educational environment that is conducive to learning and one which respects the vastness and diversity of the global community.

Yet sadly we see that more and more students are feeling marginalized because of immutable characteristics, such as race, national origin, sexual orientation, disability, and/or religion.

I'd like to take a few moments to address three priorities which we hope that the Commission will consider in moving forward. The fist is anti-Semitism and other bias or hate related incidents on campus.

The annual ADL audit of anti-Semitic incidents has documented acts of anti-Semitism across the country since 1979. Reported incidents on campus have increased dramatically over the past 20 years, and still the majority of hate crimes and anti-Semitic incidents go unreported.

Anti-Semitism is just one example of the increasing problem we see with biased incidents in our university and college campuses. Our experience has shown that the effectiveness of well designed diversity, training, and education programs makes a

big difference.

ADL's A World of Difference Institute provides anti-bias education and training on college and university campuses through a Campus of Difference. The program helps participants increase their self-awareness, strengthen their community, and celebrate diversity.

We urge the Commission to embrace such and similar proactive programs to combat bias and discrimination as part of an integrated response to increasing trends of intolerance on campus.

Secondly, we seek to improve access to higher education for undocumented immigrants. We're concerned about the future of students brought here as children and educated here, but who face barriers to higher education and the accompanying opportunity to become integrated, contributing members of their communities.

In keeping with our democratic principles and our commitment to a just and inclusive society, ADL believes that these individuals should be offered greater access to a bright future. We encourage the Commission to help the children of immigrants to achieve their goals by working to remove or reduce the insurmountable obstacles that currently lay before them.

Lastly, we're asking your assistance in addressing notable gaps in hate crimes reporting on campus. Every year thousands of college students are the victims of bias motivated slurs, vandalism, threats, and physical assaults. In 1998, to increase awareness of hate violence on college campuses, Congress enacted an amendment to the Higher Education Act requiring all colleges and universities to collect and report hate crime statistics to the Office of Post Secondary Education of the Department of Education.

Under the current rules, colleges must report only those bias related crimes involving bodily injury, for all intents and purposes, ignoring the array of other destructive and disruptive forms of bigotry and intolerance. The Department of Education's hate crimes categories do not conform to those utilized by the FBI since 1991 under the Hate Crimes Statistics Act and, in fact, reflects substantial under reporting.

Even worse, the limited available data directly conflicts with campus hate crime information collected by the FBI under HCSA.

A review of the department's reporting requirements is necessary to insure the consistent reporting of hate crimes between the two agencies. We're providing among our written material additional

documentation to support this point.

We urge the Commission to take all necessary steps to eliminate discrepancies and federal hate crime data collection efforts which currently provide limited, confusing, and even contradictory data.

Let me conclude by thank you and applauding the important work that you've undertaken.

MS. OLDHAM: Forty-four, 44? Forty-five.

MR. DAVIDS: Hello. My name is John Davids, and I'm a graduating senior at Salem State College.

I'm concerned with the affordability and accessibility of higher education. In his State of the Union address, President Bush said, "To make our economy stronger and more dynamic, we must prepare a rising generation to fill the jobs of the 21st Century." He went on to say, "And we'll make it easier for Americans to afford a college education by increasing the size of Pell Grants."

Students are still waiting for a break in what is now a five-year freeze on the maximum Pell Grant awards. With inflation and the skyrocketing cost of going to college, Pell Grants are now worth half of what they were 30 years ago.

More and more students are now turning to

loans, and recent increases to student loan interest rates will put students in so much debt when they leave college that instead of seeing opportunity, they will see shackles. These shackles undermine the American dream. Instead of having options to start a family, buy a house, or continue your education, the latter of which is key to the jobs President Bush is talking about, they will have to sell their dreams, including often occupational ones, just to manage their daunting student debt.

This is not the future I want for America, and I sincerely hope that the Commission recommends funding for Pell Grants and other grant aid to be increased, as well as restoring interest rates back to reasonable levels.

Thank you for your time and consideration.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Sixty-two. Sixty-three.

MR. DENNEHY: Good afternoon. My name is Michael Dennehy. I direct the Upward Bound Program at Boston University, and I also represent the New England Educational Opportunity Association, and I'd like to talk today about the role of the federally funded TRIO programs, which target low income, first generation college students, and the role these programs play in the area of college access, and I'd

also like to provide specific examples from my work with Upward Bound at Boston University.

As our earlier speakers have illustrated, equal opportunity for college access is a great concern. One of the speakers earlier today had mentioned the fact that high achieving, low income students were attended college at about the same rate as low achieving, high income students, and I think that pretty poignantly speaks to the issue of affordability around the already mentioned issues of the Pell, the shift from need based state to merit based state.

I'd like to spend a minute talking about academic preparation in addition to those issues of financial need, and particularly the role that the Upward Bound program plays in academic preparation for students.

In Massachusetts, upward bound programs have had great success in helping program participants meet state graduation requirements as mandated by the Massachusetts Education Reform Act, which predates and in part serves as the role model for No Child Left Behind.

At Boston University's program, we target participants who failed middle school state assessments or who had entry GPAs below 2.5. In fact,

55 percent of our entering class of 2005 met the Department of Education's definition of academically at risk. These are students who would probably not be going on to college with these test scores and GPAs.

From this cohort, the students are entered in our program as high school freshmen, with graduate a date of 2005. Eighty percent of this cohort went on to post secondary institutions by September, and 96 percent of program completed entered a college by September 2005.

Sixty percent of this cohort and 68 percent of programs completers tool at least one advanced placement course at their high schools. A cornerstone of college access is academic achievement and Upward Bound works to develop the skills students will need to succeed in college.

The success is not unique to the program at Boston University. TRIO programs have a broad reach. Nationally nearly one-third of all high school seniors from low income families who enter college do so each year with the assistance of pre-college TRIO programs, Upward Bound and Talent Search.

Accountability is a critical component in assessing the effectiveness of higher education. Programs that help prepare students to enter and succeed in college should be evaluated based upon the

rate at which program participants matriculate at and graduate from college.

TRIO programs track such outcomes and document their success each year in annual performance reports submitted to the United States Department of Education. Some recent outcomes from Upward Bound at Boston University show that the high school class of 2005, 72 percent of project completers earn a Bachelor's degree, and for our graduating class of 2001, 62 percent have earned a Bachelor's degree to date and 38 percent are still enrolled.

These completion rates are significantly higher than the four-year national average of 34 percent and the national six-year average of 56 percent. The availability of ignore academic preparation and information about college choices are key elements in making college accessible to all Americans.

To this end the federally funded TRIO programs are an important resource for low income and first generation college students.

Thank you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Number 70. Seventy-two -- oh, I apologize. You weren't on here. Come on up.

MS. SCHOEN: Good afternoon. Liz

Hollander, who is the Executive Director of Campus Compact asked me to come speak to you today as a student who embodies the ideals of Campus Compact.

My name is Katie Schoen. I'm a senior qat Providence College, a small, liberal arts college in Providence, Rhode Island. Today I'm here speaking as a student, as a member of the Providence community, and as a spokesperson for Campus Compact.

One of the things that brought me to Providence College was the public and community service major. This major incorporates service learning into all aspects of an academic curriculum. Service learning combines community service with academic readings and discussion.

Through reflection on my service, I was able to more fully understand that which we were exploring within the classroom. I have been fortunate enough to participate at a diverse number of local service sites, including an AIDS prevention agency, an LGBTQQ Support Center, numerous local schools and libraries, shelters for victims of domestic violence, homeless shelters, and centers dealing with substance abuse.

All of these experiences have greatly shaped my academic career by showing me real society rather than a lofty deed from the ivory tower. These

various events have also helped to strongly root me in the community. I feel a personal connection with many of those with whom I have worked, and this connection is so strong that I plan to stay in Providence after I graduate in May.

I'm an example of how service learning reduces the brain drain. Because I have interacted with the community I am now part of it, and I want to be in providence after May.

Civic engagement trains students to improve their ability to lead, to interact with others, to problem solve and to become committed. It is also the responsibility of universities to train leaders who are prepared to deal with the complex economic and social problems that plague many of the stations' communities, providing these leaders with the tools, skills, and abilities and dedication that they need to tackle these difficult problems.

Providence College is a part of a larger coalition called Campus Compact. Campus Compact is a national nonprofit organization that seeks to promote public service, civic engagement, and service learning in higher education. It is a coalition comprised of nearly 1,000 colleges and universities and more than five million students.

Campus Compact offers resources for many

of these universities to develop and maintain a service learning component to their education. It provides research, advocacy, leadership development, partnerships and training to all of its students and universities.

Campus Compact is seeking to assist in the development of the students to become active citizens and contribute to society. I hope that the Commission will publicly recognize the importance of educating students for social responsibility and will support investments in service learning, such as Learn and Service America, service scholarships, and loan forgiveness for students who pursue careers in public service.

I would like to close with a quote from John Dewey. "Democracy needs to be reborn in every generation and education is its midwife."

Thank you.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Seventy. Seventy-two. Seventy-three.

MR. MARTH: This feels a little bit like working at the deli counter with all of the numbers.

(Laughter.)

MR. MARTH: Did you want fries with that?

(Laughter.)

MR. MARTH: Well, members of the Commission, thank you for your time at this time. My name is Edward Marth. I live in Rhode Island. I was raised in Massachusetts, went to State College in Massachusetts, UMass, Rutgers. I work at the University of Connecticut where my job is to represent the faculty, but I also spend time in my community raising money, and we award scholarships on a need base because we graduated from high school to go on to the college of their choice.

I feel strongly about this issue that you're dealing with here today. I knew several years ago and had reason occasionally to meet with Senator Clayborn Pell, and he would always carry a three-by-five card around with him where he would pull it out and tell you how many students had benefitted from the Pell Grants.

I suspect that if the policy makers in Washington from the President on down today had a similar card, it would have an F on it for failure.

The national debt is reported recently to now be about $30,000 for every man, women and child in the United States, and it grows by the minute as we gather here. It's reported that we have a resilient economy, but it grows more fragile as the debt grows since debt is supported less by Americans than by

Chinese and others who compete with this country economically. We are dependent on oil, cheap goods from abroad, Minonet (phonetic) services from Middle East tools, cars from Asia. We're a country that cannot afford to compete with the cheapest labor daily crossing the border or assembling technological goods in distant lands.

At the same time, employment costs are relentlessly driven down here and 40-plus million people life without health care because they can't afford. The economic trajectory is not good for the economic bottom half of America's population and worrisome for those of us in the middle.

The only dependable investment that society can make to insure that our future is as good as was our past is in education. It is as true now as it was when President Lincoln signed the Morric Act in the throes of the Civil War. Leaders then knew that the struggling country would have to have people trained in the agricultural and mechanical arts. The thrust of that milestone legislation.

The story GI Bill remade America in the transition from a warring economy to the powerhouse years of the '50s and '60s.

Today as the country lurches toward the death of such magnitude that few can imagine such red

ink, the government budget proposing cutting 42 programs and the Education Department of the college loan and grant programs are being cut back or eliminated, or made more expensive a proposed reduction of nearly six billion.

We would spend that money to eliminate one known terrorist cells in a heartbeat. No question. The maximum Pell Grant would remain at $4,050 for the fifth year in a row, but the overall amount would be reduced by 2.3 percent.

That's scandalous. The loans would increase slightly and perhaps to coincide with the change in laws make it harder to declare bankruptcy for individuals, but corporate America thumbs its nose at government fines and shifts pension and other obligations to the government. This is not a picture to build optimism that this country will have the brain power to compete in the new technological world economy or the ability to even manage an economy slipping away from our shores.

It's almost done, but I'll try to end it up there with the debt for college is a good investment, but it is money not available for housing and health care for the newly graduated or the newly dropped out. We need to keep the doors open. We need to have you stand up for that as forceful as you

possibly can making that dream alive for people.

Thank you.

MS. OLDHAM: I think we missed Number 62.

MR. ROONEY: Thank you, Mr. Chairman, members of the Commission.

My name is Jim Rooney. I'm Director of Public Affairs at the Boston Foundation. The Boston Foundation is one of the nation's oldest and largest community foundations, and we increasingly commission research on competitiveness issues and bring leaders together from across sectors to examine the ways in which the region can move forward.

And one such effort that I just wanted to very briefly bring to your attention this afternoon, and I've submitted copies, is a recent study on the impact of colleges and universities in Greater Boston today. Dr. Vest is no doubt well aware of it, having helped us on this.

I just wanted to share with you our main finding and our main recommendation since, based on a national scan of best practices, it's in our judgment that this has some national applicability as well.

Our main finding is that over the past ten years there has been an enormous and under heralded blossoming of partnerships across academia, business, government, and neighborhood institutions be it in

terms of economic development, quality of life, civic engagement, what have you.

And our main recommendation is that leaders both in academia and in other sectors work more strategically to nurture these and accelerate these. Many of what we found are what you would have to describe as more episodic instances, and while I recognize that the charge of your Commission is more in terms of accessibility, affordability, accountability, and that something like external partnerships might be tangential, I'd suggest that many of the issues that have surfaced here today, many of them gut wrenching, could be ameliorated to a large degree by better tapping external constituencies and would certainly suggest that there might be some opportunity to focus on that.

We certainly stand ready to serve as a resource to you in that way and certainly thank you for your interest and again, welcome to Boston.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Seventy-four.

MR. O'CONNELL: Thank you.

I wasn't planning on speaking today but decided that I would. My name is Robert O'Connell. I'm a math professor at a community college, and I'm concerned about academic standards.

Any time I read about, have material about this, it always talks about having graduation exams or possibly standardized final exams. Thinking about it, a graduation exam will identify which institutions are failing, but if you have statewide standardized final exams for all courses, you then identify which professors are being successful and which ones aren't. That shows the internal problem in an institution. That to me is very desirable because then you can correct it.

The other thing is that if you had statewide final exams, standardized final exams, the system already exists because professors are required to give final exams. Every state can set up its own exam, and one of the advantages of that, the businesses will locate in the state which has the best qualified people. So there's a natural sorting out, and there's a natural competition there.

To use a business analogy, no manufacturer -- well, if you have a production line, such as Raytheon with its Patriot missiles, there are points on that production line where there are quality checks. Final exams would be the quality checks.

We need it desperately in education. We're in a horrendous condition. I think probably you could say 15 to 20 percent of the hundreds of billions

of dollars that are spent in education are for a couple of reasons. One, we have students who should not be in college.

Two, we have students who don't want to be in college, but we are investing money. If they don't pass a final exam in a particular course, they're going to drop out or they're going to shape up. Either way it's highly desirable.

If you disagree with that, I would suggest that you look at PBS program declining by degrees. I agree with everything in there. One of the illustrious private schools in western Massachusetts, a professor said that what he gives today as a C was an F 20 years ago. It's a grievance against the college because they refuse tenure, grievance by the union, refuse tenure to a professor. One of the reasons for refusing tenure was because the professor failed too many students.

What message does that give to the rest of the teaching staff all over the state? You want your job? Pass your students. That's not what education is about.

Teacher exam, this state. The first time the teacher exam was given, 50 or 60 percent of the students failed. What happened was the number of students enrolling in schools of education decreased.

The problem is throughout the country the system that created that 50 or 60 percent failure rate is the system that runs the colleges in the country. To me this is a very important issue.

Thank you very much.

DR. DUDERSTADT: Thank you.

MS. OLDHAM: Seventy-five, 75. Seventy-six.

MR. PAOLILLO: Good afternoon. Can I congratulate all of you? You have great bladders. You really do.

I'm Len Paolillo and still loving teaching in college after 36 years hearing all of these wonderful students here. That's why I'm still at it. I'm a professor at Massachusetts College of Liberal Arts in North Adams. We're trying to be known as MCLA, and I also wear another hat. I'm a chair of the National Education Association Legislative Committee, and we do have a few higher ed. members in the organization, but that's where I fit in the organization.

But I can also speak for my K through 12 colleagues who really care about what happens to post secondary education.

Today I want to bring to your attention an issue that I haven't heard much about, and that is

using graduation rates as an accountability measure in post secondary institutions, and I do so with the knowledge that -- I'm not going to read this because hopefully you'll read it. This is the only one I think I've seen on retention rates -- but anyway, I've done some considerable organization; us and the AFT have done a lot of research on using graduation rates, and I just want you to understand that today we don't have the homogeneous cohort of young people fresh out of high school attending post secondary education on a full-time basis, as I did and maybe many of you did.

Today the average age at community college is 29, who have lived 50 percent more life than the traditional college student, and these additional years are full of life altering events like having children, learning the ins and outs of different areas of the world of work and maturing in one sense of what kind of education is needed to accommodate their family needs and career goals.

What we find with some of the research that NEA and AFT, American Federation of Teachers, has put together is that when you look at the factors that contribute to graduation rates, basically we're talking about student income levels and being a traditional student. They're much more likely to graduate in four to six years.

However, the colleges I'm at and you heard many people testify today, at the public colleges we take many, many more nontraditional students, and one of the things that affects, you know, college retention and enrollment is the fact that if you do have like children, if you do have an outside job, all those things affect that rate.

And age also is a factor. We find that 57 percent of undergraduates are 21 years or older, but it's not age per se, but things like part-time employment, having children, being a single parent, being financially independent of parents or working full time. All have an impact.

A study that was done recently by Professor David Labin at CUNY in New York, the data indicated that if one looked at graduation rates for a cohort, they took a 30-year period of time. If you looked at them at the six year mark, a majority of the cohort didn't graduate. If you look even at the ten-year mark, they missed a significant minority of people.

So I just caution you. Please don't use graduation rates as the end all, be all. Another study that I highlighted here, the University of California shows basically that you could set up a situation where he controlled for various kinds of

characteristics that affect graduation rates, and some colleges may have the exact same rate, 50 percent, but one had an expected rate of 70 percent based on these characteristics I mentioned to you and one had an expected rate of 30. They would both seem either good or bad equally.

So I urge you not to do that, and one last final thing. Please don't do what David Horowitz is trying to do to us in terms of his attempt to have academic freedom curtailed.

Thank you very much. You're terrific to be here all this time.

MS. OLDHAM: Seventy-seven.

MS. BURN: My name is Courtney Burn. I'm a sophomore at Northeastern University, and I'm representing the Associated Students of Massachusetts.

I attended Mass. Bay Community College as well in the fall. Now, as a sophomore at Northeastern, I'm already facing insurmountable debts. I owe over $30,000 already, and I'm just a sophomore.

Today I keep hearing that the average debt is 20, and I think they said $30,000, but the reality is my peers and I will be facing up to $30,000 in debt by the time I graduate for a private education.

And today our only hope is to publicly expose these shameful votes that cut and eliminate

higher education funding. However, come election day, we, the students, will employ our power, vote out the cutters and slashers of higher education, and vote representatives, governors, and a President that will support significant funding for all college students.

Thanks.

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Seventy-eight.

MR. GORDON: My name is Ben Gordon. I am currently a student as Mass. Bay.

I would like to talk to the Commission about some symbols and morals that define this country as America. These symbols and morals are that I was socialized into since childhood. This is the belief of the American dream, that simply being a citizen in this country, you are entitled to reach your full potential, live a good life, raise a family, get an education, and work in your desired field as long as you work really hard.

As I have grown older and attempted to apply these morals, I have discovered that these nation defining traits are not so clearly cause and effect, and a lot are used to justify the advantages the upper class have over the population.

I was born learning disabled into a lower

middle class family, as such started out behind in the world, but I believed that if I worked hard enough, I could surpass anyone. But I soon learned that to enter the next level took an impossible amount of money that looked only to further increase.

What America effectively has been doing is taking the public out of public education. They are taking equal out of a nation that prides itself on equality. When this country is struggling to keep up with an evolving technical world, we continue to cut off our own human resources from reaching our own potential.

So many people are born with an amazing amount of potential that will never be realized only because of monetary reasons. These people need help because they are the future of this nation, and the generation that can make this country great.

But they are only sleeping in the dream right now because that is all they have been given. The American dream is only a dream or a vision for most people. It is past time to give them the American way, to wake them up and say that you acknowledge their potential and ambition, their dedication to go into higher education and further themselves and open those doors for them.

Right now those doors have to be forced

open by working full time and trying to get an education, also doing whatever volunteer work or internships the individual wishes. It is not fair that simply because someone is born into more economic resources that they can walk through as many doors as they want with ease without the burden of financial stress.

Education needs to be the American way, for if it is successful, it can be the crucial tool of bridging the gap in the American people and creating a united, equal nation to be proud of. We are people that have been divided not by those who work hard or those who have natural talent because I believe all of us have those, but by status and accessibility to education.

Wake them up from the American dream and give them the American way of life. Offer an opportunity to this generation to live the American way. What morals should we as a nation instill in our children? I hope they are true.

DR. DUDERSTADT: Thank you.

(Applause.)

MS. OLDHAM: Seventy-nine. Eighty.

MR. CHU: Good afternoon, members of the Commission. My name is Peter Chu, and I am a graduating Master's student from the University of

Arkansas, in Fayetteville, Arkansas, and I know you all are thinking this is a long way from home being in Boston, Massachusetts, but all that will come out in what I say.

I am here on spring break, and one of my friends is a member of USSA and really told me about the Commission and about everything that's going on with the federal government and funding, and I was really intrigued by this because my Master's degree that I will receive in May 2006 this year, by the way, is in higher education, administrational leadership.

And why that was so intriguing to me is because in classes throughout the past two years, we've talked about issues, current issues in higher education, current issues about what's going on, the issues facing our students today, and a lot of the times in a lot of those topics were those financial issues, were about the access to higher education whether it be from the admissions standards to financial aid and the cost of attending colleges.

And so I was wondering because in our discussions in classes we always talked about access. We always talked about financial aid. We always talked about the federal government's role, the state government's role and everything in that aspect, and so I was really intrigued to hear that we recently had

a $12 billion cut to federal loans and everything in that nature, and I was wondering because it was very interesting to me to see that because -- we are within the higher education system we always talk about and especially in the society we talk about wanting people to become more educated so that they can serve society and give back to the community.

But then we are restricting those access to higher education.

As you can see, I don't really have any papers, don't really have anything really written out for you all, but I couldn't sit back, especially with my background and my passion for student teaching and to become an administrator in this field. I couldn't just sit there and not say anything about this issue or not have a voice in this.

So I don't have any recommendations or statistics to share with you all, but just a personal story. I myself am from a divorced home from Arkansas. I have four sisters, one brother. All of them attended college. My parents made just enough money to pay the bills, just enough money to put food on the table, just enough money to clothe us, but not enough money to put all of us through college.

I am the fourth of the six to receive a college degree, the first one to receive a Master's

degree, and all of my siblings have either graduated from college or are in college now, and there's four of us who are in college now.

And I tell you this just to say that there is no way that I nor any of my brothers and sisters could have made it through college without loans or grants. My parents made just enough money to edge us out of the Pell Grants and everything like that, but I tell you this just because that my youngest sister when I was sitting back there listening to the stories; my youngest sister almost did not come back to college because she could not afford to go to college.

So I say this because with each one of us graduating, I will graduate with a $50,000 debt, and each one of my siblings will graduate with at least $30,000 in debt, and that, in turn, turns out to be about $200,000 for just me, myself, and my family.

So I really strongly urge you all to really think about just what kind of impact these cuts will have on us as far as first generation, low income students.

Thank you.

(Applause.)

MS. OLDHAM: Let me just quickly run through the numbers that folks weren't here just to

make sure we haven't missed anyone: 11, 39, 40, 41, 44, 72, 75, 79.

DR. DUDERSTADT: Well, thank you very much. We really appreciate the input.

(Applause.)

(Whereupon, at 3:31 p.m., the meeting was concluded.)