THE STATE OF AMERICAN HIGHER EDUCATION: WHAT ARE PARENTS, STUDENTS, AND TAXPAYERS GETTING FOR THEIR MONEY?

HEARING

BEFORE THE

COMMITTEE ON EDUCATION AND THE WORKFORCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

HEARING HELD IN WASHINGTON, DC, MAY 13, 2003

Serial No. 108-15

Printed for the use of the Committee on Education and the Workforce

87-721 pdf

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
FAX: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

COMMITTEE ON EDUCATION AND THE WORKFORCE

JOHN A. BOEHNER, Ohio, *Chairman*

THOMAS E. PETRI, Wisconsin
CASS BALLENGER, North Carolina
PETER HOEKSTRA, Michigan
HOWARD P. "BUCK" McKEON, California
MICHAEL N. CASTLE, Delaware
SAM JOHNSON, Texas
JAMES C. GREENWOOD, Pennsylvania
CHARLIE NORWOOD, Georgia
FRED UPTON, Michigan
VERNON J. EHLERS, Michigan
JIM DeMINT, South Carolina
JOHNNY ISAKSON, Georgia
JUDY BIGGERT, Illinois
TODD RUSSELL PLATTS, Pennsylvania
PATRICK J. TIBERI, Ohio
RIC KELLER, Florida
TOM OSBORNE, Nebraska
JOE WILSON, South Carolina
TOM COLE, Oklahoma
JON C. PORTER, Nevada
JOHN KLINE, Minnesota
JOHN R. CARTER, Texas
MARILYN N. MUSGRAVE, Colorado
MARSHA BLACKBURN, Tennessee
PHIL GINGREY, Georgia
MAX BURNS, Georgia

GEORGE MILLER, California
DALE E. KILDEE, Michigan
MAJOR R. OWENS, New York
DONALD M. PAYNE, New Jersey
ROBERT E. ANDREWS, New Jersey
LYNN C. WOOLSEY, California
RUBÉN HINOJOSA, Texas
CAROLYN McCARTHY, New York
JOHN F. TIERNEY, Massachusetts
RON KIND, Wisconsin
DENNIS J. KUCINICH, Ohio
DAVID WU, Oregon
RUSH D. HOLT, New Jersey
SUSAN A. DAVIS, California
BETTY McCOLLUM, Minnesota
DANNY K. DAVIS, Illinois
ED CASE, Hawaii
RAÚL M. GRIJALVA, Arizona
DENISE L. MAJETTE, Georgia
CHRIS VAN HOLLEN, Maryland
TIMOTHY J. RYAN, Ohio
TIMOTHY H. BISHOP, New York

Paula Nowakowski, Chief of Staff
John Lawrence, Minority Staff Director

TABLE OF CONTENTS

TABLE OF CONTENTS..... i

OPENING STATEMENT OF CHAIRMAN JOHN BOEHNER, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC..... 1

OPENING STATEMENT OF REPRESENTATIVE DALE KILDEE, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC..... 3

STATEMENT OF CHARLES MILLER, CHAIRMAN, UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS, HOUSTON, TEXAS 6

STATEMENT OF DR. MARY ELLEN DUNCAN, PRESIDENT, HOWARD COMMUNITY COLLEGE, COLUMBIA, MARYLAND..... 8

STATEMENT OF DR. FRANK NEWMAN, DIRECTOR, THE FUTURES PROJECT, BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND..... 9

APPENDIX A -- WRITTEN OPENING STATEMENT OF CHAIRMAN JOHN BOEHNER, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC. 49

APPENDIX B -- WRITTEN STATEMENT OF CHARLES MILLER, CHAIRMAN, UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS, HOUSTON, TEXAS..... 57

APPENDIX C -- WRITTEN STATEMENT OF DR. MARY ELLEN DUNCAN, PRESIDENT, HOWARD COMMUNITY COLLEGE, COLUMBIA, MARYLAND..... 71

APPENDIX D -- WRITTEN STATEMENT OF DR. FRANK NEWMAN, DIRECTOR, THE FUTURES PROJECT, BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND 97

APPENDIX E -- ADDITIONAL MATERIAL SUBMITTED BY DR. FRANK NEWMAN IN RESPONSE TO CHAIRMAN BOEHNER'S REQUEST 107

APPENDIX F -- RESPONSES FROM CHARLES MILLER AND DR. MARY ELLEN DUNCAN TO REPRESENTATIVE RUBEN HINOJOSA'S SUBMITTED WRITTEN QUESTIONS 167

APPENDIX G – WRITTEN STATEMENT SUBMITTED FOR THE RECORD BY REPRESENTATIVE DENNIS J. KUCINICH, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES 179

TABLE OF INDEXES 183

THE STATE OF AMERICAN HIGHER EDUCATION: WHAT ARE PARENTS, STUDENTS, AND TAXPAYERS GETTING FOR THEIR MONEY?

TUESDAY, MAY 13, 2003

HOUSE OF REPRESENTATIVES,

COMMITTEE ON EDUCATION AND THE WORKFORCE,

WASHINGTON, D.C.

The committee met, pursuant to call, at 2:05 p.m., in Room 2175, Rayburn House Office Building, Hon. John A. Boehner [chairman of the committee] presiding.

Present: Representatives Boehner, Hoekstra, McKeon, Castle, Johnson, Ehlers, Keller, Carter, Burns, Kildee, Andrews, Hinojosa, McCarthy, Tierney, Holt, Grijalva, Majette, Van Hollen, and Bishop.

Staff Present: Kevin Frank, Professional Staff Member; Alexa Marrero, Press Secretary; Alison Ream, Professional Staff Member; Deborah L. Samantar, Committee Clerk/Intern Coordinator; Kathleen Smith, Professional Staff Member; Charles Barone, Minority Deputy Staff Director; Ellynne Bannon, Minority Legislative Associate/Education; Ricardo Martinez, Minority Legislative Associate/Education; Alex Nock, Minority Legislative Associate/Education; and Joe Novotny, Minority Staff Assistant/Education.

OPENING STATEMENT OF CHAIRMAN JOHN BOEHNER, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC.

Chairman Boehner. The Committee on Education and the Workforce will come to order. We are holding this hearing today to hear testimony on the "State of American Higher Education: What are Parents, Students, and Taxpayers Getting for their Money?

Under committee rule 12(b), opening statements are limited to the chairman and ranking member. If other members have statements, they will be included in the hearing record. And with that, I ask unanimous consent for the hearing record to remain open for 14 days to allow member statements and other extraneous material referenced during today's hearing to be submitted for the official record. Without objection, so ordered.

Let me welcome our witnesses here today and thank them for taking time to come before the committee and continue the discussion about the higher education reauthorization and its four guiding tenets: accessibility, accountability, affordability, and quality.

We began the conversation about the reauthorization of the Higher Education Act in the 107th Congress. We sent a request for proposals to the postsecondary education community and received hundreds of proposals, which are currently under review. While the process will take time to complete, this hearing will serve as a kick-start to an important dialogue. It is clear that for nearly 40 years, the Higher Education Act has been the vehicle that has opened doors of postsecondary education opportunity to all Americans. However, reauthorization should not be a rubber-stamp process. We need to be open-minded and leave the old territorial issues at the door. So this reauthorization should be a time to move outside of our own comfort zone and ensure that the best policy is enacted.

This Congress and this administration have made a firm commitment to education. Currently, according to the College Board, the federal government provides over 70 percent of direct aid to postsecondary education students, amounting to nearly $65 billion annually. However, I am most interested in learning more about what institutions can and should be doing to assure the American people that their investment in higher education as a student, a parent, or a taxpayer is one that will produce results and assist with lifelong career pursuits.

Accountability is the hub of the higher education wheel. Previously mentioned tenets, accessibility, affordability, and quality are the spokes that keep the wheel in motion. Before we move the reauthorization legislative vehicles through the House, I want to explore how postsecondary institutions are accountable to students, parents, and taxpayers. I am aware that institutions report volumes of data to the federal government and others, but I guess the question I am asking myself: Does that reporting provide valuable accountability? Moreover is the data reported the right data, is it enough data, is it too little data or far too much data?

And I have learned in some States, public colleges and universities require their students to take basic skills assessments before, during, and after their degree program. Assessment results provide the higher education system, the State and policymakers, students and families, with tangible results about the quality of the education provided. These results help families make important decisions about their investment in postsecondary education. In many instances these assessment results also help States make performance-based funding decisions about the public institutions. And I am interested in hearing about the opinions of the witnesses here today on the value of this type of assessment.

The increasing costs of postsecondary education dictate that institutions provide some degree of outcome results to the American people. The College Board reports that the average tuition at a 4-year public institution is now over $4,000, an increase of 9.6 percent over last year. An average tuition at private colleges and universities is over $18,000, an increase of 5.8 percent over last year's average. These increases exceed the rise in the Consumer Price Index by 8.4 percent and 4.7 percent respectively. Tuition fees began to grow much more rapidly than the Consumer Price Index beginning in the early 1980s, and these increases really haven't slowed

down. The intense rising costs of postsecondary education concerns me.

Many parties invest their resources in postsecondary education. Federal government, State governments, students, parents, taxpayers and employers, and obviously many parties have a stake in higher education as graduates appropriately fuel our nation's economy. How, then, can institutions provide all of the stakeholders with an assurance that the investment made in postsecondary education will be returned to them in the form of a strong, viable, and educated workforce? Our panelists can discuss this issue with us today.

And, finally, it is clear to me that all of these issues are closely connected. What is the federal role in ensuring access, affordability, and quality? As Mr. Pat Callan, President of the National Center of Public Policy and Higher Education stated during last month's meeting of the Advisory Committee on Student Financial Assistance, "A solution where institutions of higher education take no responsibility is not a viable. Postsecondary education cannot take the view that they can raise their prices until they are able to pay for what they need, and then rely on the federal government to step in and provide enough funding for every student to attend."

Therefore, it is important that we proceed in the reauthorization process with a broad discussion of these crucial tenets: accessibility, accountability, affordability and quality. And I am looking forward to the testimony of our witnesses so that we may identify specific strategies and proposals about these key issues.

Let me now yield to our Ranking Member of the Subcommittee on 21st Century Competitiveness, my good friend from Michigan, Mr. Kildee.

WRITTEN OPENING STATEMENT OF CHAIRMAN JOHN BOEHNER, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC. – SEE APPENDIX A

OPENING STATEMENT OF REPRESENTATIVE DALE KILDEE, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC

Mr. Kildee. Thank you, Mr. Chairman. I am pleased to join you and Chairman McKeon at today's hearing on higher education. Having led efforts on this side of the aisle in the last reauthorization, I am looking forward to strengthening our nation's higher education programs. Today's hearings will provide us with very valuable insight as we develop what I hope will be a bipartisan agenda for reauthorization.

Mr. McKeon and I wrote a very good bill in 1998. We enjoyed both the bill and the process involved with putting that bill together. Federal student aid through loans or need-based grants have become an essential component of ensuring access to higher education. We must have student loans at interest rates that do not cloud the future of our students. Without this, many of them would be unable to finance their college education. Without need-based grant programs, such

as Pell grants, many of our most disadvantaged students would never benefit from a postsecondary education.

We also need a strong focus on early intervention to ensure disadvantaged and first-generation students realize college is an achievable goal.

All of these issues raise the importance of access. Discussion over accountability, accreditation, and grant aid to institutions are meaningless if we cannot ensure that everyone who achieves and has the desire can indeed go to college.

Access to a postsecondary education shall remain our most important goal during this reauthorization. I can go back to my own case. My mother and father raised five children. My dad had to make a decision. He decided he could afford to send one of his children to college, and for some reason he chose me. I have told my siblings I don't think I was the smartest one but he chose me, and it is a terrible decision when all of my siblings certainly would have qualified for college, save for one fact. Financially, my parents were unable to pay for all of us to go to college in those days. So access is a very, very important issue.

Unfortunately, too many of our students accrue crippling amounts of debt once they leave college. And Pell grants have lost the buying power they once had. So this leaves students with little recourse but to borrow to finance their education. Students are really mortgaging their future by going to college before they ever have the opportunity to acquire a mortgage for a home.

As a part of this reauthorization, we need to ensure that students have manageable debt levels when they graduate or leave school and have favorable consolidation and repayment options.

Part of any discussion on loan debt brings us to the issue of college costs. College costs are becoming an increasingly critical issue for students and their access to postsecondary education. As a committee we must discover the root causes of these increases. We must also provide assistance and direction on how to ensure a college education remains affordable. Part of this solution may be to encourage cooperative agreements between universities for purchasing and services and ensuring the federal government provides sufficient need-based aid. And finally, we must make sure that States are keeping their commitment to higher education, even in these lean budget times.

The State of Michigan and, I am sure, the State of Texas have financial difficulties financing higher education now and that places an additional burden upon the students because that generally means tuition increases. We should not, however, rush to find solutions that may have the unintended consequences of hurting students. Placing restrictions on which university students can attend due to increases in tuition freezes out students who depend on Pell grants and student loans. In addition, such a proposal would have the negative consequence of driving those students into the marketplace for private loans with less favorable rates.

Lastly, I believe we need to be careful as we consider proposals for increased accountability in higher education. We need to examine what we demand of colleges and universities both on their performance of their students and the quality of life on college campuses. We need to do this

before we demand additional information. We should be striving to give consumers access to information that can help them make a decision what school is best for them or for their family or for their financial resources. We must also ensure that the system is providing students with the knowledge and skills they need to enter college rather than relying on remedial courses.

Mr. Chairman, I want to close by thanking you for having these witnesses here today and look forward to the testimony.

Chairman Boehner. Thank you, Mr. Kildee.

We will introduce our witnesses. And to introduce our first witness, let me recognize the gentleman from Texas, Mr. Carter, who will introduce Mr. Miller.

Mr. Carter. Thank you, Mr. Chairman, and thank you for this opportunity to introduce a man who has given a great deal of time and effort throughout his life to the improvement of education at the secondary and postsecondary level.

Mr. Charles Miller is the chairman of the University of Texas Board of Regents. Mr. Miller was appointed to the board by our then Governor George W. Bush in 1999, and was named chairman in 2001. Professionally he is the chairman of Meridian National Inc., a private family investment partnership based in Houston, Texas. Mr. Miller is an expert in the areas of monetary affairs and their effects on securities markets. He is also involved in promoting the vital relationship between business and postsecondary education. Mr. Miller is a former chairman of the Texas Educational Economic Policy Center, the Governor's Select Committee on Public Education, and the Capital Formation Committee of the Governor's Task Force on Texas Business Development and Job Creation.

Additionally, Mr. Miller is a leader in the effort to develop accountability standards for public schools in our State of Texas, and those efforts contributed significantly towards the education reform legislation Texas Governor George W. Bush signed in the 1990s. That Texas framework led to dramatic improvements in K-through-12 education performance in Texas and became the foundation of 2001's No Child Left Behind Act. It is my honor to introduce Mr. Charles Miller.

Chairman Boehner. Mr. Miller, we are glad you are here today. Let me introduce the rest of the witnesses and then we will begin.

Our second witness is Dr. Mary Ellen Duncan. She is the president of Howard Community College in Columbia, Maryland. In cooperation with the members of the board of trustees of the community college, she formed the Commission on the Future of Howard Community College to explore how the institution can meet the educational needs and interests of her region. Welcome.

And our third is Dr. Frank Newman. He is the director of the Futures Project, a higher education think tank based at Brown University in Providence, Rhode Island. He serves as a

visiting professor at Brown and at the Teachers College at Colombia University. He previously served as president of the Education Commission of the States, a national nonprofit, nonpartisan organization that helps governors, legislators, and other State education leaders develop and implement policies that improve education.

In addition, Dr. Newman served as president of the University of Rhode Island for some nine years. We welcome you, doctor.

Before the witnesses begin, I would like to remind the members that we will be asking questions after the entire panel gives their testimony. And under the committee rule, each of you has five minutes to present your testimony. Your written testimony can be submitted in full. And as long as you are anywhere close to five minutes will be nice.

Chairman Boehner. With that, Mr. Miller, you may begin.

STATEMENT OF CHARLES MILLER, CHAIRMAN, UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS, HOUSTON, TEXAS

Mr. Charles Miller. Thank you for the invitation. I am chairman of the Board of Regents at the University of Texas System, its nine academic institutions and six medical institutions, about 35 percent of the 4-year academic students in the State of Texas, and the major part of academic medicine and a major part of the health care system of Texas. I have been on the board of regents for a number of years, and during that time I focused on education and accountability both in public school where we can do the work from the higher education system and now in higher education accountability.

Because I have been involved in that for a good part of the last 15 years in Texas, education accountability at the public school level, it was natural for me to do that at the higher education level also. There is a certain amount of accountability built into the higher education system today with professional fields; engineering, accounting, law and medicine have some very structured accountability processes. The accreditation process has some form of accountabilities inherently contained in it also. However, there is a great opportunity for this accreditation process to enhance accountability and it would be productive for the signal to come from the federal government. There is also a significant amount of information that the chairman said that is reporting on broad institutional performance within institutional State and federal structures. However, this information is rarely reported, used by policymakers. It lacks uniformity. It is inadequate in some aspects. It requires no feedback or reaction from the institution and their policymakers. And it is so voluminous so as to swamp the system, making it meaningless, yet allowing institutions to say we are making a huge amount of information available.

So in higher education, there exist some forms of accountability. However, they rarely address directly the public policy agenda, teaching and learning, research effectiveness, community service, or to answer the question posed by this committee: What are parents, students, and

taxpayers, what are they getting for their money?

When it comes to learning, the academy falls short on measuring it, even in the most fundamental parts of the curriculum, reading and writing, fundamental mathematics, basic sciences or social sciences or in preparation for work, post-graduation. There is clearly great inflation, softening of the curriculum. A piece of paper, a degree, has become less significant as a measure of learning. Even achieving better graduation rates, which we all admit is an important goal, tend to encourage lowering of academic standards. Academia is highly resistant to using standardized tests to measure student learning, even those tests that are widely used for admission to the Academy graduate programs.

In the University of Texas System, we are undertaking a pilot assessment project, which will include testing of general academic knowledge and skills in writing, math, reading, and critical thinking. Ultimately we do this assessment at all nine of our academic institutions. We can expect great reluctance from the academy about measuring student learning.

I have some reasons and some arguments that I will make. I will skip those and be delighted to tell you some of those and you will hear more, I am sure. I am not recommending a national curriculum. However, some standardization of the process in measuring student learning, especially in the freshman and sophomore years, could be encouraged by policymakers and should be.

I have three recommendations I would like to make very quickly:

Applying national leadership to focus on a policy-driven, accountability-oriented data set to include public and private institutions; no commissions, no studies. This is more of a ready, fire, aim approach. We need to get something on the table to say this is the data set and then debate whether it is the right data set and how to use it and so on. Otherwise we could extend this discussion indefinitely.

We could establish a national competitive grant program and test a strategic policy-oriented framework to measure student learning at the undergraduate level, using one or two cross-academic institutions. It could do that by getting individual institutions or consortium to bid for grants.

And, third, integrating results-oriented accountability measures in the accreditation process would be very, very helpful.

Mr. Chairman, members of the committee, thank you for the opportunity to speak to you today and I will be glad to try to answer questions. Thank you.

WRITTEN STATEMENT OF CHARLES MILLER, CHAIRMAN, UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS, HOUSTON, TEXAS – SEE APPENDIX B

Chairman Boehner. Dr. Duncan, you may begin.

STATEMENT OF DR. MARY ELLEN DUNCAN, PRESIDENT, HOWARD COMMUNITY COLLEGE, COLUMBIA, MARYLAND

Ms. Duncan. Thank you, Mr. Chairman, and members of the committee. My name is Mary Ellen Allen Duncan and I am president of Howard Community College in Columbia, Maryland. I am representing the American Association of Community Colleges, which has as members virtually all the country's 2-year public regionally accredited institutions of higher education. The work of this committee has a substantial impact on college students and prospective college students. For millions of Americans, the federal student aid programs crafted by this committee have meant the difference between economic success and failure.

The fundamental goal of the Higher Education Act is to ensure that a lack of resources does not prevent a single qualified individual from attending college. This goal should continue to guide the work of the committee. Congress should take pride in the fact that federal student aid has opened the doors of college to so many. In 1973 when the Pell grant program was first implemented, the college continuation rate was 47 percent. By 2001, the rate had jumped to 62 percent. Nearly 5 million students receive Pell grants each year and another 6 million receive loans. Federal student aid represents the bulk of all available student aid and higher education would be immensely inferior without it. However, the job is not yet done. The unfortunate reality is that more affluent students still attend and persist in college at much higher rates than financially disadvantaged individuals.

The American system of higher education is a huge success story. The economic and productivity gains that it fosters have helped to make our economy the worlds largest and kept it competitive. Higher education is our sixth largest net export. Community colleges are proud of their role in providing thousands of highly skilled individuals each year in nursing, information technology, first responders, and in many other areas.

The economic benefits of higher education translate into more than $750,000 in increased lifetime earnings for those who possess only a baccalaureate's degree compared to those compared to those who have just a high school diploma, and 335,000 for those who have an associate's degree.

College remains by far the best investment most people will ever make. This committee is rightly focused on college affordability as rising tuition generates huge worries as well as practical financing challenges. However, college remains affordable. Average community college tuition fees are now $1,735, while the average public college tuition and fees are about $4,081. Nearly 80 percent of the nation's students at nonprofit colleges attend these schools. Private colleges provide enormous amounts of institutional aid to enable a broad spectrum of students to attend. The total 4-year cost of tuition and fees at a 4-year public college is just about two-thirds the average cost of a new automobile.

Community colleges do everything within their power to keep tuition as low as possible. Low tuition enables access. Access is the centerpiece of our mission. Last fall, in the midst of extraordinary budget cuts that have continued, community college tuitions rose by an average of 7.9 percent. Over the previous 6 years, however, they increased by an average of just 2.2 percent.

The recent spike was a direct byproduct of reductions in State and local funding. In many places, the increases were undertaken only after budget reducing steps were taken, such as widespread layoffs, hiring freezes, reduced program offerings, larger classes, deferred computer, library, and infrastructure expenditures.

I don't like to say it, but we expect tuition increases to be just as high or higher this fall because community college State and local funding is in a free-fall. Still, students get a great bargain at community colleges. On average, tuitions represent only 19 percent of community college overall revenues, while State funding supplies more than twice that amount.

For many of us, this is also a time when our enrollments are higher than ever. Please be assured that the increased student aid funding does not cause higher tuitions. For example, between 1995 and 1996 and 2000 and 2001 academic years the Pell grant maximum increased by $1,410, and for that our students thank you. And also during this time, the HOPE scholarship tax credit of $1,500 came on line. Over the same period, community college tuitions and fees rose by just $278. It would never occur to us to raise tuition because need-based student aid has risen. Rather, the aid increases bolsters access to our colleges as enrollments have surged nationwide.

I realize that my time is up, so in the questioning I will talk about accountability. I am sure that will come up.

WRITTEN STATEMENT OF DR. MARY ELLEN DUNCAN, PRESIDENT, HOWARD COMMUNITY COLLEGE, COLUMBIA, MARYLAND – SEE APPENDIX C

Chairman Boehner. Thank you, Dr. Duncan.

Dr Newman.

STATEMENT OF DR. FRANK NEWMAN, DIRECTOR, THE FUTURES PROJECT, BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND

Mr. Newman. Thank you, Mr. Chairman and members. The Futures Project that, as you know, I have been heading, has been focused on the transition that is underway in higher education, as it becomes a much more complex and market-oriented system. And we have been looking at it not only in the United States but also across the globe, and one thing about it, the tough questions you are raising are being raised right across the globe. Country after country, we see the same issues and questions coming up. While it is true and I would argue that higher education has not been aggressive enough in responding to these questions as yet, compared to the rest of the world, American higher education looks good.

If you think American universities are recalcitrant, try German, for example. As it is, the universities and colleges are coming under a great deal more scrutiny partly because higher education has become so central to society, not only to the community and to the States in terms of

workforce and civic preparation, but to individuals as a ticket in participating in the good life, the middle class; but it has also become more costly.

And a series of flaws have become much more evident and I will quickly name them. We are concerned about the outcomes that have come up here before. Are students learning what they need to learn? And there is now more and more evidence that yes, in general; but there are some major holes in what is going on in math and science and other issues that need attention.

Secondly, the institutions have been focused on taking the responsibility for learning. And I would say the answer is we tend to blame failures of learning on the student rather than taking responsibilities ourselves. The completion rates that Dr. Duncan mentioned are an important issue. Overall completion rates aren't anywhere near good enough. But the completion rates for low-income students are truly an issue that needs to be addressed. Something on the order of 8 percent of students in the lowest quintile ends up getting degrees within about 10 years.

And then, finally, costs. And costs continue to rise principally because we have simply not devoted the energy and attention to these issues. Are these issues possible to resolve? The answer to each of them is absolutely. We have workable answers for each of these. It is not a question of whether we can figure out how to improve retention and graduation rates and the academic achievement of students, even the lowest-income students. There are institutions out there doing it very effectively at the moment. The same is true with learner outcomes. The problem is getting around to doing something about them. What can be done?

The first thing important to recognize is there is a fundamental change going on at the State level. States are increasingly working with their institutions, negotiating with their institutions to move them much more toward a market, much more toward autonomy, but at the same time negotiating with them to create much more exact and discrete measures of responsibility and accountability. And this is happening right across the globe, and it is happening in every country we have been looking at, but it is happening more and more in States. The States are looking toward the kind of market forces coming in as a vehicle for encouraging some of the changes for which you are concerned.

For example, if the regulations that have been in place so far haven't been effective in getting institutions to focus on costs, can the market pressure do that? Given that the States are engaged in such a process and that the system is becoming much more sort of a supermarket of a variety of institutions, public, private, for-profit, virtual institutions, all competing increasingly in this circumstance, what can the federal government do? First of all, it ought to recognize that the States have that responsibility of solving the structural questions of higher education.

I would argue the State could do three principal things: One is better information. Mr. Miller has already touched on that. But I think it is evident that markets work best when good information is there, and this is a place where we have a huge need for better information. And I agree it is not more information, it is better information, it is reliable information, it is meaningful information, and it is regular availability of it. Learner outcomes are the principal issue there.

The second thing is learning to use competitive grants. The federal government's huge success story in higher education is the funding of academic research. We did not have a leadership position in academic research until after World War II when the federal government began federally funded peer review competitive grants. We vaulted from the back of the pack to the front of the pack and we have been at the front of the pack ever since, and it works. That principle of using competitive grants in the other two major areas is something that deserves exploration.

And finally, we need to focus, as the federal government always has, on the less advantaged students. And that is several things. It is not student aid alone; that is essential, but it is not enough. Students need more than access. They need support as they get into the process and as they go through the process. And all of these, I think, are doable, but I think it is an urgent matter to get at them. Thank you.

WRITTEN STATEMENT OF DR. FRANK NEWMAN, DIRECTOR, THE FUTURES PROJECT, BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND – SEE APPENDIX D

Chairman Boehner. We thank all of our witnesses for their excellent testimony and thank them for really focusing in on the point that we are trying to get at in this hearing. Many of us in this room got ourselves a college degree through all types of means. Members heard me say I am one of 12 children in my family, and my dad owned a bar. Going to college was never an issue; I mean it was never discussed. And somehow along the way I decided I was going to go to college some way, shape, or form, and I struggled through many different ways and finally got there. But I have always said no child should have to go through what I went through, and I am sure what many of you went through, in order to seek a higher education.

Before I get into the questions, there are really several big points that we have talked about. Accessibility. That is clearly what the federal government has done best in terms of what we do in the Higher Education Act. But our concern is that with these rising costs, tuition, fees and other support programs, that I feel like the more we do, the further we are falling behind. And if we are going to continue to be successful in the one goal of providing more access, how do we do it? How do we continue to do that in the face of ever-rising costs of tuition and fees? And I guess I will start with you, Mr. Miller.

Mr. Charles Miller. I believe that affordability is one of the key current questions. I think unless we resolve that, we are heading for a train wreck in plain terms. Accessibility, affordability, and accountability are all integrated. You can't have a productive institution or one, which will correct itself or change itself like we are trying to do with public education if there aren't any measures of how it is performing.

Higher education, in order to learn to produce better results or more productivity or more efficiency or applications or technology, has to have some ways to measure how well we are doing. There aren't any broad regular or accepted measures today, and there is a resistance to do that. Affordability in a system, which is highly subsidized, becomes something like an entitlement, which we have, in public education. We have also had it in medicine. This looks a little bit like medicine. It is regulated; it is subsidized. There is not a lot of transparency or accountability. So

it is very hard to correct it. And we tend to do it just the way we have done it in the past: talk about it, and then continue to do it.

So I think what the federal government could do to help transform it would be to get some accountability and reporting data measures of learning in the system to help it correct itself. I am not recommending federal regulation or formal intervention, but something about the way we fund it tends to make it more of an entitlement: Give people more money and then go off and do it again the same way.

I think we are past that time and we can't do that with a subsidized regulation, unaccountable, entitlement type program.

Chairman Boehner. Dr. Duncan, before you respond, I certainly understand the issues facing public institutions in the economic crisis that many of the States, virtually all of the States are in, but I just wanted to get that on the record.

Ms. Duncan. I appreciate that a great deal because certainly right now in Maryland, for instance, the State support levels are going to be back in the 1998 levels in terms of support per student. So I think affordability often fluctuates because of State support and institutions at our State support. It is an area that is discretionary money in terms of State budgets. It isn't an entitlement in the sense that you can count on that money from year to year. If there are difficulties in State budgets that is the one area that governors can make cuts. So higher education is often the first place to cut in difficult times. I think if you were to look at the relationship between tuition and State support, you will see exactly the relationship.

On the other issue of accountability, I think this is something that community colleges and all colleges in higher education should embrace because obviously it only improves us to know more about what we do. There are levels already in States. The Higher Education Commission, for instance, in Maryland has State indicators we must report on and they are always being refined.

Additionally, let us take nursing. All students in the nursing program, whether in 2-year or 4-year schools, take a licensing exam at the State. And the 2-year nurses do just as well. And so we have a very clear measure.

There are lots of third-party evaluations in the technologies, for instance, third-party vendors that do evaluations. So there are lots of measures. And of course programs differ from institution to institution.

But I think this idea of funding research should extend to faculty whose job is teaching and the research is focused on learning outcomes for that faculty. I think, that is, that the idea of a grant to permit faculty in community colleges to be supported to conduct that kind of research would be very positive. We have that going on in our institution now. We fund it because we think it is very important that faculty do test to see whether or not there are different methods that achieve different results. So instructional research is a different kind of research, one that has never been paid attention to, but one very useful in getting at this issue of accountability.

Chairman Boehner. Dr. Newman, as you answer the same question, you referred to one of the goals would be the competitive grants, and you referred to the two other areas; if you could elaborate on that.

Mr. Newman. In higher education it is customary to talk about three big areas of activity: teaching and learning, research and scholarship, and service to the community, with that bringing the fruits of the knowledge of the institution, for instance, community colleges do a tremendous amount of help, such like corporate training. In the two other areas, teaching and learning and service, we have had some experience with using competitive grants and they work beautifully. The federal government is a much better place to do this than the States. In the States the money is close enough to the institutions and the institutions are skilled enough so that what happens when you get a good competitive grant program, for example, on improving the effectiveness of teaching, the institutions have lobbied hard and have done this over and over again and get it turned into formula funding. The federal government is far enough away, and see if this is a nice way to say this and the Congress is remote enough.

Chairman Boehner. You don't have to be that polite.

Mr. Newman. Well, it is hard to get to you guys, and the competitive funding stays in place. And in research we literally have the success of the world.

Chairman Boehner. Most of my colleagues wouldn't think we are that far removed from our constituents.

Mr. Newman. Can I go back to your question on access, to make it a little more complex than your question, if you don't mind? If you look back at the State of the State addresses this year, you find that every governor said we need to improve access, have a bigger share of population get to college, because we need it to build our economic development in our State. And that is a powerful argument. The trouble is that the only way at the moment you can expand access is go deeper into the pool. You can't get more rich kids or middle class kids going to college, because they are all going. We have to get a bigger share of the population, meaning you move to less advantaged students.

Right now, less advantaged students, over a third, when you get to the people coming in at the bottom end of academic credentials, over a third drop out during their first year. Before we talk about expanding access, we ought to talk about fixing the results of the access we have. And we know how to do it, and we can do it, and unfortunately it takes some costs. It is not huge, but you have to provide a different kind of support and really effective programs. But when you do it, you can get graduation rates that are as high and education attainment that is as high as the average for other students.

Chairman Boehner. Before I recognize Mr. Kildee, if you would be kind enough to submit some additional testimony on helping those at the lower economic level better increase their chances of staying in school, I would appreciate it.

ADDITIONAL MATERIAL SUBMITTED BY DR. FRANK NEWMAN IN RESPONSE TO CHAIRMAN BOEHNER'S REQUEST – SEE APPENDIX E

Chairman Boehner. And, Mr. Miller, you talked about a data set; and if you have some ideas on what this data set that would be more appropriate than what we are doing now, I would appreciate that.

Now I recognize my friend from Michigan, Mr. Kildee.

Mr. Kildee. Thank you, Mr. Chairman. The issue of college costs has received increasing attention in recent years, and recently a proposal was announced that would prohibit students from using their Title IV aid at institutions of higher education, where tuition has increased by twice the rate of inflation. That was a proposal made informally a couple weeks ago that would effectively bar students that need loans and aid from attending certain institutions because their tuition has increased over twice the rate of inflation.

Let me start with you, Mr. Miller, and go down the row. Is this the proper area for the federal government to get involved?

Mr. Charles Miller. Yes, sir, it is. I think there is a cost pressure problem. There are a couple of reasons for it. One is that institutions themselves don't have much of a governor when it comes to costs. They are not the normal kind of productive institutions. We do not necessarily want them to be the same, say, as a business that cuts costs. So there aren't any ways to trigger that kind of efficiency.

I think we could do some things that we are talking about in the way of producing information that would help them make those changes or encourage it. If I were in the place of spending money, I believe I wouldn't put any funds on the table or add any growth to any of these programs without getting some of these sets of information and performance indicators in place. And I would ask the community of academia to do that. Costs are not only tuition and fees. We charge x number of dollars for tuition and fees and about 50 percent of that goes back to students in financial aid. So even though we have a relatively low tuition and fee level, we already give back half of the financial aid, and it is usually need-based. Some of it is merit-based. And then by the time you add potential student loans of all kinds, including federal, it makes up the whole amount of tuition and fees.

So for a student to come to the University of Texas, they pay no tuition and fees. We subsidize them from many other sources. We are trying actually to broaden the sources. State money does, research grants do, and private contributions, endowment earnings, and services we give. So the better we can diversify, we feel, the better the system would be. But the real cost for that student is the living cost and room and board and the time taken.

And there is a third cost that almost never gets in the equation, which is how long it takes to do that. If the State is paying 20- or 25,000 to educate the student, charging the student just a fraction of that, but the student's earnings could be 25,000, the cost for that student to stay in school another year for society is about $50,000. The real costs have to do with things other than tuition

and fees. You are dealing with those in some of these programs, but unless we get deeper into the cost structure and how these institutions operate, we won't really fix the affordability side.

And access is part of that. But, again, the best place to fix access; because we have a higher portion of people in that demographic group, 18 to 24, going to universities now than we have ever had. It has been growing gradually. That is part of what has been putting pressure in place. More people want to go, more people are ready to go. It pays economically more to go. It is very clear when we are in a weak economy, people are encouraged to stay in school longer and those put cost pressures on the system. The best place for access is in K-through-12. If we prepare students for college, and we are not always doing that as well as we should, they will get to the higher education system. Then we have to be prepared to educate them. But we are not doing as well in K-through-12 with access for the low-income students.

Mr. McKeon. [Presiding.] Ms. Duncan.

Ms. Duncan. On the subject of affordability, community colleges still have very low tuition and still a small percentage of our overall costs. Generally speaking, one fifth of the cost is provided by tuition.

On the subject of access and affordability, I think that, as you know, community colleges as open admission institutions take the challenge seriously of trying to actually be sure that the freshman student goes on to be a sophomore student, and that is certainly a costly challenge because they may or may not come prepared as they should come.

Mr. Kildee. Let me try to get to the essence of my question. Is this a proper role for the federal government to get involved? In other words, to say you cannot use your Pell grant, your student loan, at a university where the increase in tuition has been twice the rate of inflation, is this proper federal law?

Mr. Duncan. Not unless the federal government can control what the State does in terms of providing funding. I mean, otherwise at Howard Community College, access would be cut off, because I couldn't serve the students that needed to be served. If I didn't have any flexibility in terms of how to raise revenue, if State and local entities aren't going to provide revenue, and yet your mission is to serve the people in your community, your only option left is tuition.

Mr. Kildee. Mr. Chairman, could I ask Mr. Newman to comment.

Mr. McKeon. No. No.

Mr. Kildee. It was his proposal.

Mr. Duncan. And I do respect the Congressman's proposal and I love the intention in terms of keeping costs affordable. And it is certainly part of something we would like to do most of all and be sure we never raise tuition. If it were possible and if there were incentives to keep the States from bailing out on us, we would love that, yes.

Mr. Newman. Mr. Kildee, I appreciate the heads-up on that as to whose proposal it was. I think it is a subject that is not completely out of bounds for the federal government, or I think it is the wrong approach. I don't think it can work, at least not effectively, in the sense that the States are already manipulating a whole set of variables around this. In some cases they are doing drastic things to the basic support of the institution, which is forcing increases in tuition. In other cases, they tried all kinds of regulatory approaches to try to control tuition increases. And the basic answer is if you look back over the last 20 years is that they failed. They haven't worked. They have sometimes stopped tuition increases for a period of time, but they have caused other problems to appear elsewhere and eventually they get abandoned.

My own sense of getting costs under control is extremely important. It is absolutely essential. We obviously can't continue to expand the numbers of people going to college if the costs keep rising at rates of two or three times the rate of inflation, and, more importantly, at rates that far exceed the growth in personal income. But I don't think this is the way. I think there are other ways we are going to have to deal with it.

Does that mean I am finished testifying?

Mr. McKeon. No. Mr. Carter.

Mr. Carter. Mr. Miller, would you expand a little bit, and we talked a little bit at lunch about your ideas about the accountability standards as they would reflect to the undergraduate student.

Mr. Charles Miller. I think there is a sense from the graduate students that they get the least capable instructors. They are not sure that the foundation that they get to go to the higher level is what they need. When they get into the workforce, there is a lot of evidence and surveys that the business community is not satisfied with what has been taught. There are issues even about the communications skills of the people who teach it.

I don't have any problem with any of the things that universities do, and I wish they would do it any way they want, but there ought to be some measure of the learning experiences, particularly at the freshman and sophomore level. What we teach in the first two years of college is about as widely accepted as what we intend to do in the fourth grade. There ought to be some encouragement by the federal government just to measure the learning experience of people in those early years in college and at least some measure created by the Academy, and then over time we can see what really measures.

It would be fairly simple to take tests, measure a freshman in certain subjects with tests that are already created, measure what they learn in the first year and in the second year, and at least know what that institution or that class or that academy was able to impart. It can be done individually. It doesn't have to be a fixed amount for any institution. Anything like that would be a better system than we have today, which is basically no transparency at all. We don't know what is being taught and what is being learned. We trust an Academy that is under tremendous cost pressure with very little oversight. Up to a certain point, that was okay, but the community at large won't accept that. Over time with the cost pressures, it is going to be the Russian fruit store model. We are going to keep the prices down, the quality will disappear, the lines will be long, and

eventually there won't be any food.

And that is what is happening in higher education. We are pushing quality down by having these cost pressures and we need to know what the quality is to decide how to deal with it. The federal government should intervene with tuition aid and other spending, not intervene in the sense of directing or regulating or controlling. To just ask the question: What is it that we are getting for those dollars that can affect the behavior of the institutions getting the money or the students who are going there? Why shouldn't it do that? I think if it doesn't do something about it, then there won't be any other intervention in the cost side. What will happen over time is that we will have a separation for the richer and higher-quality or elite schools over time, and we will get sort of a dumbing-down of the rest of it because there will be some set of people that can pay anything at any time. But if we keep pressure and we don't have some way to get the system more productive, that system will deteriorate in quality over time, I think.

Mr. Carter. Dr. Duncan, presently, we hear more and more about students that come to colleges and universities and have to start out by taking remedial classes. And I hear comments that the remedial classes drive up the length of time you are going to be in school.

Is it possible for someone to start in school, taking almost remedial classes to get up to the level where they should be to do college work, and maybe take one or two semesters before they actually get to where they are doing college work? Do you have any comment on that system and what we can do to improve that system?

Ms. Duncan. You are absolutely right that colleges, particularly community colleges, do test students when they arrive to see what their skill levels are in English, math, and reading; and if they have deficiencies and are not ready for college-level work, they could take one class or one semester, or, just as you said, take two semesters, which happens in some cases.

There are complex reasons for that. In some cases they come directly unprepared from high school. The college-level requirements are different, for instance, in math than the high school requirements for graduation.

Because there is this gap between one set of requirements and another, students pay the price by having to take additional work at the pre-college level. In community colleges, it is much more complex, because people come back from being out for a long time and want to retool. And so they see that as absolutely essential before they get back into college work to do math again or to redo their English skills.

But we have done studies in Maryland to show that basically the investment made has made it possible for so many more people to move through the system more efficiently that actually when you look at it over time, the cost is not that great for the result that you get.

Ms. Duncan. If you were not to do that piece and just have students enter, obviously the success rates would be much lower. So it is a way of ensuring that students are retained, and so I think it is a pretty efficient system. And it is for the most part, for instance, in our college we use a great deal

of technology to do that kind of instruction in both math and English.

We can move a lot of people very quickly through the system, very efficiently. And I think it is probably one of the most cost-effective things that we do in the community college in terms of ensuring success and retention. That investment up front, I think, pays off in the long run.

Mr. Carter. One of the things that we are concerned about, we all talked about dropout rates and we have, especially in the people, the people who are having to use the greatest amount of public resources, loans and so forth, and we have this high dropout rate in the first and second year which results in these people left with a debt that they have accomplished nothing for. And that concerns us.

We have; first off, it is a natural tendency to possibly default on it. You did not get anything for your money. But, in addition, it seems that we have loaded them with a burden and we have also possibly under financed the first two years of college, over financing the last two years of college; and they have had to go to work or something else to make it through school and, therefore, they did not make it through the first two years of college.

A proposal has been suggested in subcommittee that we might look at more heavily funding the first two years and lightening up on the last two years, giving the incentive, as we had in law school, which is, you will not work your first years of law school. If you do, you will be out of school because we have learned that you cannot work and go to this law school.

A lot of the kids that are going to your schools have to work and take that student loan to get through school. And some of them are doing a year of remedial before they get there. They might have three years of debt and expense to get there. Would you like to comment on that?

Ms. Duncan. I think you make some very good points.

Mr. McKeon. [Presiding.] Can we get to the next one? The time is up. Then you can come back to that.

Ms. McCarthy.

Mrs. McCarthy. Thank you. I want to go back to keeping the kids in school, and probably follow up with a question that my colleague was asking. The majority of kids that are going to college are working; whether it is part-time, full-time, they are working.

Certainly, the workload and going to college is extremely heavy. So, again, when we are talking about especially minorities on working and maybe their skills are not terrific so they have, in my opinion, two barriers because they are working, trying to do education, and there are only so many hours in the day.

And obviously at the 6-month school, what are you going to do? You are going to try to survive, so obviously you will go back to work full-time and maybe come back to college later.

When I went to college I worked full-time, then had to drop out. Went back a year later. I just spoke at a high school graduation. This woman took 28 years to graduate, God bless her, but she did it and that was her goal.

But I think we should be look at the problem. Half of these kids are not prepared, and that is our problem. And hopefully, you kept saying that we have solutions for this. Could you give us some idea what those solutions are?

Mr. Newman. Yes. Let me just say I think a very important thing is that when one looks at research on students working, and you are right, the majority of students are working at this point, if they work under 20 hours a week, it seems to be manageable for most; the lowest-income students, it is more of a problem. But still, there is a big difference between working, say, 10, 15 hours and working 40 hours.

Secondly, I think something, and I will give in response to the chairman's request, I will send a list of the kinds of programs that we have been researching that work and make the attrition rates drop way off.

But it does seem to me you have to recognize another thing. Even more important than the question of work is the support structure that is there for the student. Students that feel that this is important, that somebody cares, that somebody understands what they are doing, that somebody asks them how it is going, someone helps coach them through the progress do enormously better.

So it is partly getting the financing under control, partly getting the work under control, but most important of all it is providing a support structure for that student who is not particularly good at it.

You do not need a support structure for students that are going to Harvard, Princeton and Yale. They already know how to run the system. They are chosen because they are really good at that one thing at Harvard, Princeton and Yale. At Brown, they are better rounded.

Mrs. McCarthy. Where did you graduate?

Mr. Newman. Well, Brown, it turns out.

Incidentally, I would also add something. We, of course, would like to see high schools and elementary schools improve so much that students come much better prepared; and there has been an enormous amount of work done by the States on trying to do this, and it has had positive, steady improvement over long period of 20 years now.

But the fact is, for certainly the next decade and probably the next two decades, we are still going to be struggling with that. So to solve this problem we have to do effective, efficient, remedial education. We cannot ignore that.

Mrs. McCarthy. That goes back to teaching our teachers how to teach and also working from kindergarten or Head Start to high school.

We are losing half of our students, not half of our students, but a large portion by junior high. Junior high, we start losing our students. High school dropout rate is higher than ever. Some of them do go back to work. And you can go into high school and see young people trying to get their education at high school at night. They want an education.

Go into any jail. What do you guards say? Give us education for these kids.

So somehow we have dropped the bucket on that one. Hopefully, with Leave No Child Behind, if we get the financing that we are supposed to, that would help us a great deal.

Thank you.

Chairman Boehner. [Presiding.] The chair recognizes the gentleman from Delaware, Mr. Castle.

Mr. Castle. Thank you, Mr. Chairman.

Not to beat a dead horse, I want to move along the same line of questioning and talk directly about cost control at the college level. And all of you are exemplary leaders in the college/university communities, and probably a lot of what I have to say does not apply to you.

There was a letter to the editor of Business Week concerning a gentleman who has kids at a couple of highly regarded liberal arts colleges, like Brown. "I was appalled to see the incompetence and complete lack of accountability or regard for the customer, the students and those paying the bills, at these institutions. There is absolutely no interest in controlling costs or other operational issues. Most people running these institutions wouldn't last five minutes in any kind of competitive business."

Present company the exception, of course, but that is what one individual said.

According to the Advisory Committee on Student Financial Assistance, financial barriers prevent 48 percent of college-qualified low-income high school grads from attending a 4-year college and 22 percent from attending any college at all. And community colleges obviously do better, and we know that.

The cost of college has dramatically outpaced the rate of increase in family incomes. I think it has outpaced the rate of increase of anything else in the country, including medical care, as I recall, in the last 10-year period. Over the last two years, tuition rose by more than 10 percent in 16 States. In 1999 and 2000, 64 percent of students graduated with student loan debt and the average student loan debt has doubled to $16,928, probably the debt of a lot of the people sitting in the audience today.

Thirty-nine percent of student borrowers now graduate with unmanageable levels of debt. Fifty-five percent of American student borrowers and 58 percent of Hispanic student borrowers

graduated with unmanageable debt burden. That is assuming that they graduate, and we know that a lot of them do not even get there.

I just think that we have a tremendous problem. And I know there are a lot of moving parts, and we at the federal government level with our loan programs and our Pell grants and the various thing that we do, and the tax credit structures that we set up, have a part in this.

I know that the States have a part in this for the publicly funded institutions. And obviously the States are struggling right now. So we are aware of all of that.

I am not one who believes that regulations are going to work. But I am not sure the will is there. I am not. I have been working on this problem for a number of years now, and I am very concerned. Some of you have expressed it, and if we put the three of you in charge, my sense is that maybe the will would be there.

But I am talking about the broader will of everybody running colleges and universities, including 2-year schools, across the United States of America. I frankly am very, very concerned about those costs.

I think we have a tremendous problem in this country and I think we need to address it sooner rather than later. I have said that for a long time, and it simply is not happening and the cost of living keeps going up tremendously. And we are not educating the way we should in terms of lower-income and particularly our minority populations.

I realize there are a lot of offsets. Many of the better schools, the better-endowed schools, the Williams Colleges and those places can offset some of this. But for the most part, young people are rolling up tremendous debt. If they go to graduate school, it is even worse. Most of them can't afford to go to graduate school. That is a problem for America.

We really do need to address it. And we need to address it at the institutions that you belong to and all of our colleges and universities in the country. I would be interested in your comments on that direct part of it. You do not need to bring in the Federal Government and the States. I know all about that. But what can we be doing to motivate the colleges to do better?

And I have looked at college after college. I have concluded it is a tremendous problem out there.

You can go in any order that you want, but if someone is willing to take that, I would appreciate it.

Mr. Charles Miller. Public education had some of the same problems. The institution couldn't affect itself. Central bureaucracies regulated it, and it is highly subsidized or free; it is an entitlement. The people who pay for it are not necessarily the ones who use it. The taxpayers who pay for it are not necessarily the ones who have the children in school, although there is some of that.

Medicine is the same way. The people who use the system haven't been the ones who necessarily paid for it because we had third-party payers and there wasn't any accountability between the people who used it and the people who supplied it. And there were, in areas where you could build costs into it, an infinite amount with technology or safer ways to do things, or presumably, better ways to teach.

One of the ways we put a brake on that in public education was to turn loose the regulation, at the State level particularly, and begin to ask those who were delivering the system to be held accountable. Not the children but the people who delivered it: the schools and the system. That began to create a force that made the system begin to correct itself. I think something like that is going to have to be done in higher education probably in medicine, because you have some of the same factors.

I will beat a dead horse. It is a highly subsidized area. So if the State is paying only 20 or 30 percent and the federal government a certain amount, the people using it.

Mr. Castle. But what about what the colleges are doing? What are you paying the football coach at Texas? What are you paying the president at Texas? I don't know. These are the things that concern me. What are we doing about those overall costs? I just do not hear anyone speaking to that out there.

We have those problems in government. We have to control our costs. Manufacturing has those problems. But colleges do not seem to recognize that as much.

Mr. Charles Miller. We had that, probably in both of those areas, in higher education.

Mr. Castle. Not to pick on Texas football.

Mr. Charles Miller. Actually we break even on that. And even in Texas it might be harder to defend continuing what we do there.

At UT Austin they have a great program. They pay the coach large amount money, and it supports itself. The chancellor of the University of Texas system gets paid a lot, but we get that with private funds. The State only puts in 10 percent.

I am not defending that. I am not sure what accountability there is. I think there are problems with that, because we can keep bidding each other up with that.

Mr. Castle. I would like to pursue that. Could I ask the other two to answer the question? I know my time is up, but if Dr. Duncan and Dr. Newman could answer that question, I would appreciate it.

Ms. Duncan. I have worked in three States, South Carolina, New York and Maryland, and I have never done anything but worried about controlling costs, because there has never been any revenue.

Mr. Castle. I came very close to excluding you from this because the community colleges have done better.

Ms. Duncan. It is difficult to relate to this discussion. Most our faculty are adjuncts who are paid on hourly rates, basically. They have no benefits. We have a lot of issues in terms of how we treat our workforce even.

And I have 1,500 people who work at Howard Community College. Three hundred fifty are the core workforce; all the rest are adjunct, are hourly people, and that is how we keep our costs down. We control costs; we are experts at controlling costs.

Mr. Castle. I like that. I wish you could teach some of the others who are not controlling their costs.

Ms. Duncan. And we do not have football.

Mr. Newman. I think the odds are very good that when you want to get organizations to examine costs and to really get efficient about costs, which, is what you are talking about; you are not talking about simply controlling costs, you are talking about doing things effectively and efficiently. You want more learning but on an efficient basis.

There has to be a strong incentive within the organization to succeed at that, and regulation does not get you a strong incentive to succeed. So it seems to me essential that we find ways to force the institutions to be competitive in terms of cost.

We are now moving into a system where that is very much the case. We are seeing more and more institutions competing. Sort of the quasi-monopolies that institutions used to have are breaking down as the competition heats up. That is a good thing.

But there is a role for government, a very powerful role. Unless you structure the market properly, the competition will do the reverse. For example, you mentioned athletics. Athletics are the poster child of what goes wrong in the competitive world when there are not restrictions and structures in the market.

What we have is a market that is out of control. We are paying college coaches a million dollars, sometimes $2 million.

I was at a major university, and I wouldn't mention it by name because I don't think it is appropriate, but it was the University of Nebraska. The man who picked me up at the airport was talking about the economy had no construction under way in Nebraska. And I said wait a minute, I just saw a whole bunch of construction cranes and he said, yeah, we are adding more luxury boxes to the stadium, but we always do that.

We are out of control in athletics.

Mr. Castle. Have you met Coach Osborne on this committee?

Go ahead.

Mr. Newman. We are going to have to have some controlled form of competitive effort to get costs down. It will not, and by regulation, it has not worked in any other field and will not work in this.

Mr. Castle. I agree with that, and I will yield back my time.

Chairman Boehner. The gentleman's time expired a long time ago.

The chair recognizes the gentleman from New York who knows a little bit about this subject, former president of a college out on Long Island, Mr. Bishop.

Mr. Bishop. Thank you, Mr. chairman. This is a subject I won't say is dear to my heart, but it is a subject that I know a fair amount about.

But I want to change the topic a little bit.

Mr. Miller, at the end of your written testimony, you talked about developing a national accountability model for higher education and you outlined a set of measures that could be included in this accountability model. My question to you is, how do you see that model interacting with the existing models that are imposed by a great many State Departments of education on higher education, including private education and with the regional accrediting bodies?

Do you see the model as complementing those efforts or do you see the model as supplanting the efforts of those groups?

Mr. Charles Miller. There are two accountability systems I was talking about, maybe three counting accreditation. One is to measure student learning. I think that is something that individual institutions or sets can adopt; and that, over time, would, because of competitive or comparative reasons Americans like to do better and better than people they are compared to over time that would be adopted, I think, wide consensus about what should be taught and what should be learned in the first two years especially.

And I would like to see some encouragement of that from the federal government in some form.

The other set of data is institutional performance data, and that gets into how we operate, how productively, what we turn out, what we do, what time, how we use our money. There are a whole set of data points I could give you.

I think we need to encourage the academy to come up with a really strong offering of what that is, because I think said, perhaps, earlier we have so much data we are getting inundated with it.

It is not effective and nobody can use it. It needs to be policy driven.

So whatever the data is needs to turn to the State leaders and the local leaders and you all and say, this will help you make your decisions and help the institutions manage theirs. If it is not connected to policymakers and has some feedback mechanism, it will get lost with all the data we collect today, which is enormous. We have too much. It is not policy driven, and it does not go to the people who make the decisions outside of the academy. Even inside the academy it is really hard for people to know what it is they are making decisions on. .

I could tell you truthfully, as a board member of four years, and I have a substantial amount financial background, it is hard to interpret the financial data or get meaning from it the way most us would, say, that run organizations or manage organizations. It is very difficult. It is tradition or accepted.

I am not sure that people in the institution, I don't think, are intending that to happen, but it has happened all the time. Unless there is some outside encouragement or imperative to change, I don't think it will change itself. I also know it is a crisis time to do that.

Mr. Bishop. But my question is, do you see the type of encouragement that you are suggesting the federal government impose on higher education, do you see it being directed specifically to the colleges or throughout regional accrediting bodies?

Speaking from having been on the receiving end of the accrediting bodies for the last 29 years, it seems that there are already a great many standards that colleges are struggling to comply with. And to add another set of standards, unless those standards were integrated with the existing standards, I think would be perhaps counterproductive for colleges.

Mr. Charles Miller. I think the answer on accreditation would be that you focus on the performance data. I think today it is primarily input driven, just like it was in public education. It is how much per square foot in the seedy archaeology department. It is very detailed and focused on inputs.

And I think we need to not totally eliminate that, but I think it would be healthy to put performance data into the mix, the kind of performance data that we are talking about here today, and not to force institutions, but to find a way to get a common reporting process so that policymakers can use that.

And that includes the accreditation people. They are policymakers, directly or indirectly. They are stamping their approval on the quality of what is being produced.

The only way to measure quality is to measure output. It used to be inputs. We accepted that. That was a good way to do it in the earlier years when that was first tried, to measure quality; that is why we had accreditation. But today we need to measure outputs more critically.

Mr. Bishop. But at least the regional accrediting body, with which I am most familiar with, the Middle States Association, is putting enormous emphasis on measuring outcomes, much to the

benefit of colleges and their students.

Mr. Charles Miller. I commend them on that. Thank you.

Mr. Bishop. I have a question for Dr. Duncan.

You make reference in your testimony to the burden associated with working, for students, and the impediments that that kind of work obligation puts in the path of students who are hoping to graduate.

Have you had any experience measuring the difference between students who work on campus or off? And the reason I ask the question is, my experience with dealing with student retention issues is that students who are able to connect themselves to a part of the college tend to graduate in higher numbers than those who remain unconnected; and work on campus is a way for students to be connected.

So the thrust of my question is, wouldn't we all benefit from increased college work/study support so that students could work on campus, have a better chance of graduating, and also reduce their loan obligation?

Ms. Duncan. I think that is an excellent suggestion, because also the work then is limited; it is not 40 hours. You do not have any of your work/study students working 40 hours. And you do build a relationship with them and there is a support a natural support group that develops around students to make sure that they are doing well. So I think that is an excellent idea.

But certainly working in the freshman year, and a number of you has mentioned the importance of putting resources in the freshman year. I think those are critical areas to be sure that freshmen have all the support they need to develop the discipline and the skills they need to succeed in the years that follow. And if they can do less hours working and if the work is manageable, like it typically is with work/study, 15 to 20 hours, then I think it is much more likely that students will be successful.

Last night, I met with nursing students just coming into the nursing program. And that is a major critical workforce need in Maryland. And most those people, men and women, already are working full time and wanted to be in the evening nursing program full time. The success rates are going to be problematic with that kind of a situation, but they have children, families, they have homes that they have to manage. And so it is definitely a crisis for people who are in that situation to try to do both.

Mr. Bishop. Mr. Chairman, do I have time for one more question?

Chairman Boehner. Sure.

Mr. Bishop. Dr. Newman, in your testimony you reference a study conducted by the Pew Charitable Trust, an effort that was supported by the Pew Trust that put emphasis on the freshman

year and talked about large introductory courses as a way of saving money.

Have the students who were enrolled in those courses been tracked with respect to their retention?

Mr. Newman. Yes. The study is a very interesting case. Pew funded the study, and it involves 10 institutions the first year, 10 the second, 10 the third. Each is a multiyear program.

What they did was not simply apply technology to large introductory courses, but what they did was completely redesigned the courses and asked the fundamental question, what costs so much about it? How do we use resources?

Mr. Castle made the point that industry would examine it quite differently and look at costs, and that is what they have done.

They have had excellent results. The savings have been between 7 and 70-something percent, averaging 30 percent in costs. But the student satisfaction and the independent assessment have shown that the learning has gone up. They have tracked the students to see not just, have they stayed involved, but do they take more courses in that field.

One of the things that is really a problem is that many students, for example in math, will take a course in math, or whatever is required, and say, I will never take another math course again as long as I live.

Mr. Bishop. Not a bad idea.

Mr. Newman. That is true for statistics, not math generally. Incidentally, just a point on what you mentioned earlier about students working on campus. There is some interesting evidence.

There are a dozen or so really interesting colleges that only admit very poor students, but the students, in turn, as part of their costs, like Berea and Warren Wilson and so forth, have to work. Those students have very high retention rates and very high loyalty to the institution.

Mr. Bishop. Thank you, Mr. Chairman.

Chairman Boehner. The chair recognizes the gentleman from Florida, Mr. Keller.

Mr. Keller. Thank you, Mr. Chairman. I have questions on two areas, one, the accountability area and the other one the affordability. On the accountability area, I am all for accountability, and I kind of direct this to all three of the witnesses.

For example, when we talk about measuring the performance of a third grader, to make sure he can read, it is about literacy, and I support it. But if we are implying that the federal government should start requiring college seniors to take some sort of test to see if they are smart enough to graduate, it seems to me that would be a case of Big Brother just being a pain in the ass.

That is not in the talking points, but that is my sense of it.

When you talk about accountability, Mr. Miller, is that what you are suggesting, some sort of test for these kids before they graduate?

Mr. Charles Miller. No, I think the federal government has implied that with the No Child Left Behind.

Mr. Keller. No, they have not implied that for college?

Mr. Charles Miller. Well, they apply an accountability system, and the States are able to devise whatever they think. And over time they are going to be expected to do that all through the system to the 12th grade. It is going to take that number of years to do it.

They are not asking the States; they are telling the States essentially to do this.

Mr. Keller. But let me say this: It is 3rd through 8th grade for No Child Left Behind Act. Are you implying that colleges should be required to give students some sort of tests before these kids graduate, required by us?

Mr. Charles Miller. I don't think colleges should be required to test high school or not. Almost all colleges have some entrance requirements if they are four-year colleges. Community colleges and some others are open enrollment.

So I don't think there should be any requirement for some colleges.

Mr. Keller. Let me move on. I am not talking about high school testing here. I am talking about college.

Dr. Newman, let me go to you and then Dr. Duncan.

Mr. Newman. May I add? I think, in general, whenever the federal government can encourage, force, provide the incentive, whatever way to get the institutions to do themselves what you want them to do, it is better than you doing it to them.

So the question then comes, is there a way to create an incentive that forces institutions to begin to actually measure learning without the federal government saying, we are going to give everybody a test? And I think there are some ways of doing that, and the federal government has been pretty good at it.

One way is to think about how to use the accrediting associations and get them to demand it. The other way is what the State of Illinois has done. The State Board of Higher Education in Illinois just came to an agreement with all the institutions that report to it saying, we are going to measure the outcomes, but we want you to develop the mechanisms by which we are going to do it, and we want it to be reported. We will negotiate with you.

Mr. Keller. Dr. Duncan, do you have a thought on a requirement that we make college graduates be tested before they graduate?

Ms. Duncan. That would be difficult because of the complexity of the programs that students are in. But there are tests now, and I agree that the incentives coming through the accrediting agencies are a way great way to go. Many of the accrediting agencies are looking at the Baldrige model as a way of identifying quality measures. And that, I think, is a very interesting application of getting to this issue of outcomes.

So I think there are mechanisms that can be strengthened and that can be effective, but already there are measures, for instance the education core, the academic profile is used by many colleges to test how students are doing, but mostly in freshman and sophomore years to make sure they are on the right track.

Mr. Keller. Since I am getting low on time, let we switch to another topic.

You were asked earlier about work/study programs. I recently had all the leaders in my State of Florida together, the Secretary of Education and all the financial aid counselors from the colleges, and there is a big concern with work/study programs; and I will tell you why. It causes you to lose your Pell grant. And I will give you an example, because we have to reform this.

Imagine a student pre-med kid, family of four with an income of $38,000. He gets his Pell grant, $4,000. The average tuition and everything else is about $12,000. If he decides to go out and work his tail off and make $9- or $10,000, he loses his Pell grant if he hits the $47,000 mark. So there is actually a financial disincentive for part-time work.

Are you aware of this problem and do you have any suggestions about how to fix it?

Ms. Duncan. Well, since or tuition does not get to that level, it does not occur in our institutions to the same degree. If you really are dealing with real students who want financial aid and work, whose parents are supposed to pay in many cases and who do not, it is much more complex than just knowing those numbers.

When you are faced with real students every day and there have to be a lot of systems beyond even the federal support to fill in the gaps, because there are always gaps. You will never figure out every single situation that will support students who have needs. And it is something that we have to continually work out because there are people who are always falling through the cracks, because what it says on paper may not be their real situation.

So it is indeed a problem.

Mr. Charles Miller. Can I add one answer, because it is a good example for me to express what I have been talking about?

I believe in work/study programs properly applied. I do not have an answer about the connection with the Pell grant, but the part of that equation that worries me, even if you allow that,

to not have one refute the other or allow that student to get both of those financial aids, the price that that institution is going to charge is unregulated or unlimited and will go up to match it.

We do not have any governor on the system to stop it from going up regardless of what we do. The more we give to that student without any system to contain the price, not the costs, the more we are pressing prices up. We need something to keep that price from going up.

Mr. Keller. I thank all the witnesses. Thank you, Mr. Chairman. My time has expired.

Mr. McKeon. [Presiding.] Mr. Hinojosa.

Mr. Hinojosa. Thank you, Mr. Chairman. I want to thank all the members of the panel who have come to testify. I found them very, very informative, and I appreciate the opportunity to ask a question or two. But I would respectfully request that I get one or two minute answers so I could ask more questions.

My first one is directed to Dr. Mary Ellen Duncan. Community colleges like yours are certainly the gateway to postsecondary education for most minority students. Unfortunately, many in our Latino community who start at a community college with the hope of completing a 4-year degree never reach their goal. They do not make the transfer.

So what can be done to improve the transfer rates from community colleges to baccalaureate degree programs?

Ms. Duncan. I think this is certainly a challenge that community colleges have to address with all minority students. It can't just be a way in and not a way out. And a great deal more of our resource needs to be put in the freshman year to be sure that students are prepared for that transfer.

There are other problems coming along in terms of access to four-year institutions. Because of the tremendous growth in community colleges, there are many more students ready to transfer than there are seats in four-year institutions, so this is going to be two problems, one, that the community colleges have to work on in terms of providing better support for students as they come in the freshman year, the freshman year is a critical year; and also fighting the battle to be sure that seats are reserved for students in the transfer process and that they actually do have a place to go when they complete their two-year programs.

Mr. Hinojosa. We can get some additional information in writing to this question, because it is very important to areas like I represent.

The second question is also to you, Dr. Duncan. You are absolutely on the mark when you describe community college as the Ellis Island of higher education. However, for one group of students, even this Ellis Island of education may be beyond their reach. I am talking about young people with immigrant parents without permanent resident status who are brought to this country as children and who have attended and graduated from American high schools, who are often at the top of their graduation class and yet cannot go to college because they do not have that permanent

resident documentation.

I have students in my congressional district who have graduated valedictorian and some salutatorian, but they can't accept the scholarships. They are even asked to pay out-of-State tuition fees.

How does your community college association recommend that the federal government address this issue?

Ms. Duncan. Well, I certainly can speak for something very imminent in Maryland. We have a bill waiting to be signed to make that possible, that the State legislature has passed. So we certainly in Maryland have worked hard in the community colleges to make this possible.

I don't know if the association has a position.

Mr. Hinojosa. It does support it?

Ms. Duncan. Yes.

Mr. Hinojosa. We would like to talk to you more about that.

Mr. Miller, I enjoyed meeting you this afternoon, and it is refreshing to me to see businessmen with your capacity to be serving in the position that you have.

The Texas Higher Education Coordinating Board has developed a plan called Closing the Gaps. What is the State of Texas doing to make some progress in closing the gaps in that initiative?

Mr. Charles Miller. Thank you, and thanks for encouraging a Texan to talk for just a minute, Congressman.

We are doing a lot of things. Actually, we have now required that students in Texas take the college preparation curriculum or opt out. In other words, it is a default curriculum. It is required instead of optional. That is a big step.

We are raising the bar for graduation from high school. The first test this year will be a much higher standard required for that. We are proud of that.

The business community has been very active reaching down, as far down in the community, even to the 5th or 6th grade, to let families and students know what is available in higher education, particularly first generation families. We are making an effort to do that. We think that is a very high priority.

Mr. McKeon. The gentleman's time has expired. Maybe you could give those additional questions in writing and they could answer them.

Mr. Hinojosa. I do have them in writing, and I would like to submit them and ask, if possible, if you all could give us some written responses, because they are very important to my area.

RESPONSES FROM CHARLES MILLER AND DR. MARY ELLEN DUNCAN TO REPRESENTATIVE RUBEN HINOJOSA'S SUBMITTED WRITTEN QUESTIONS – SEE APPENDIX F

Mr. McKeon. They are. Thank you.

Mr. Burns.

Mr. Burns. Thank you, Mr. Chairman. And I thank the panel for being here.

I spent 20 years of my life in the university system of Georgia, so I share a good bit of the experiences that you are sharing with us today. I want to talk about two things; one is accountability and the other is quality.

I am interested in your input on policy, university policy changes that might assist us in controlling costs and being more accountable for those things. We seem to focus on things like student cost per credit hour and measures, as Mr. Miller suggested, of input and not output. We have got to go over to the output side.

I recall advising a young man one time who attempted Accounting II five times, and his marks were F, F, F, F, and B. I asked him, what happened to D and what happened to C? And I think my challenge there is, how did this person have the opportunity to sit through the same course so many times at, essentially, taxpayer expense? What policies can the universities provide to keep those kinds of patterns from recurring?

Mr. Miller?

Mr. Charles Miller. Thank you. I think those are very valuable kinds of questions because that gets down to policy decisions, that we can make those.

We are trying to get more flexibility in Texas to actually price those kinds of things, to encourage people to get out faster, take afternoon classes, Saturday evening, things that would lower the cost or accelerate the graduation.

But I think reporting on retention and those things we were saying a minute ago, the graduation rates and comparing institutions, would encourage that kind of management. So the policies that would be followed would be those that would help reduce the costs.

And that student might even be limited in being able to enroll a certain number of times or the price may go up or they may not be able to come back for a number of years.

Unless you are reporting those, you would have a hard time implementing the policy.

Mr. Burns. I am not suggesting that the class should not be available. I think, in this case, the student was not taking the course seriously the first few times he took it.

Our system is quite unique in the United States in allowing access. We have a very open access system. If you look at the Swedish system that I worked in, or the British system in Australia or New Zealand I was in, their demands and expectations are higher than ours and they hold them to a higher standard.

Are we seeing a different thing in community colleges, Dr. Duncan?

Ms. Duncan. I think occasionally what you say probably occurs. It certainly occurs sometimes in remedial courses; and our board of trustees has asked us to look at how many times students repeat classes and asked us to provide various kinds of intervention earlier so that students who are not performing well can get extra support, so that they are not in that situation and they are basically forced to make decisions about whether they are going to stay or leave.

But we certainly have out there as a possibility that, if students do not succeed after a certain number of times, they may have to pay the full price. So we have certainly addressed that.

But I think as to your point about access, the community college can't be described in one simple way. Since people are coming from so many different walks of life into the college, it is rather chaotic.

But by and large, it is remarkable how many people do get to achieve, given the right support.

Mr. Burns. The best students, I always found were those nontraditional students who were coming back into the educational environment after having some life experience. If you look at the triangle of the university, the student, and whoever the payee might be, it always works best when the student is financing their own education because they have a vested interest in that.

Let's look at quality issues. I concur with some of the inputs I have heard this afternoon about performance and quality measures. How do you define success? How do you measure outputs? What would be the two or three key variables or key indicators of a successful education?

Ms. Duncan. For the community college student, whether or not they get the jobs they are preparing for and the employers are satisfied; whether or not they transfer if that is their goal. Or if they have another goal, which is very possible, I can give one very poignant example.

We have a student who is going to be singing at the Kennedy Center next week. The only thing she was interested in studying was music. And she is going to be performing. She won the Young Artist Competition for the National Orchestra. She only wanted to study music and foreign languages so that she could study opera. She is a success story.

Mr. Newman. I think there are a small number of intellectual skills that are critical for the student. We have plenty of institutions that are beginning to measure these. For instance, students ought to

be able to write clearly, communicate orally clearly. They ought to be able to solve problems so they could take information, for example, if they know enough math that is one thing, but if they know enough math and they can apply it to a problem that is another thing.

These are things that we can measure. Admittedly, we will measure them at differing levels depending on the institution where we measure them.

So I think we ought to be doing that, and I think we ought to work on getting every institution to figure out how to ask those questions of its students. I think it is perfectly doable. People are doing it.

But you asked a second question. What is success? I think it is not only gaining those skills and that level of knowledge, it is something else. It is gaining the self-assurance and the confidence to go out and do something in the world.

And somebody mentioned before, maybe it was you, expectations. We need to raise the expectations students have of themselves. And you do that not by telling them, if you do not do this, we are going to flunk you out. You do it by saying, you can do this; we are here to help, but you have to get going here.

Mr. Burns. Virtually all the students I had had the capability. They had the ability, and they were waiting for the right time.

My friend and colleague from Florida was pointing out or was asking about the issue of testing. We already have testing at the graduation level; it is called the CPA or professional engineer or some licensing whether you talking medicine or pharmacy or nursing, what have you. There are already ways to evaluate professional competency. We may need to develop other types of measures in other types of fields.

Thank you, Mr. Chairman.

Mr. McKeon. Thank you.

Ms. Majette.

Ms. Majette. Thank you, Mr. Chairman. And thank you to the panelists not only for being here today, but also for all that you do to help to educate our nation. I really do appreciate your efforts and your work.

I have a couple of questions. First, I would like to say that, Mr. Miller, I certainly agreed with you when you made the statements earlier that we need to do a better job at K through 12 in order to educate our children and prepare them for college.

I agree with you, coming from the experience of having attended an intercity public school back in the 1960s and early 1970s, and then graduating and going on to Yale. And having been in the top 10 percent of my class and doing very well, but then meeting the challenge of that

university and finding out that I was not as well prepared as I could have been or should have been at that public school level.

I was able to, with the assistance of the university; with tutors and study groups and other kinds of things, I was able to get up to speed fairly quickly and go on to attend law school and graduate, become a judge, and now I am here.

But having said all of that, I agree with you that the foundation of success at the college level, that foundation is built in K through 12. And so I guess my question to you regarding that you said you think the quality is down at the higher institutional levels, and do you see that as being a function as a result of our failure to do what we need to do in K through 12?

And how do you see that Leave No Child Behind and the other programs that currently exist will help alleviate the problems that we are dealing with now?

Mr. Charles Miller. Thank you. I think the answer is, I personally believe, for retention and graduation, there is nothing more important than the fundamental parts that we get from K through 12.

We are trying to measure the high school results all the way back into earlier grade school, and high school all the way through college, to align the system so we can follow or monitor performance. So we could actually go back to look at a Texas high school to see if they prepared a student for college. We are doing that with some of the testing requirements and the like.

I think we have actually, to some extent, lowered standards, because we do not have any measure of standards, particularly in the freshman and sophomore years. We have tended to take that for granted. As we get more cost pressures and enrollment pressures, because many more people want to do that and the value of a degree is going up a lot financially, the more we get that pressure without some encouragement for quality, some productivity improvement, the more quality goes down. It is just like an inevitable force. It is not easy to measure it, because we do not have any measures of quality that most people widely accept.

But I think the public, at large, feels that, and I think it is probably accurate.

Ms. Majette. Doesn't that assume that people won't vote with their feet? It sounds as though you are assuming, no matter what the cost, people are going to continue to pay that cost. And I don't know that that is really how it would work in the real world.

And certainly Dr. Duncan has the example in her written testimony of the young man who made the decision that he did not want to incur that kind of cost, and so he made a different choice.

I don't know if that is the norm, but I do think that people make decisions based on their finances to a large extent on whether they would go to a particular place or not.

Mr. Charles Miller. Yes, they do vote with their feet. One of the ways they vote is to leave college. They drop out. They are not retained. They do not graduate. They feel like they can get

something better some other place. They go to other colleges. There are sets of people who do not have an option, and they are put in categories that they either can't do it or won't do it. There are people who can afford anything.

So what we are trying to say is, we want to broaden that access for as many people as we can and make the ability for people to move with their feet wide-ranging. We don't necessarily have that. We have limitations on people's ability to move with their feet. We want more of that. So it is a very good goal.

Ms. Majette. Thank you.

And Dr. Duncan in your testimony, you talked about Marcus Bryant, who made the decision to turn down the offer of a four-year college because of the debt load that he would accumulate. That is a real problem, and I have seen it time and time again.

The students are writing checks they cannot cash and are graduating from college and professional schools with sometimes debt in the six figures before they start to work. As a result of that, we see that personal bankruptcies are on the rise and other related issues. What do you think we can do?

Or do you think we are making it too easy for young people to begin their careers going too deeply into debt and how do you see us resolving that issue?

Ms. Duncan. Frankly, I am not sure that I see a solution to resolving that issue, except that people do have choice. And I think we do have responsibility to make people aware of what their choices are.

And I think students do have to understand what the cost is, and certainly we advise students very carefully who want to take loans, and we do not encourage loan taking for the very reason that you mentioned. Because students are going to transfer, they certainly are going to have other debts that they are going to incur later.

So we do try to be sure that students understand when they make decisions about taking financial aid and loans that they know what that means in the long term. And I think it is part of our responsibility to advise students in the process.

And we do a lot of work in high schools to advise them. We do not wait until they get to Howard Community College. So we spend a great deal of time with juniors and seniors and their parents talking about the cost of going to college and planning for it and realizing what their choices mean in terms of costs.

Ms. Majette. Thank you.

Mr. McKeon. I guess it is my turn now; and I might have to leave, because my other committee is in a markup on the Armed Services bill, and I will have to leave shortly for a vote.

But I am glad that this hearing was held. I think it is very important that we focus on affordability, accessibility, accountability, and quality. These are issues that we will be focusing on as we go through the higher education reauthorization this year.

And I am glad that my good friend, Mr. Kildee, brought up, that somebody thought about an idea that has kind of stirred a little controversy. But the focus on that idea, which is not yet written into a bill, but we are in the process, everybody's focused on one thing, and that is, if the tuition goes up at twice the rate of inflation for two years and then you report to the Department of Education, and do you it again a third year, there may be some sanctions imposed. Nobody has talked about the transferability or the creativity or other things that we have talked about in that bill.

The purpose and the concern that I have is, Mr. Castle read some important statistics, 48 percent of our qualified high school graduates are not able to go to a university now because of costs; 22 percent cannot go to a community college because of costs.

And when I talk about this bill and doing something about it, the whole brouhaha is, you can't do that, we can't have federal controls, the federal government can't be involved in that kind of thing. The federal government accounts for 38 percent of the cost of higher education. We provide 6 to 7 percent of the cost of K-12 education and we are quite involved there. I think if we are providing about 38 percent, we ought to get somewhat involved.

Federal controls is anathema to me, but letting this problem go on is greater because we are creating a mixed society if we say, you can go because you have the money, you can't go because you do not have money.

I think we need to address it. And what I am saying is, the students, the parents, the States, the schools, the financial institutions that are providing loans, the guarantee agencies, everybody, including the federal government, needs to become involved in this process.

The federal government has increased their share of higher education, $23 billion in the last four years. That is a lot of money. At the same time, the States are cutting their money. They should be involved.

We have had some good points today about how the parents and students could be discriminating buyers. We need to have a forum where people say; will I get a good education at this school?

Sometimes in the past there has been a tainting of community colleges and that, I think, is very misplaced. I think they do a fantastic job to help get people started. And in some cases, that is all the education they have, but that really helps them as they go through life.

And I just think that we need to really all come together.

I do not dislike schools. And I do not dislike administrators. But the fact that the first thing that came out of their mouth is: You can't do that. Not the idea that, well, maybe we should look

at our costs a little bit or maybe we should look at what we can do to be creative.

In California, we have students that are going to one State university, take an education class or English class, and they cannot transfer those credits to another California State university. Same school, different campus. Why can't they do that?

On many of these things we need to come together and get involved and address this problem, because the problem is great and it is going to get greater if we do not come to the table and address it.

Dr. Newman?

Mr. Newman. Mr. Chairman, I want to be sure I am clear about something. I do not disagree; in fact, I strongly agree that the problem needs to be addressed. I would argue that the universities and colleges of this world, up to now, have been irresponsible on this subject; and I do not mean that they are stealing.

Mr. McKeon. Let me interrupt you. You probably do not mean what you just said, when you say the colleges are irresponsible. See, we tend to lump all the 6,000 schools into one thing when we say that. And some are doing a very good job. Some are not. We need to all come together.

Mr. Newman. What I mean by that, we have a responsibility to do more than control costs. When I was a university president I went through a very tough budget cycle and had to cut out college and sports teams and other things like that, and that is painful stuff. But we have to go beyond that. We have to be very good at analyzing our costs and exactly what you are talking about. My question is not whether that is a responsibility that the institutions have or whether or not the federal government ought to be concerned and engaged in that. It is, what is the mechanism that will get us there?

The reason I gave the answer that I did, we have been tracking over the last decade some very extensive efforts on the part of the States to try to regulate costs. And it is like many of other things that they have tried to regulate the costs. When they regulate, it does not do well. What we need to create is a set of circumstances under which the institution feels compelled to get at this subject on their own, and we have, I think we are on the cusp of that. And if we can find some ways to push us over so that the institutions begin to take that responsibility.

There was a time maybe 10 or 15 years ago when you raised the question that, maybe of the better-known institutions, you said, we really need to think about costs, someone would be sure to say, if you are here talking about efficiency, then it is clear you do not understand higher education. And that is just a cop-out. We have to address it, and I think the federal government has a stake. I just I think we have to find workable ways that will force the institution to be creative and thoughtful about it, rather than regulate it.

Mr. McKeon. Five years ago, we talked; and not a whole lot has happened. We have to get serious about it now, and we can't let this go on.

My time is up, and I do not disagree with you. We need to come together and work on this issue.

The chairman is back. I am leaving. I just finished.

Mr. Van Hollen.

Mr. Van Hollen. Thank you, Mr. Chairman.

I want to thank all of the witnesses who are here today, and a special thanks to Dr. Duncan, a fellow Marylander. I appreciate all the work that you do at Howard County Community College; and I hope the governor will sign that piece of legislation, which will open the doors of higher education to others who, as Congressman Hinojosa said, some of them are valedictorians in their class. They graduated side by side with others, and just because they lack a permanent resident status because of a decision their parents made, they might not have the opportunity that others would have. So I hope the governor signs that bill.

I am trying to sort out the difference between the costs of providing that education versus the components that go into it. Because I think sometimes when we talk about increasing costs we are really meaning increasing tuition, and I am trying to sort out the differences between the two.

Coming from the State legislature, it is very clear to me the trade-off between State support and tuition; and we are seeing that right now. As the States are strapped, you are seeing States reduce their support for public higher education. As a result, the colleges and universities have one or two choices, either they can cut back in services, they can fire some professors or cut back some programs or whatever, or they can make up the difference in increasing tuition.

That does not mean the costs of the education have changed. It just means the different components going into paying for it have changed. I think it is helpful for us to be reading off of the same song sheet.

Is the cost in public higher education, I know tuition is going up, but to what extent is the overall cost of providing that education like on a per-pupil basis going up? Because my understanding is that, while it has been rising, it has not been going up like medical inflation and all of these other things. It has been going up but not as rapidly. Tuitions are going up largely because of the withdrawal of State support.

If I could get a sense from all of you if you know, and sort of on the national and average level what is the increase.

Mr. Newman. Actually, I hate to do this again. Can I disagree?

Mr. Van Hollen. Sure.

Mr. Newman. It is bad to do it twice. It is bad to do it once.

If you take the last few years, and obviously, this year particularly and next year are extraordinary years, the financial crisis in the States mean that public institutions are really doing some extraordinary things to keep functioning on a reasonable basis. But if you exempt that, if you take, for example, the period from 1980 to 2000, what happened during that period was State support on any basis you wanted to look at it taken as a whole for higher education increased on a per-student basis after inflation. That is to say, institutions over that period of time got a significant increase over that 20-year period in the amount of money they got from the State, real money.

In addition to that, the other revenue sources they have increased. So in the research university world the federal research dollars increased substantially. Tuition increased during that period, even though State support was increasing, and fund-raising increased. Now that depended on the institution, but many of the major public institutions became skilled fund-raisers.

The result of that is the question you are asking, is the actual cost of educating went up. There is no question about it. It went up at a fairly sizable rate. It is not that it simply has been a trade-off of we did not get the State money so we have to increase the tuition. That is true today more than ever. It is always true during down times, but in fact it was going on when times were very good and the amount money was going up.

Mr. Van Hollen. Do you have, and it would be interesting to see a chart in the rise in tuitions versus the rise in costs. My sense is, at the State level, and having just come from the State legislature, even at times even when State support was going up we tried to keep pressure down on tuition so that could not rise as quickly as it would in normal times. But it would be interesting to see what the increase was.

On the issue you raised, Dr. Newman, on the question of the students at lower-income levels where such a small percentage graduated, and we talked about some strategies for changing that, do you see there being a federal role?

Listening to testimony, it almost sounds like this is something the institutions themselves really have to get a handle on, the students at the university or the college. It sounded like there are some cases where, because of the way the college or university handled the situation, whether it was on-campus jobs or things like that, they were able to, you know, increase its graduation rates.

This has been raised in the context of a congressional hearing. Do you see there being federal strategies or is this something that we should say to colleges and universities, you have identified the problems; go out and find a good way to deal with it?

Mr. Newman. I think there is a federal role. I think there is a role at the federal government, the State government and the institutions.

The institutions, first of all, have to accept the fact that this is a problem, it is their problem, and they need to do something about it. In our discussions, they too often said, I wish more presidents would answer it the way President Duncan did. And I am just saying that because she is from Maryland, and we know that is a powerful State. But, too often, the tendency is to say, the

student did not do well. We probably shouldn't have admitted that student.

The evidence is very strong. Miami Dade Community College has an excellent program along this line. The students in Miami are tough students to educate, but they have done extremely will with them. You can see places like that all over the place.

What it means, among other things, is what you mentioned, congressman, about being tutored and mentored while you were at Yale. The difference is that Yale has enormously more resources to do that and the will to do it and the recognition that a student that gets into Yale ought to graduate. Whereas that is not uniformly shared, I think there is an institutional responsibility.

But I think the federal government can do several things.

First of all, if it makes plain what the statistics are, the way repeatedly all three of us have argued for. The federal government does force you to tell how the basketball players are doing. But if you start making these things plain, the institutions will start responding. They always do respond to better information.

Secondly, the questions of student aid and the other support program recommends are real. I think the federal government has a real role in this.

Mr. Ehlers. [Presiding.] The gentleman's time has expired, and it is my turn.

I appreciate you being here. It has been an excellent panel.

I have a deep love for higher education. I have devoted a good share of my life, 30 years, four as an undergraduate, four as a graduate, and 22 teaching. But I also served as the Chairman of the Higher Ed Appropriations Subcommittee at the State Senate level, so I am very familiar with the problems you are discussing.

Let me just make a couple of comments, and I would like each of you to react to them.

I am very concerned, first of all, about the federal government being the one governing the accountability, although there is certainly a need for accountability, and I am interested in whether or not accountability could be built in as part of the accreditation process. We already have that mechanism in place. If they do such mundane things as counting how many books there are in the library as part of accreditation, it seems to me that they could certainly begin to get at Mr. Miller's comment about the fact that the bookkeeping is different at every school and the accounting methods are different. Why not have them adopt standard methods of accountability, such as financial accountability, instructional accountability, and so forth, and make that part of the accreditation process, which every institution of higher education goes through periodically?

The second question is on the issue of inflation, which you have heard so much about. There are two aspects that bother me: first of all, the inflation of costs, tuition, books and other things, and secondly, of grades. They have totally different causes, but they are both major problems. As I find when I interview students, I almost have to disregard their transcripts. It is

virtually meaningless because all of them are getting very high grades, and so clearly it is not a good measure. Also in terms of the financial inflation.

I find it interesting, I think we have a real problem here that I do not hear discussed much and that is it is very difficult to increase the productivity of higher education or even K-12 education, just as it is very difficult to increase productivity in the medical field. Whereas in a factory or any other work place, you can increase productivity. That, I think, is part of the reason for the rapidly increasing costs. Simply because when you have one situation, as you do in a hospital, or a one-on-20 situation, as do you in higher education, how do you increase productivity? Particularly when other expenses such as university-wide computer systems and others come in.

Finally, my final comment is about loans. I hear a lot of concerns about the increasing amount of student loans. I have to tell you, I had this opinion when I was a professor and I told students to not worry about their loans, and I still feel that way.

The average student accumulated student loan as of this year is approximately $18,000 per student. Think about the students who did not go to college. They probably bought a car and borrowed $18,000 for it. What is going to be more useful for future earnings, the car or the education? Obviously, the education, because it pays for itself.

Similarly, when students get out of college they get married, they buy a house, they may even have a $200,000 mortgage. It is going to make their cost of education look pretty small, and in fact their education will help them pay off the mortgage on their house more quickly.

So I think certainly we need accountability to keep the costs in rein, but at the same time I don't think we should build this atmosphere that it is terrible to borrow money for an education but it is fine to borrow is it for a car or house or anything else that you want.

I would appreciate your comments on the accountability through accreditation, the inflation issue and the loans. Let's go backwards this time, Dr. Newman and Dr. Duncan and Mr. Miller.

Mr. Newman. Let me choose the productivity question.

I understand your point about the difficulty of understanding in an organization that functions the way a university or college does even what productivity means, let alone how to increase it. But there is some very interested and encouraging data.

I was mentioning before the Pew grants that were experimenting with redesigning courses and trying to make them do three things: cost less, improve student learning and improve student satisfaction; and that is really what productivity is about. If you can do those three things simultaneously, it is more productive.

What they found, at least for large introductory courses, one would have to be careful about saying if they can do it there they can do it anywhere, that you could take essentially any large introductory course and make significant savings and improve student learning and improve student satisfaction. They did it by a variety of things, and I have gone and looked at a number of

programs, and I come away convinced that they have made real gains.

So that is one example. There are several other examples that I have been to see that fit this.

So I would argue that today we have arrived at a point that if people are willing to sit down and do a careful analytical job, which we essentially almost never do in higher education, if we take, for example, if we ask ourselves the question, how do we teach students mathematics? And we ask that question and look at it and try to find more effective ways of doing it so that the student learns more and it costs us less, we can actually do it.

But it takes that kind of determination. That is not the way we are structured to do it. We are structured to do it that the professor just figures, here is what I am going to do, and we do the same thing, which is a costly way of doing it.

People have found cheaper ways principally by using adjuncts, but, of course, that has huge costs in terms of quality associated with it.

Mr. Ehlers. Thank you.

Dr. Duncan?

Ms. Duncan. To your point about accountability, I think using the accrediting agencies as mechanisms for getting to some of the issues that you are talking about is appropriate; and I think many of them are addressing that. I don't think that in today's standards you see this input anymore. I think that is kind of old news. That did happen at one time, but you do not see that today in any of the standards. Nobody is counting books in the libraries anymore.

What you do see, for instance, in North Central is the option to use the Baldrich criteria as a method of reporting; and I think it has a lot of very interesting aspects that gets to the issues that you talked about. Cost, productivity, student outcomes, all of those issues is addressed in that model. You see in middle States and emphasis on student learning outcomes. So there is a lot happening in those areas in different regions of the State, of the country that address some of the things that you said already in the accrediting agencies. These discussions are going on, and there are new models that have been available for a number of years that do improve and get to some of those measures. So I think it is an appropriate way to go. It is a process of continuous improvement, and I think that we should continue to work on that.

On the subject of productivity, I certainly agree with Dr. Newman, to include all of those factors. There are other issues that also become addressed, for instance, the issue of space. Many of us do things now to minimize the use of space because we do not have it. So doing on-line instruction or something like we do with campus web where you are in the classroom one day and on line 2 days to relieve classroom space for other types of use.

All of these measures, student learning, student satisfaction, cost effectiveness and the use of your facilities, how to get the most use out of them, and using them, of course, all the time, from

7:00 in the morning to 11:00 at night, including weekends, is another productivity piece.

I think that many of us have had to learn how to find ways to increase productivity. But it is not simply a measure of how many students and the students-teacher ratio, it is much more complex than that. That is only one measure. And, remember, we do not want to sacrifice the outcomes of retention and graduation. So we wouldn't look at just one measure. We have to include all of those.

On inflation of costs and inflation of grades, the whole aspect of the learning outcomes provides comparisons. For instance, at our community college all faculty have to do a learning outcomes project; and they have to compare with outside institutions, other tests, either a standardized test, a national measure or a university measure, to see whether or not in fact learning occurs.

This prevents the inflation of grades by insisting that we look at other measures other than our own. I think it helps a great deal, and it is something that I think faculty is very concerned about. Faculty does not like their reputation to be eroded by saying that they all give good grades. There are Web sites now where students also evaluate how they grade, and the administrator can look to see if they have a reputation for giving good grades or hard grades.

Mr. Ehlers. The accrediting agencies basically set the bar. They set the minimum requirements. Do they do any comparative evaluation? Do they look at all of these aspects and say University A is doing a better job than University B? Students are learning more at University X instead of University Y?

Ms. Duncan. They certainly ask to you name peer institutions and be involved in benchmarking projects. More and more we are talking about benchmarking and looking at peer institution not only within our States but also outside of our States.

Mr. Ehlers. Is that public information that the federal government could use as part of their evaluation?

Ms. Duncan. Any information that is gathered is public information.

Mr. Newman. There is, Mr. Chairman, a very interesting thing going on that could fit your description. I don't know if you are familiar with the National Survey of Student Engagement. And there is a Community College Survey of Student Engagement. They are trying to measure they are nongovernmental efforts, but they are trying to measure things that are not learner outcomes but are surrogates for it. For example, how much contact is there between students and faculty? How much this? How much that? Not just books in the library but things that are relevant to learning. So far they have been private, because the institution insisted that they be private at first.

The community college one is going on-line with all of the information from the community college collected on the 23rd of this month. The university one isn't yet going on-line.

Mr. Ehlers. Okay. Mr. Miller?

Mr. Charles Miller. The question, which is the new question today, I am in agreement with you. I think there is a good economic case that people can afford to pay for it themselves, and people should have responsibility to do that. You have done it on the other end of the pipeline, encouraging tax shelters or tax incentives or things that encourage savings for higher education. I would still encourage that people start early and remember the value of it so that by the time that the student gets to college there is at least some incentive to have it paid for by the people that are going to use it and benefit from it.

There are many private contributions to that. Anything that would encourage that would be helpful, but there is nothing I see wrong with borrowing money to get a college education within reason, and I think it should be encouraged as part of the financial aid program.

What you said is accurate. I think what is happening in a lot of cases, people that feel pressed about loans have made decisions to do something else with their funds in many cases and find themselves caught short when it comes time to have the child educated, including the parents. So I think if loans are required, if people have the option of doing that, that is a good element.

I think I have said, on accountability, one of the problems again is transparency in data; and the federal government in my opinion does have a role. I don't think you should regulate higher education. The response I have heard on the accreditation, using that as an accountability place, has been very firmly opposed because people feel that is a federal regulatory step. I think of it more like we do securities markets, which is where I come from. There is less true regulation, and we found some failures there because of self-regulation that got to a certain point where we had to intervene. We should intervene at times, and there is a role for the federal government to complete information, put it in a form for policymakers to use. We do that with census data and a lot of other things. We put it in a form for people to use. We should do that in higher education. That will make the system be more accountable. It will not have a choice.

Mr. Ehlers. My time has expired, but I would like to see, Dr. Newman, the data on teaching large classes and having better student learning.

Because when I was teaching at Berkeley I taught several classes with hundreds of students in, and at a private liberal arts college I taught much smaller classes, and I would find it hard to believe that there is a way that you could structure a class of 200 or 300 students where the learning takes place as well as it does in the classroom of 20 or 30 students. So you can send that to me later.

Thank you. My time is more than expired.

Mr. Andrews, I apologize for taking so much time.

Mr. Andrews. Please, I enjoyed hearing the questions and the answers.

I also would like to thank the witnesses for their insight and endurance this afternoon.

I am very worried about the rising cost of getting a higher education, and I think we do need to adopt measures that make data more transparent so people can know what they are buying in terms of quality. However, I would question the underlying premise of the hearing which implicitly is that the market is dysfunctional in the area of higher education, that even though there are many, many, many choices as to where one can go to school and many different programs that the price that is yielded by market competition is somehow dysfunctional. I disagree with that.

In fact, I think it is a rather rational functioning market in this way: I think that the gap between a person who is skilled and unskilled in terms of lifetime income has accelerated faster than the increase in the cost of getting a higher education. And I think, although many students would not articulate their choice this way, they intuitively understand that taking on this significant expense at some point in their lives, usually early in their lives, more than pays back in multiples over the course of the rest of their life.

So, I approach this from a very different point of view and, frankly, find any explicit or implicit price regulation to be unacceptable. I think the premise of the price regulation is flawed to begin with. .

I am in favor of more transparent information about quality. I think most people choose a school based upon what happens to the graduates of that school. For example, there is a community college near my area that has an outstanding mortuary science program, and the students that want to go to that program look at whether the people are hired by funeral homes and whether they are still working as morticians later on. .

I went to Cornell. I know that people look at Brown on the basis of whether they can read and write when they graduate. I say that in jest.

Let me ask you this question: If we were going to make higher education the first priority of the federal budget, a truly parallel universe, if we were going to make it the first priority of the federal budget, I would like each of you to tell me what you think the maximum Pell grant ought to be and what the maximum family income ought to be to qualify for a Pell grant. If you make more than $40,000, you effectively do not get a Pell grant. If we were going to make higher education spending the first priority in the budget, what should the maximum Pell and be what should the maximum family income be for eligibility?

Mr. Newman. Well, everybody else is standing back, so I will go plunge ahead fearlessly. I think that is a nifty question.

First, I would make the maximum Pell grant fairly sizable and maybe something in the order of 8- or $10,000, $8,000 probably.

Mr. Andrews. What would you make the maximum family income that could begin to receive it? I realize you wouldn't give the same grant to everybody. What would the maximum family income

be?

Mr. Newman. Certainly no higher than $60,000 and maybe less. The reason I say that is because student aid in the rest of the system is moving rapidly toward middle-income and up students. It is moving toward merit and other vehicles, ways of getting money to students. The net effect is that the great bulwark of worry about this low-income student is the federal government. In fact, one could almost say it is the last bulwark. And what is happening institutionally is it is moving toward merit, away from low-income students.

The Pell grant and the federal government were the original agencies worrying about this. It is now more central than ever that they focus on the low-income student.

Mr. Andrews. Dr. Duncan, what would you say?

Ms. Duncan. I would agree with Frank. Those are good numbers.

Mr. Andrews. The 8- to 10- would take it close to 80 or 90 percent of public university average tuitions. It is now down to 42 percent, I think.

Mr. Miller what you would say?

Mr. Charles Miller. I am not as sophisticated on the details as these people, but I wouldn't do much to raise those limits today unless there was some conditions about higher education providing more accountability to the public and more information and data that is transparent to you all.

And I don't want price controls, so I really want to be clear. I am very uncomfortable with that idea at any level. Although I was intrigued by what Congressman McKeon said when he said everything else but the details of his plan. I think there is a very important crisis coming up. When we see the cuts in the States that we haven't seen yet and when we see the rise in tuition that we haven't seen yet but are on the table, I think we will see it more clearly.

Mr. Andrews. What if we passed a law that said that every institution that receives title 4(a), which is really every institution, has to publish on the internet the following information: what percentage of their students graduate; what percentage of their students are employed after five years of graduation; what percentage of their students are employed in the field of their major field of study in five years; what the median income of their graduates is after five years; and what the loan default rate is for after five years.

Let's assume we did that. What do you think the maximum Pell ought to be under those circumstances?

Mr. Charles Miller. I think that kind of data is what we are looking for in a format that could be used several combinations for several kinds of institutions. Because I believe there is diversity and a marketplace that can work with that and has worked. I think it could be raised if it is means tested. I do not have a set number that I have studied carefully. Over time, if we get the kind of accountability that is proper and transparency that is proper for the federal government to provide

aid for students from families who need that protection.

Mr. Andrews. I appreciate that. I realize my time has expired. I just make this comment.

I do appreciate the need for more accountability. I think costs are a problem. It is not the number one problem in higher education in America today. The problem in American higher education is that students in the bottom 40 percent or so of family incomes have to borrow an amount of money that is so overwhelming for them that a lot of them are not going to school, are not staying because they have to work full-time once they are there, and are being sort of diverted from the schoolhouse door.

The answer to that is some combination of an increase in the Pell, a broadening of the work/study program, in my view, an increase in flexibility of loan repayment and some other combination of tools. If you make 31-, $32,000 a year family income and you are looking at 14-, $15,000 a year to go to Rutgers in my State, you are not going, if you have to borrow 9- or $10,000 a year. That is the problem, and I look forward to the committee having that hearing soon.

Mr. Ehlers. The gentleman's time has expired. I thank you for those thoughtful questions.

Part of the problem, incidentally, with the marketplace that you referred to is that in today's system you virtually have to be a college graduate to understand enough in order to choose appropriately to make the marketplace work. So we have to improve the accessibility of that information so that students that can, in fact, make those decisions.

This concludes our hearing. I wish to thank the witnesses for giving up their valuable time to enlighten us about their perspectives. I rarely sit through an entire hearing, and this is one I enjoyed sitting through because I learned a great deal all the way through the hearing. I appreciate your participation.

If there is no further business, I declare the hearing adjourned.

[Whereupon, at 4:30 p.m., the committee was adjourned.]

APPENDIX A -- WRITTEN OPENING STATEMENT OF CHAIRMAN JOHN BOEHNER, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES, WASHINGTON, DC.

Opening Statement of John A. Boehner
Chairman
Committee on Education and the Workforce

Hearing on The State of American Higher Education: What are Students, Parents & Taxpayers Getting for Their Money?

Tuesday, May 13, 2003

Good morning.

I want to welcome our witnesses here today and thank them for taking the time to come before this committee and continue the discussion about the Higher Education Act reauthorization and its four guiding tenets – accessibility, accountability, affordability and quality.

We began the conversation about the reauthorization of the Higher Education Act in the 107th Congress. We sent a request for proposals to the postsecondary education community and received hundreds of proposals, which are currently under review. While the process will take time to complete, this hearing will serve as a "kick start" to an important dialogue. It is clear that for nearly forty years, the Higher Education Act has been the vehicle that has opened the doors of postsecondary education opportunity to all Americans. However, reauthorization should not be a

rubber stamp process. We need to be open-minded and leave the old territorial issues at the door. This reauthorization should be a time to move outside our comfort zone and ensure that the best policy is enacted.

This Congress and this Administration have made a firm commitment to education. Currently, according to the College Board, the federal government provides over 70 percent of direct aid to postsecondary education students, amounting to nearly $65 billion annually. However, I am most interested in learning more about what institutions can and should be doing to assure the American people that the investment in higher education as a student, parent or taxpayer is one that will produce results and assist with lifelong career pursuits.

Accountability is the hub of the higher education wheel. The previously mentioned tenets – accessibility, affordability and quality – are the spokes that keep the wheel in motion. Before we move the reauthorization legislative vehicles through the House, I want to explore how postsecondary institutions are accountable to students, parents and

taxpayers. I am aware that institutions report volumes of data to the federal government and others, but does that reporting provide valuable accountability? Moreover, is the data reported the right data and is it enough?

I have learned that in some states, public colleges and universities require their students to take basic skill assessments before, during or after their degree program. Assessment results provide the higher education system, the state and its policymakers, and students and families with tangible results about the quality of the education provided. These results help families to make important decisions about their investment in postsecondary education. In many instances, these assessment results also help states make performance based funding decisions for their public institutions. I am interested in hearing the opinions of the witnesses here today on the value of assessment.

The increasing costs of postsecondary education dictate that institutions provide some degree of outcome results to the American

people. The College Board reports that the average tuition at a public four-year institution is over $4,000, an increase of 9.6 percent over last year. Average tuition at a private college or university is over $18,000, an increase of 5.8 percent over last year's average. These increases exceeded the rise in the Consumer Price Index by 8.4 and 4.7 percent, respectively. Tuition and fees began to grow much more rapidly than consumer prices beginning in the early 1980's, and these increases have not slowed down. The intense rising cost of a postsecondary education concerns me.

Many parties invest their resources in postsecondary education – the federal government, state governments, students, parents, taxpayers, and employers. Obviously, many parties have a stake in higher education, as graduates appropriately fuel our nation's economy. How then, can institutions provide all of these stakeholders with an assurance that the investment made in postsecondary education will be returned to them in the form of a strong, viable and educated workforce? Our panelists can discuss this issue with us today.

Finally, it is clear to me that all of these issues are closely connected. What is the federal role in ensuring access, affordability and quality? As Mr. Pat Callan, President of the National Center of Public Policy and Higher Education stated during last month's meeting of the Advisory Committee on Student Financial Assistance, "A solution where institutions of higher education take no responsibility is not viable. Postsecondary education cannot take the view that they can raise their prices until they are able to pay for what they need and then rely on the federal government to step in and provide enough funding for every student to attend."

Therefore, it is important that we proceed in the reauthorization process with a broad discussion of these crucial tenets – accessibility, accountability, affordability, and quality. I am looking forward to the testimony of our witnesses so that we may identify specific strategies and proposals about these key issues.

With that, I yield to my friend Mr. Miller for any opening statement he may have.

APPENDIX B -- WRITTEN STATEMENT OF CHARLES MILLER, CHAIRMAN, UNIVERSITY OF TEXAS SYSTEM BOARD OF REGENTS, HOUSTON, TEXAS

Written Testimony by Charles Miller

Is There A Need for a New Approach to Higher Education Accountability?

House Committee on Education and the Workforce

May 13, 2003 – 2:00 p.m.

Rayburn House Office Building, Room 2175

1. Current Higher Education Accountability Practices

Multiple stakeholders. Higher education institutions are accountable to students, parents, and taxpayers for the education provided and the costs of providing it through state appropriations, tuition, and financial aid. Ohio Governor Bob Taft said in his inaugural speech in January 2003, "We need to ensure that the financial sacrifices parents and students are making for college today are rewarding them with the results they deserve…"

A long-term issue. Accountability in higher education has been an increasingly significant national issue over the past decade, spurred by rising costs of college, disappointing retention and graduation rates, employer concerns that graduates do not have the knowledge and skills expected in the workplace, and questions about the learning and value that higher education provides to students.

Higher education is already accountable. Higher education associations, accrediting bodies, research centers, and federal and state governments all promote higher education accountability. Institutions produce voluminous accountability information, reporting data to the Department of Education's Integrated Postsecondary Education Data System, to regional,

national, and specialized accreditation associations, and to state legislatures and/or higher education coordinating boards. As American Association for Higher Education President Yolanda T. Moses wrote recently "Colleges and universities already comply with numerous accountability regulations, including voluntary programmatic and institutional accrediting processes."

Current accountability information is not effectively communicated. Yolanda Moses contends, however, that "while current quality measures in place on campuses may be working they are poorly understood by a wider public, and therefore institutions should work more closely with various stakeholders to ensure that these methods become more widely understood."[1]

Current accountability systems are fragmented. The quantity of information actually serves to obscure what we really need to know. Today, higher education accountability systems are characterized by fragmentation, frustration, and lack of utility. Professor Joseph C. Burke of the Rockefeller Institute at SUNY Albany recently reported that 44 states have some combination of higher education performance reporting, budgeting, and/or funding.[2]

Current accountability systems are not highly useful. Professor Burke warns policy makers about an ongoing weakness in existing accountability systems: "The big problem… is not just … flawed format, huge size, and excessive indicators, but the failure of state, system, and campus policy makers to use them in planning and decision making."[3]

What is needed: building alignment and a culture of evidence. The challenge is to get the right information to the right people, and to align accountability systems so that

---

[1] AAHEBulletin.com, "President's Letter," March 2003, aahebulletin.com.
[2] Joseph C. Burke and Henrik Minassians, "Performance Reporting: The Preferred 'No Cost' Accountability Program, the Sixth Annual Report," The Nelson A. Rockefeller Institute of Government, 2002. rockinst.org/quick_tour/higher?ed/current_projects.html.
[3] Joseph C. Burke, personal email communication with Geri Malandra, Feb. 7, 2003.

institutional, state level, and national systems use the same information. We need useful information, to build a "culture of evidence," not to add to the burden of red tape that institutions of higher education currently bear.

2. Overview of Proposals to Improve Accountability Systems.

Agreement on what we generally need to know. A number of research centers, nonprofit education associations, and federal and state governments have proposed various approaches to improve higher education accountability. There is some agreement about the broad areas about which we need to know more, or at least communicate better: affordability, accessibility, retention and graduation rates, student learning outcomes, and post-graduation employment.

Lack of consensus on framework or standards. Diversity of institutional mission, students, and decentralized governance are unique strengths of American higher education.[4] But, this variability presents a major issue: with no single national curriculum, and funding streams more complex than in K-12 systems, it is difficult to prescribe uniform standards for all of postsecondary education.

Structure of Accountability Systems. Paul Lingenfelter, of the State Higher Education Executive Officers group, recently made these suggestions on effective higher education accountability systems:[5]

- Focus on a few clear, significant, measurable goals
- Determine why existing practice is not achieving goals

[4]Institute for Higher Education Policy, *Reauthorizing the Higher Education Act: Issues and Options*, March 2003, p. 144

[5] Paul E. Lingenfelter, "Educational Accountability: Setting Standards, Improving Performance," *Change*, March/April 2003, pp. 19-23.

- Monitor progress publicly
- Focus on improving performance rather than punishing failure
- Employ both intrinsic and extrinsic incentives for individuals who produce results
- Build capacity
- Involve everybody and use multiple tools
- Invest in results

Jane Wellman, writing for the National Governors Association, has suggested key elements that should be included in statewide higher education accountability strategies.[6] These elements could inform a national system, as well.

- Establish goals in relation to statewide plans
- Focus on total state support for higher education
- Ensure comparability, simplicity, and visibility
- Include institution-specific information
- Track students
- Cultivate broad support for statewide systems
- Recognize the difference between K-12 and higher education

Report cards. Responding to information now available in the Center for Public Policy and Higher Education's *Measuring Up* report cards, many institutions have instituted report cards. Some have suggested that these become a requirement. There is significant overlap among the proposals. For example, Professor Joseph Burke suggests that indicators should be

[6] Jane V. Wellman, "Statewide Higher Education Accountability: Issues and Strategies for Success," *Higher Expectations* (National Governors Association, 2002), pp. 7-16.

selected that would allow "measuring up and down," useful at the state, institution, and even department level.[7]

- Funding – state appropriations per FTE
- Affordability – Tuition and fees, less financial aid, as % of median family income
- College-school collaboration – pass rates on teacher certification examines; % of freshmen with college preparatory curriculum in high school
- Participation – rate of higher education going as % of high school graduates
- Articulation – transfer rates between 2- and 4-year institutions
- Completion – graduation rates
- Degree attainment
- Job placements of graduates
- Sponsored research – dollar volume
- Student development – alumni survey on the knowledge and skills developed in college

The Career College Association has proposed a required institutional report card, including:[8]

- Institutional mission
- Student demographics
- Student/faculty ratio
- Instructional expenditure per student

---

[7] Joseph C. Burke and Henrik P. Minassians, *Reporting Higher Education Results: Missing Links in the Performance Chain* , New Directions in Institutional Research, No. 116 (Jossey-Bass, Winter 2002), pp. 110-111.
[8] Stephen Burd, "Will Congress Require Colleges to Grade Themselves?" *The Chronicle of Higher Education*, April 4, 2003.

- Services provided to students
- Graduation rates
- 1st, 2nd, year retention rates
- Transfer rates into or from the institution
- Post-graduation employment success
- Licensure examination pass rates
- Student and alumni satisfaction
- Employer satisfaction with graduates

These elements can be part of system- or institution-specific accountability systems, **like the one The University of Texas System is launching this year. Its comprehensive accountability system will include measures like those above, within a framework that will evaluate performance around five critical mission-related areas: 1) Student Access and Success; 2) Teaching, Research, and Health Care Excellence; 3) Collaboration with and Service to Communities; 4) Organizational Efficiency and Productivity; and 5) Aggregate System Performance.**

3. Accountability for Quality.

Employers want consistent skills, including good verbal and written communication skills, honesty and integrity, teamwork skills, interpersonal skills, and a strong work ethic. Also included on lists of what employers seek from college graduates are:

- Ability to learn, take initiative, decision making, teamwork, motivational fit, ability to thrive in a diverse environment;

- Strategic thinking, flexibility, initiative;
- Portable skills: writing, technology literacy, qualitative analysis, scientific literacy, oral communication, critical thinking.

Learning assessment is a critical issue. It is being examined seriously by several national research groups.[9] As the National Research Council recommends in *Knowing What Students Know*,

> "Policy makers are urged to recognize the limitations of current assessments, and to support the development of new systems of multiple assessments that would improve their ability to make decisions about education programs…"[10]

The NRC also recommends that

> "Funding should be provided for a major program of research, guided by a synthesis of cognitive and measurement principles, focused on the design of assessments that yield more valid and fair inferences about student achievement."[11]

Setting a research agenda. Stanford's National Center for Postsecondary Improvement proposed a set of research questions to guide the improvement of higher education in the 21st century.[12] Improving educational quality and institutional performance is one of the three key priorities articulated in the NCPI report, *Beyond Dead Reckoning*. It calls for the development of a "culture of evidence" – to create quality measures, collect data on outcomes, and use the information to redesign practices to improve quality (p. 12). This study suggests a focus on such questions as:

---

[9] The American Association of Higher Education is leading a major national initiative on learning assessment; extensive resources are available at http://www.aahe.org/assessment/.
[10] James W. Pelligrino, Naomi Chudowksy, and Robert Glaser, eds., *Knowing What Students Know: The Science and Design of Educational Assessment* (National Academy Press, 2001), p. 310.
[11] Ibid., p. 299
[12] *Beyond Dead Reckoning: Research Priorities for Redirecting American Higher Education*, October 2002.

- What are the attributes of a culture of evidence in a higher education institution? How are these qualities cultivated?
- How are external accountability measures aligned with internal quality improvement processes? What policies motivate institutions to define and apply measures of performance that are relevant to public purposes as well as to institutions?
- What policies, incentives, and resources support institutions and their faculty to develop better measures and instruments of student learning – and use them in their teaching?

Value-Added Assessment. The Rand Corporation's Council for Aid to Education is in the midst of National Value Added Assessment Initiative. This is a long-term project to develop a way to assess the quality of undergraduate education in the U.S.[13] The purpose is to create system that will show how institutions add value to their students. The Rand authors caution that "it is simply not sufficient to import from K-12 or industry the rhetoric of assessment and efficiency....An assessment system cannot be handed down to higher education from above; it must be a faculty- and institution-driven initiative.

Need for a Conceptual Framework. The current "frenzy" lacks a "coherent conceptual framework that would align assessment with the valued outcomes of higher education," according to Richard Shavelson and Leta Huang of Stanford University.[14] For these authors, testing is a risky approach because "the tests quickly become proxies for the goals we really value." They suggest several tactical principles:

---

[13] Roger Benjamin and Richard H. Hersh, "Measuring the Difference College Makes: the RAND/CAE Value Added Assessment Initiative," Peer Review, Vol. 4, No. 2/3, Winter/Spring 2002, pp. 11-15.
[14] Richard J. Shavelson and Leta Huang, "Responding Responsibly to the Frenzy to Assess Learning in Higher Education, Change, January/February 2003, pp. 11-19.

- Assess personal, social, and civic abilities as well as cognitive ones
- Encourage real dialogue and greater agreement on the content of the assessments
- Recognize that what we test and make public will greatly influence what is taught and what is learned
- Achieve clarity in the debate about what to assess through the use of a conceptual framework
- Develop multiple and varied assessments
- Distribute meaningful feedback on assessment to all stakeholders

Role of Testing. Testing can play an important role in the assessment of student learning. More is being learned about how testing affects quality in K-12 education, as part of the No Child Left Behind movement.[15] Some of this knowledge will be useful in considering postsecondary testing. Consensus seems to be growing that postsecondary testing should focus on assessing how well colleges are teaching, rather than individual student achievement.[16] **The University of Texas System is taking the initiative for a pilot assessment project that will include testing of general academic knowledge and skills in writing, math, reading, and critical thinking. Ultimately, we would do this assessment at all nine of our academic campuses.**

4. Policy Questions.

Is there a need for a new approach to higher education accountability? Yes, it is time for our nation to focus on the critical outcomes we expect for our students, and to hold our institutions accountable for these results.

---

[15] See Jonathan Crane, "The Promise of Value-Added Testing," *Policy Report*, November 2002 (Progressive Policy Institute, http://www.ppionline.org.
[16] Kate Zernike, "Tests Are Not Just for Kids," *New York Times*, August 5, 2002.

Do we know enough now to design a national higher education accountability framework that is highly likely to have a greater impact than the systems in place now? Not yet, although many of the building blocks already exist.

Can a consistent, but flexible, vision be developed of what students should get out of college? Yes, but only if national leadership and institutional will are aligned.

Should a national accountability model be developed for higher education? The long-term goal would be to gather specific, longitudinal, and comparative data that would show which, among like institutions, are most successful in the areas under study, determine the factors of that success, and then apply the knowledge for further improvement. This model should:

- Build on existing systems and sources of data.
- Be aligned with state efforts.
- Create a conceptual framework.
- Utilize multiple kinds of measurements.
- Select meaningful indicators.
- Develop a method to benchmark higher education institutions with similar missions.
- Foster engagement of higher education community
- Communicate widely about process and results.
- Foster use of results by rewarding success

Committee on Education and the Workforce

Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)

Your Name: Charles Miller		
1. Will you be representing a federal, State, or local government entity? (If the answer is yes please contact the committee).	Yes X	No
2. Please list any federal grants or contracts (including subgrants or subcontracts) which you have received since October 1, 2000: None		
3. Will you be representing an entity other than a government entity?	Yes	No X
4. Other than yourself, please list what entity or entities you will be representing: The University of Texas System.		
5. Please list any offices or elected positions held and/or briefly describe your representational capacity with each of the entities you listed in response to question 4: Chairman, U. T. Board of Regents		
6. Please list any federal grants or contracts (including subgrants or subcontracts) received by the entities you listed in response to question 4 since October 1, 2000, including the source and amount of each grant or contract: The 15 component institutions (9 academic, 6 health) of U. T. System have received numerous grants.		
7. Are there parent organizations, subsidiaries, or partnerships to the entities you disclosed in response to question number 4 that you will not be representing? If so, please list:	Yes	No X

Signature: Charles Miller Date: 5/07/03

Please attach this sheet to your written testimony.

APPENDIX C -- WRITTEN STATEMENT OF DR. MARY ELLEN DUNCAN, PRESIDENT, HOWARD COMMUNITY COLLEGE, COLUMBIA, MARYLAND

Statement of the American Association of Community Colleges

to the

House Committee on Education and the Workforce

on

"The State of American Higher Education: What are Parents, Students, and Taxpayers getting for their Money?"

Presented by

Mary Ellen Duncan, Ph.D.

President, Howard Community College

Tuesday, May 13, 2003, 2:00 p.m.

2175 Rayburn House Office Building

Washington, DC

Good afternoon. My name is Mary Ellen Duncan and I am president of Howard Community College located in Columbia, Md. I am pleased to be with you today to present testimony on behalf of the American Association of Community Colleges (AACC) on the state of American higher education and the reauthorization of the Higher Education Act (HEA). AACC represents almost 1,100 public and private, associate degree granting, regionally accredited institutions, and serves as the national voice for community colleges.

It is appropriate that community colleges be represented at this overview hearing on higher education. To a large degree, the growth that is commonly referred to as "the community college movement" occurred largely because of the programs authorized by the HEA. In the fall of 2001, community colleges had credit enrollments of over 6 million students, and about 5 million noncredit students. These numbers have surged over the last couple of years, and this trend shows no signs of abating. Community colleges are the first choice for the workers challenged by our sluggish economy. Most of our colleges report that the recent spikes in enrollments, which have pressed our institutions to the limit, have been due to both the "baby boom echo" of traditional college-aged students, as well as older individuals who are employed or recently became unemployed.

Community colleges enroll 44% of all U.S. undergraduates (measured in terms of head-count), and 45% of first-time freshmen. Almost two-thirds, 63%, are enrolled on a part-time basis of fewer than 12 credit hours. The average age of our students is 29 years. Because community colleges enroll 46% of all African-American undergraduate students,

55% of all Hispanic students, and 46% of Asian/Pacific Islander students in higher education, they pride themselves on being the "Ellis Island" of higher education.

At Howard Community College, 2,300 students received financial aid in the current award year. Of these students, approximately 1,400 benefited from Federal Pell grants and Federal Supplemental Educational Opportunity Grants (FSEOG), totaling $1.7 million. Financial aid recipients represent approximately 26% of our total credit students enrolled in the 2002-2003 award year. More than half of our financial aid applicants are independent students, and many of these are single parents and minorities.

Title IV Programs and Participation in Postsecondary Education

As Congress sets to reauthorize the HEA, it deserves thanks for having done so much to make college possible for those who otherwise would not have had the chance to improve their lives through higher education. The college continuation rate for recent high school graduates has risen from 47% in1973 (just as the central student aid programs of the HEA were being implemented) to 62% in 2001. The genius of creating a student-focused system in which aid is delivered to the individual, for use at the college of his or her choosing, has repeatedly proven itself. But this investment is one that not only accrues to the individual; our economy would be incalculably weaker if not for the increased education and training fostered by the Title IV student aid programs.

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

better. Our colleges view themselves as having a pact with the federal government: community colleges strive to keep tuitions as low as possible, but for those who cannot meet the cost of education, the need-based programs in Title IV of the HEA are there to fill the gap. And there is a consensus that the HEA has proven extremely efficient and effective in providing financing to students and families who need resources to attend college.

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

Unfortunately, the job of promoting equal access to postsecondary education is not yet complete. Access to college remains highly stratified by income. Over the last 25 years, a "rising tide" has lifted the college participation rates of students across the income spectrum fairly equally, with the largest gains occurring in the second lowest income quartile. This is a great achievement. Unfortunately, the persistence gap between less affluent and more affluent students has widened over that time. And, despite the gains in overall college access, the gaps in college participation across the various income bands have remained fairly consistent. We believe these gaps must be eliminated; with that will come the end of the current condition in which low-ability, high-income students are likelier to attend college than low-income, high ability students.

What Have Parents, Students and Taxpayers Gotten for Their Money?

The short answer to the question posed by today's hearing is: the best system of higher education in the world, a system that is not only the envy of other countries but also the nation's sixth largest net export. Support for higher education has fostered the world's strongest economy, with productivity gains resulting from a better skilled workforce as well as the research that is conducted in America's colleges and universities. The holders of a bachelor's degree, with no education beyond that, can answer this question by responding that, on average (according to the U.S. Census Bureau), they have received about $750,000 more in lifetime earnings compared to those holding just a high school diploma. Those with an associate degree could answer that their lifetime earnings increased by about $335,000 compared to high school graduates. Obviously, complex sets of aptitudes and abilities give rise to these enhanced earnings. However, higher education is not just about earnings. Our higher education system produces a better-informed citizenry that participates in civil and political discourse, essential to a smoothly functioning democracy. Our society benefits, tangibly and intangibly, from a better educated populace.

Community Colleges and the Workforce

A first principle of community colleges is providing their local communities with the workers they need. A correlate important goal is to provide individuals with the skills that they need to attain economic independence. In the last 25 years, the percentage of workers with an associate degree, certificate, or some college has more than doubled from 12% to 27% of the workforce. The array of occupational programs offered by community colleges is truly mind-boggling, and permeates every sector of the economy. Our colleges pride themselves on their entrepreneurial nature. For example, when Howard County's executive asked us to create a

photonics program to support the fiber optics companies in our community, we responded within six months.

In all of the fields in which high-profile labor shortages exist, such as teaching, nursing, information technology, and first responders, community colleges are on the front lines, offering programs designed to address these pressing needs. For example, 48% of all applicants taking the national registered nurse examination to become licensed professional registered nurses were graduates of associate degree programs, and these graduates pass that examination at the same rate as those who have attended four-year colleges. 65% of new healthcare workers get their training at community colleges. Community colleges also train and credential 85% of the nation's first responders—police, firefighters, and emergency medical technicians.

Community colleges do not receive adequate recognition for their role in educating the nation's teachers. It is estimated that at least 25% of graduates of undergraduate programs in teacher training began their postsecondary education at community colleges. Community colleges provide this initial teacher preparation, but also are heavily engaged in professional development for K-12 teachers; post-baccalaureate certification for undergraduate majors in non-teaching fields; encouraging high school students to enter the teaching field, and training the paraprofessionals whose skills must be enhanced as a result of the "No Child Left Behind" law. Consequently, AACC is proposing that a small new program in the Higher Education Act be created to help community colleges further their activity in this critical area. We seek a national competitive grant program of $20 million. Howard Community College is now offering an Associate of Arts in Teaching (AAT) degree in elementary education that will fully articulate

into the teaching training programs at Maryland's four-year public colleges and the AAT in secondary education is currently under development.

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

Most colleges contract directly with a wide variety of businesses to provide the customized training to meet their needs. These programs are developed rapidly according to customer specifications. 95% of businesses and organizations that use them recommend community college workforce education and training programs.

The Accountability Debate

Community colleges embrace the accountability discussion because they are already highly accountable. In fact, colleges already provide a great deal of accountability information to federal, state, and local governments and accreditation agencies, and welcome every chance they have to explain how they are accountable for the funds they receive.

Proponents of greater accountability often claim that community colleges and other higher education institutions graduate an insufficient percentage of their students, or that their program quality is lacking. The astonishing diversity of higher education, whose non-profit

institutions alone serve more than 16 million students each year, tends to get lost in these generalizations.

Let me mention three examples at HCC: this week I received an invitation to hear Jessica Swink, soprano, sing at the Kennedy Center. She took only music classes at Howard, because she did not qualify for financial aid even though she was one of 10 children. Swink studied part-time and would only take music classes until she became an apprentice to the Washington Opera. Though Swink may never get a college degree, I am likely to hear her sing at the Metropolitan Opera House one day. On the other hand, Marcus Bryant, an African-American student, with high grades, turned down offers to four-year colleges to attend HCC because he did not want to accumulate debt. He will transfer to Georgia Tech or Carnegie Mellon and study mechanical engineering. And just this week, an 80-year old man complained because he couldn't get into an accounting class (no available seats), but I guaranteed I would get him registered early next semester. These are some of the people who become statistics in the reporting process. HCC's motto is "You can get there from here." Students decide the "there" and that's the way it should be.

Community colleges alone have an enormous variety of programs and goals: to provide basic transfer education in academic areas; to give adult basic education to those who need it; to allow incumbent or unemployed workers to upgrade their skills; to provide language education for those who lack facility in English; and to help businesses get the workers they need in short order. These various functions will have different desired outcomes attached to them. It is also

important to remember that not all students who enroll at a community college plan to earn an associate degree.

The competitive nature of higher education ensures that the ultimate goals of accountability—quality and efficiency—will be generated. The portable nature of the federal student aid programs neatly complements our competitive higher education system, empowering people to make their own choices about which college suits them best, whether they be deciding between Stanford University and the University of California at Berkeley, or between Kingsborough Community College in New York and the local ITT Technology Institute. Students themselves know better than anyone else how committed they are to completing a program.

Community colleges currently report substantial amounts of performance-related information to a variety of external bodies, and this includes the federal government. States provide about 42% of the overall annual revenues of community colleges and local governments add another 18%. These entities have developed extensive and growing reporting requirements. AACC has provided some information on state reporting to the Committee. Accrediting bodies and the sponsors of other programs, government and private, also demand reporting of various kinds, including reporting on outcomes. Accreditation also demands continual institutional self-assessment, a data-driven process. For example, an important focus of Middle States is on learning outcomes assessments. The North Central region has a process that parallels the National Baldrige quality model.

Congress obviously has a legitimate need to ensure that its enormous investment in student financial aid is well spent. However, community colleges urge this Committee to think carefully before it places new accountability mandates on institutions. We believe that the focus should be on providing data that will help students make more informed choices about the college best suited to their needs and goals. Wherever possible, Congress should strive to let colleges use information that they are already generating for other purposes. For example, at HCC there are five full-time employees and several part-timers who respond to accountability requirements from local, state, federal, and accrediting agencies. Unfunded mandates erode dollars from direct services to students, especially at a time when local and state governments are withdrawing support and enrollment is growing.

In its Dec. 30 HEA reauthorization submission to this Committee, AACC stated the openness of its member institutions to report to the federal government new outcomes information. We also think that different types of institutions should provide different types of information. For example, many community colleges will want to report on the attainment of skills certificates and industry certifications by their graduates, as well as their wage gains. Liberal arts colleges may find these measurements inappropriate to their missions and programs. Congress should recognize that the 3,600 non-profit institutions of higher education, which now enroll over 16 million students, should not be looked at through the same lens.

Congress should also ask if it is always desirable for every student to graduate, or whether colleges are now being used for other purposes as well. Community colleges are under extreme pressure from local employers to provide more short-term training to help workers keep

pace with changing skill requirements. A growing body of data shows that significant economic gains accrue to those who receive some postsecondary education, but not a degree. According to the Census Bureau, in 2001 the average salary of a high school graduate was $23,470. The average salary for an individual who had attended a postsecondary institution but had not attained an associate degree was $28,245—a difference of almost $5,000, more than 20%. In addition, the children of those who attend any amount of postsecondary education are much more likely to enroll in college than those whose parents have no postsecondary education experience. The fact that these students don't receive a sheepskin is no sign of failure.

In this reauthorization, Congress should focus on the enormous impediment to graduation created by the huge and growing number of students who are working. Studies show that when students work more than 15 hours per week, their likelihood of graduating declines sharply. Unfortunately, according to the National Center for Education Statistics, in the 1999-2000 academic year 84% of community college students worked, 54% of them full-time. This intensity of work involvement may be due to student financing needs, or because the student was employed full-time before enrolling in college. Nationally, according to the National Advisory Committee on Student Financial Assistance, low-income students average 24 hours of work each week. Common sense suggests that a lack of persistence and graduation will correlate with part-time enrollment in college; the longer it takes a student to complete his or her coursework, the likelier that external factors will deter that student from achieving a degree or certificate.

Community colleges accept from the start that, for many reasons, not all of their students will graduate. Some important factors include lack of adequate financing; the rigors of

employment; family and other personal reasons; or because a student's goal of improved employment prospects have been met. In addition, some students are able to transfer to a four-year institution without obtaining a two-year degree. Furthermore, in some cases students will find that college is just not right for them. However, community colleges ardently believe that these cases are the unavoidable consequence of a system that operates with an open-door admissions policy, and that what some might label a failure is rather an ongoing, but reasonable, price that the nation's system of higher education must absorb. Congress should remember that, for community colleges nationally, the majority of the cost of educating students rests with state and local governments.

College Tuitions

Students, their families, and legislators have good reason to be worried about college costs. For many college students, tuition is rising faster than family incomes, a situation that causes deep and persistent concern throughout higher education. Community colleges are particularly sensitive to tuition increases because of their high enrollments of low-income students, for whom relatively small tuition hikes can stand in the way of enrollment.

Community colleges are surprised and disappointed by the current battery of criticisms about college tuitions. The simple fact is that college tuitions are, across a broad range of institutions, extremely affordable, and represent the best investment most individuals will ever make. According to the College Board, in the fall of 2002 the average tuition and fees charged at a two-year public institution of higher education was just $1,735. The average tuition and fees

charged by public four-year colleges were $4,081. Roughly 80% of the students in non-profit higher education attend these institutions. The average cost of a baccalaureate degree at a four-year public college is now about two-thirds of the average cost of a new American automobile. Therefore, it is hard to understand why tuition charges are thought be inordinate, given the economic returns that accrue to participation in higher education as outlined above. Also, the tuition that students pay is only a small fraction of the overall costs of educating them, whether it be at a public or independent institution.

Community colleges raise their tuitions as a last resort. It is just plain wrong to think otherwise. Last fall, tuitions at two-year public institutions rose on average by 7.9%. This regrettable hike came after a series of tuition increases in academic years 1995-96 to 2000-01 that, according to the National Center on Education Statistics, were as follows: 3.9%, 2.9%, 3.0%, 1.0%, 0.8%, and 1.6%--an average of 2.2%. At HCC, tuition remained the same in FY99, 00, and 01. The increase since 1999 ($81) to 2003 ($86) has been 6.2%. From 1999 to FY2004 ($90), it will be 11.1%. Reductions in state aid are directly related to these increases and I'll talk about that more in a moment.

In virtually every case, the recent large tuition increases were a direct outgrowth of state and, in some cases, local funding reductions. These cuts have been unprecedented in their severity, and have often occurred in the middle of the academic year. The current round of tuition hikes came after community colleges were forced to tell faculty that they were being laid off, or notify students that classes they were counting on to complete their programs were being cancelled, or that candidates who had expected to be enrolling in nursing or other high-demand

programs would have to wait another year. We regret to report that early signs indicate that community college tuitions will be rising this coming fall at an even higher overall percentage than they did last year. The colleges have no choice. For example, the Governor of California has proposed raising the fees charged for each credit at the state's community colleges from $11 to $24.

At Howard Community College, we have been forced to raise our tuitions, but this has been coupled with a hiring freeze for all positions. Howard Community College, like all community colleges in Maryland, is funded by a formula. However, because of reductions by state government made to balance the state budget, we have received about $2 million less over the last two years than we would have received if our statutory aid formula had been followed. We have stopped making new investments in every corner of our operation. In addition, our college, as a matter of policy, devotes a portion of the money that is derived from tuition increases to scholarships. All this has been coupled with unprecedented increases in enrollments. At HCC, we have been averaging about 7% increase each year for the last 4 years. The fall numbers will be even higher.

AACC strongly contests the claim that federal student aid increases cause higher tuitions at community colleges. For example, between the 1995-96 and 2001-02 academic years, thanks to generous appropriations, the maximum Pell Grant was increased by $1,410, from $2,340 to $3,750. Over that same span, according to the College Board, the average tuition and fees at two-year public institutions increased by just $278, from $1,330 to $1,608. Also during this period, the Hope Scholarship tax credit of up to $1,500 was put into place. It simply is not true

that institutions consider the availability of federal aid when setting their tuitions. (In many states, of course, tuition is set by legislatures, not the colleges.) Community colleges are pleased to report that this strong Congressional support for the Pell Grant program has translated into increased access. In fact, the Pell Grant recipient pool increased by almost one million students, to 4.9 million, over just the last two years.

Lastly, it may be that certain factors endemic to the academic enterprise cause the cost of educating students to rise at a faster rate than most other goods and services. For better or worse, college is a labor-intensive enterprise in which the application of technology to achieve productivity gains is not possible to the degree that it is in manufacturing and even other service industries. And the cost of technology itself is dear. However, community colleges strive to keep their costs of education as well as the tuitions they charge at levels that allow for widespread access. Their average cost of educating a student is about 60% that of educating a student at a public four-year institution.

College Preparation

As Congress looks at the state of higher education, it should focus on college preparation. College is the key to the American dream, but not all students are given the same tools to take advantage of it. Academic achievement from the earliest ages remains strongly tied to economic background. Numerous studies show that college participation is related to students taking rigorous high school curriculums. Hopefully, reforms in elementary and secondary education

will result in greater numbers of students taking more challenging academic coursework and succeeding at it.

More than any other sector of higher education, community colleges pay the price for under-prepared students. This is becoming ever more the case as four-year institutions ratchet up their admissions standards. Community colleges are open-door institutions, but that is not the same thing as allowing students to enroll in the program of their choice. Community colleges routinely undertake assessments of all new students so that they can determine their readiness for specific programs. They devote large amounts of resources to providing education designed to ready students for their offerings. Some of this is delivered to recent high school graduates, while much of it is provided to individuals who have been out of school for years. Remedial math is more frequently required than reading or writing; the need for these services is concentrated in urban areas.

Howard Community College has benefited greatly from a TRIO Student Support Services grant. The program has had a tremendously beneficial impact on the ability of 225 eligible students to complete their programs. Over two-thirds of the students are low income, first-generation college students and/or students with disabilities. 42%-47% are minority students (compared to HCC's 35% overall), and 60% of all the students are low-income. All of these students have a need for academic support in personal, career and retention counseling as well as individualized advising and tutoring, help with improving study skills, leadership development and development of self-advocacy skills. Even though this program serves a

population that has the most barriers to academic success, the program consistently demonstrates its effectiveness by meeting and/or exceeding a set of measurable objectives.

For community colleges, it is not just a matter of selecting the best students but bringing out the best in all students who apply themselves in our colleges. The federal government is a big element in the fulfillment of our mission.

AACC is pleased to have the opportunity to present this testimony to the Committee, and looks forward to working cooperatively with you over the coming months.

Committee on Education and the Workforce

Witness Disclosure Requirement – "Truth in Testimony"
Required by House Rule XI, Clause 2(g)

Your Name: MARY ELLEN DUNCAN		
1. Will you be representing a federal, State, or local government entity? (If the answer is yes please contact the committee).	Yes	No X
2. Please list any federal grants or contracts (including subgrants or subcontracts) which you have received since October 1, 2000: Attached		
3. Will you be representing an entity other than a government entity?	Yes	No X
4. Other than yourself, please list what entity or entities you will be representing: American Association of Community Colleges.		
5. Please list any offices or elected positions held and/or briefly describe your representational capacity with each of the entities you listed in response to question 4: None		
6. Please list any federal grants or contracts (including subgrants or subcontracts) received by the entities you listed in response to question 4 since October 1, 2000, including the source and amount of each grant or contract:		
7. Are there parent organizations, subsidiaries, or partnerships to the entities you disclosed in response to question number 4 that you will not be representing? If so, please list:	Yes	No X

Signature: Mary Ellen Duncan Date: 5-9-03

Please attach this sheet to your written testimony.

Competitive Grants - Received July 1, 2001 - June 30, 2002

Project	Description	Grantor	Amount of Award	Start Date	End Date
Consolidated Adult Education & Literacy Services Program	Teach adults basic skills including reading, writing, math, conversation and job readiness.	Maryland State Department of Education	$126,039	7/1/2001	6/30/2002
Displaced Homemakers (Career Links)	Provide support services and limited financial assistance to displaced homemakers over the age of 30.	Maryland State Department of Human Resources	$15,757	7/1/2001	6/30/2002
Student Support Services (TRIO)	Federal program to offer support to developmental students.	U. S. Department of Education	$296,307	9/1/2001	8/31/2002
Community Development Block Grant (CDBG) *	Provide child care training program for senior staff and group leaders.	Howard County, Maryland	$39,800	7/1/2001	6/30/2002
Community Outreach - Community Development Block Grant (CDBG) *	For Pinnacle Career Resources, Inc. to provide intensive career coaching, career preparation training and employment referral services.	Howard County, Maryland	$113,400	7/1/2001	6/30/2002
Community Development Block Grant (CDBG)*	Establish a Certified Nursing/Geriatric Assistant to Licensed Practical Nurse Program (CNA/GNA to LPN)	Howard County, Maryland	$97,328	7/1/2001	6/30/2002
Maryland Articulation Partnership for Teachers	Implement science and math courses for elementary education majors through a partnership with Prince George's Community College and eight other community colleges funded by National Science Foundation (NSF).	Prince George's Community College	$1,450	7/1/2001	6/30/2002
Computer, Science, Engineering and Math (CSEMS)	Provide 25 scholarships for Computer, Science, Engineering, Computer Support Technology and Math students from 2002-2004.	National Science Foundation (NSF)	$171,811	7/1/2001	6/30/2004
Tech Prep Program	Partnership with Howard County Public Schools.	Maryland State Department of Education	$35,750	7/1/2001	6/30/2002
Johns Hopkins Research Projects Administration	Design a one-day workshop for regional high school math, science and technology teachers, provide a web registration process & conduct satisfaction survey.	NSF/Johns Hopkins University	$35,773	12/1/2001	6/30/2002

* Funds granted to HCC Educational Foundation, Inc.
All other funds granted to HCC

Competitive Grants - Received July 1, 2000 - June 30, 2001

Project	Description	Grantor	Amount of Award	Start Date	End Date
Community Outreach - Community Development Block Grant (CDBG) *	For Pinnacle Career Resources, Inc. to provide intensive career coaching, career preparation training and employment referral services.	Howard County, Maryland	$96,750	12/13/2000	6/30/2001
Campus Day Care Tuition *	Community Development Block Grant-to pay tuition for child care for low and moderate income HCC students.	Howard County Department of Social Services	$90,000	10/1/2000	6/30/2001
Children's Learning Center *	Community Development Block Grant-to pay for professional services.	Howard County Department of Social Services	$66,650	10/1/2000	6/30/2001
Community Development Block Grant (Gap Coverage)*	To enable the college to hire a project manager to launch a Child Care Training program for senior staff and group leaders.	Howard County, Maryland	$1,480	5/1/2001	6/30/2001
Community Development Block Grant (Gap Coverage)*	To enable the college to hire a project manager to launch a Certified Nursing/Geriatric Assistant to Licensed Practical Nurse Program.	Howard County, Maryland	$4,800	5/1/2001	6/30/2001

Competitive Grants - Received July 1, 2002 - June 30, 2003

Project	Description	Grantor	Amount of Award	Start Date	End Date
Student Support Services (TRIO)	Federal program to offer support to developmental students	U. S. Department of Education	$315,046	9/1/2002	8/31/2003
Tech Prep Program	Partnership with Howard County Public Schools	Maryland State Department of Education	$36,500	7/1/2002	6/30/2003
Advanced Technology Educationd (ATE) Planning	To provide funds to start Information Security curriculum planning and gather partners for the ATE NSF proposal	National Science Foundation/Johns Hopkins University	$18,248	7/1/2002	6/30/2003
Community Development Block Grant (CDBG) for Micro-Enterprize*	An agreement for the Office of Continuing Education to provide training for Certified Nursing Assitants.	Howard County, Maryland	$15,000	7/1/2002	6/30/2003
Community Development Block Grant (CDBG) for Micro-Enterprize	An agreement for the Office of Continuing Education to provide training for Certified Nursing Assitants.	Howard County, Maryland	$7,000	1/14/2003	6/30/2003
Perkins/Vocational Education	Support for vocational education and state planning	Maryland State Department of Education	$186,283	7/1/2002	6/30/2003

* [illegible] Foundation, Inc.
All other funds granted to HCC

Non-Competitive Grants - July 1, 2001 - June 30, 2002

Project	Description	Grantor	Amount of Award	Start Date	End Date
Perkins/Vocational Education	Support for vocational education and state planning.	Maryland State Department of Education	$183,539	7/1/2001	6/30/2002
Pell Grant **	Federal grant funds for students who demonstrate financial need.	U.S. Department of Education	$1,696,499	7/1/2001	6/30/2002
Supplemental Educational Opportunity Grant (SEOG)	Federal grant funds for students who demonstrate financial need.	U.S. Department of Education	$80,474	8/25/2001	5/16/2002
Federal Work Study	Federal funding which provides jobs for students with financial need.	U.S. Department of Education	$148,280	7/1/2001	6/30/2002

Federal Grants Received by American Association of Community Colleges (AACC) Since October 1, 2000

1) National Science Foundation, Advanced Technological Education Program. The award totals $1,767,569 from October 1, 2000, and expires May 31, 2005.

The award is designed to encourage the development of ATE-related programs in more community colleges, and to share information about the value, accomplishments, and community impact of the ATE program in and beyond the education field. In short, the grant activities include hosting three national conferences and other presentations and meetings, a mentoring program, a cybersecurity workshop and report, publications, and national dissemination.

2) Department of Health and Human Services, Centers for Disease Control.

09/25/00 - 09/24/01	$290,000
09/25/01 - 09/24/02	$261,000
09/25/02 - 03/31/03	$130.120
04/01/03 - 03/31/04	$261,499

Bridges to Healthy Communities project: "Helping National Organizations to Enable Postsecondary Institutions to Prevent HIV Infection and Other Important Health Problems Among Youth."

3) National Science Foundation--$2 million grant since October 1, 2000.

To develop a program focusing on K-12 science, math and technology teacher preparation at two- and four-year colleges and universities.

4) Corporation for National and Community Service, Learn and Serve America program: $1.2 million since October 1, 2000.

The goals of the grant are to integrate service learning into the institutional climate of community colleges, and to increase the number, quality, and sustainability of service learning programs through an information clearinghouse, data collection and analysis, model programs, training and technical assistance, publications, and referrals. AACC has sub-granted to 21 colleges in this period.

5) Department of Labor—Employment and Training Administration--$195,000 since October1, 2000.

In order to foster exemplary service by community colleges in providing work-related education and training, as well as workforce transition services, the Department of Labor and AACC will jointly provide awards to community colleges on key areas of service by community colleges.

6) Department of Labor—Employment and Training Administration-approximately $1,650,000 since October 1, 2000.

The grant builds on the DOL/AACC partnership to further enhance the capacity of community colleges nationally to respond to workforce training and retraining of dislocated and incumbent workers. The program includes: professional development of faculty through the Workforce Development Institute, a state liaison network to expand the reach of the DOL electronic tools suite and One-Stop Career Centers, and an effort to connect the business community to the educations, skills, and training efforts of community colleges.

APPENDIX D -- WRITTEN STATEMENT OF DR. FRANK NEWMAN, DIRECTOR, THE FUTURES PROJECT, BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND

Dr. Frank Newman
Director
The Futures Project
Brown University

Testimony before
The U.S. House of Representatives
Committee on Education and the Workforce
Washington, DC

May 13, 2003

Higher Education in the Age of Accountability
Frank Newman
Testimony before the Committee on Education and Workforce
United States Congress
Washington, DC May 13, 2003

As the new millennium gets underway, higher education finds itself facing increasingly intense questions about "accountability." What is it for which higher education should be accountable and to whom? Why is this such an issue now?

First, I believe that there is a longstanding mutual commitment between American society and American higher education, an unwritten but powerful compact. Society provides academic freedom, the right to discuss controversial subjects openly, tax exemption and – most importantly – respect and trust. Higher education warrants in return that it will provide students an education that is fair and objective (not an indoctrination) and of the highest quality in order to prepare for a life of workforce and civic participation. Recently, the need to ensure quality (not just espouse it) and efficiency has been added to our responsibilities by the public officials representing the society.

Today, these commitments are more important than ever. Higher education has become more central to the performance of both the economy and the civic development of the community—as every state governor has argued. For the individual, it has become the essential ticket to the middle class. Higher education, in short, matters greatly to society.

At the same time, major flaws in the operation of higher education have become visible in a system long renowned for its quality. Research over the last 40 years has documented that, in general, college students gain in knowledge, intellectual skills and personal development at a rate that substantially exceeds that of non-attendees of comparable promise. More recent research has documented the sizeable premium in lifetime earnings of graduates. Across the globe, American universities and colleges remain the gold standard in the eyes of students, academics and political leaders alike.

However, this success is not without some cracks in the armor. The learning level is strikingly uneven among students, even students at the same institution. The average 5-year institutional graduation rate is approximately 51 percent.[i] Among the lowest income college entrants, an abysmal six percent gain a degree.[ii] As the National Science Foundation has reported, few graduates understand math or science well enough to apply their knowledge to actual problems.[iii] The business community, in a series of reports over the last decade, has identified key skills that graduates lack. A report by the Business-Higher Education Forum, called *Spanning the Chasm*, called for "cross functional skills" such as leadership, teamwork, problem solving, time management, self-management, adaptability, analytical thinking, and global consciousness.[iv] The political community (particularly state governors and legislators) has seconded those needs and added the urgency of addressing the cost and efficiency of the education process. In

other words, ours remains the best higher education system in the world, but one with important issues that must be addressed.

Can these concerns be addressed? Is it realistic to expect improvement across the face of the system? I believe the answer is yes, absolutely. For one thing, the last several decades have seen a significant gain in the research on pedagogy, about how students learn. We have the knowledge of how to structure the teaching and learning that goes on so as to greatly increase the quality—and the excitement and enjoyment – of the learning experience—if we so choose.

The steady advance of information and communication technology adds to that opportunity. New software is demonstrating a growing capacity to improve the effectiveness, the excitement and most recently the efficiency of learning. While, for many reasons, the application of technology has moved ahead at a rate that seems slow to many, American universities and colleges are still well ahead of the rest of the world. The opportunity is there for the United States to, once again, play a leading role in the advance of higher education and gain a significant competitive advantage.

While the low rates of attainment and graduation are widespread across the system, there are also a number of programs that have successfully addressed the problems—enough to make plain that these are not simply one shot solutions, but approaches that can be applied broadly. Institutions such as the University of Texas at El Paso, the Community College of Denver and LaGuardia Community College in New York City have demonstrated that, with the proper programs in place, low-income students can graduate at the same rate as the national average.

In general, these are the approaches that have been proven to work for such students: early outreach programs, carefully structured retention programs, academic support programs, effective remedial programs, early warning systems that identify students in trouble, learning communities that promote active learning, and replacing loans with grant—all of these programs have been shown to increase graduation rates for first-generation students, low-income students, and students of color. Colleges and universities need to create and foster a campus culture that is welcoming and supportive of all students. Faculty and staff should reflect the color and diversity of the student body. *All* students need role models with whom they can identify.

Most important, institutions must move beyond an isolated program serving a limited number of students to an institutional commitment to this concept: all students can and should learn.

With regard to the measurement of learning, it is interesting to note that all universities do regularly assess the depth of learning, intellectual skills and the ability to apply those intellectual skills to real problems of students they care about most – their Ph.D. candidates – through orals, dissertations and defense of dissertation. This is, of course, a complicated, labor intensive and expensive process hardly appropriate for bachelor's

candidates. But it does make plain that it can be done and that within the academic community we, deep down, believe it *should* be done.

At the undergraduate level, slowly, more institutions are assessing learning. The techniques used, pioneered by such institutions as Alverno College, the University of Tennessee or Truman State University, focus on critical areas of intellectual skills. The Illinois Board of Higher Education has recently concluded an agreement with its institutions to begin the regular assessment of learning. Higher education is far more diverse in its subject matter and student abilities, and more complex to assess than elementary and secondary education. Still, it is clearly possible to do so.

Two interesting, and large, examples of this are the British Open University (non-profit, public) and University of Phoenix (for-profit). Each of these large and complex institutions assesses the learning of every student, for every course. They also use these assessments to evaluate each instructor in terms of how well students are learning—not based on the instructor's grading but on the independent assessment.

So it is clear, learning can be assessed in a meaningful and economical way. As the use of technology advances, our ability to improve the quality and sophistication of assessment while keeping the costs down will grow.

Why, then, aren't these practices widespread? The Futures Project recently ran a series of focus groups with state legislators and with other political leaders and a series with university and college presidents. While the political leaders were quite clear that these problems are important, in fact critical, the presidents saw them as minor, small in comparison to the more urgent problems of inadequate funding and overregulation.

It is important to put the funding problem in perspective. This year, and surely next, there is indeed a difficult and painful funding problem facing the public colleges and universities. The cuts in state appropriations are likely to do real harm to higher education. However, this has not been the case over the longer haul. State appropriations to higher education actually increased over the last two decades, even on an after-inflation and a per-student basis. In the past decade alone (1993 to 2003), the amount spent on higher education by state governments increased on average by 60.2 percent.[v] What clearly is the case is that, even as state funding was expanding, colleges and universities were aggressively expanding other sources of revenue (tuition, sponsored research, corporate contracting, fundraising).

Tuition, during that same time, grew rapidly. In the first half of the 20th century, college costs rose slower than family income. As a consequence tuition remained affordable through the 1950's. Public college tuitions began to increase in the 1960s and 1970s, and then took off in the early 1980s.[vi] Since 1980, the average cost of four years of college has increased at a rate more than 110 percent *over inflation*.[vii] Between 2000-01 and 2001-02, tuition rose 5.5 percent at private colleges and 7.7 percent at the publics.[viii]

It is not, therefore, that starvation budgets from the states have driven the institutions to constant tuition increases in excess of inflation. It is rather that the subject hasn't been addressed. Academics often argue that to even think in terms of efficiency is to fundamentally misunderstand the nature of the collegiate experience. In terms of cost, there is some new and encouraging information. In several settings, universities have found innovative ways to reduce the costs of teaching while improving student learning. Perhaps the most useful experiments were conducted by the Pew Grant Program in Course Redesign, funded by the Pew Charitable Trusts and run by Carol Twigg. The emphasis was on large, introductory courses and reducing cost, improving learning, and increasing student satisfaction. In the first round involving ten universities, every project reaped cost savings ranging from 16% to 77%, with an average of 33%. Half of the institutions also reported improvements in learner outcomes (no institutions reported reductions in learner outcomes), and all of the participants remain committed to maintaining their redesigned courses.[ix]

Two powerful traditions within the academy make the spread of these common sense, workable and needed changes difficult. The first is the rhetoric/reality gap. Over the years, we have become expert at fending off criticism by a now well polished argument abut the importance of higher education, the danger to the process (and to academic freedom) of external meddling and the mystic and immeasurable basis of a liberal education. We need to move out from behind these defenses and openly acknowledge and work at correcting our problems. In an encouraging step, the National Association of Independent Colleges and Universities has begun surveying its members to determine what they are doing to begin to address these issue of accountability.[x]

The second is that the faculty reward structure remains focused on scholarship and publication, not teaching, even at many institutions that are not truly research universities (though not at community colleges). While we often criticize faculty for their lack of attention to the opportunities to improve teaching, they are simply acting logically in light of the current structure.

There is a further force for change that must gain our attention. Higher education is moving rapidly from a regulated public sector toward a market. This change is going on right across the globe. States—and governments elsewhere—are giving universities and colleges more autonomy but, at the same time, insisting on more clearly defined accountability. How will the institution measure and improve learning: how will it increase retention and graduation, how will it report its performance? Here, and aboard, governments are authorizing private, for-profit institutions to give degrees up to and including law and Ph.D degrees. The goal is to use the force of the market to bring a new sense of responsiveness and accountability.

Markets, however are not easily tamed. The gains can be great (for example, the market may, for the first time, be forcing some higher education institutions to examine their cost structure and efficiency) but the risks can be great as well (for example, focusing student aid on those who need it least). There is, therefore, an urgency to understanding how the

market is emerging and how government policy can structure it to serve the public purposes and restore the great compact between higher education and the public.

Federal efforts should, I believe, be focused on helping the states (who are the owners and operating of the public institutions that enroll three quarter of the students to create an effective market). The history of both federal and state efforts demonstrates that using regulations to achieve accountability rarely works except in extraordinary cases where government is prepared to use its full power and authority as in the desegregation of higher education or the Title IX programs aimed at ending of gender discrimination.

The federal government has a long history of collecting analyzing and marketing available information. Today, it is more needed than ever—not huge amounts of undigested information but carefully gathered and analyzed information on the key issues. Most important of these are learner outcomes and retention. Two new voluntary efforts, the National Survey of Student Engagement and the Community College Survey of Student Engagement have been measuring activities that have been shown to relate to student learning, such as the amount of student engagement with faculty both in class and outside of class. Perhaps nothing the federal government can do would be as useful as focusing on ensuring that the information necessary to allow the higher education market to serve the public is available. The Futures Project has been studying the impact of the availability of information on institutional accountability as states have moved toward performance based budgeting and performance based funding on institutional performance. While it is still early in terms of the availability of the information, the one thing that is a clear is that there is a correlation between open information and institutional performance.

A second opportunity is for the federal government to build on its greatest policy success—the development of the peer reviewed, competitive grant program for university research. Until this program was introduced in 1945, the United States was an also ran in research. Since the system's introduction and growth, American university research has become the leading research in essentially every field to the huge benefit not only of this country but the entire world. It is time to think abut how this approach can be applied to higher education two other great tasks—teaching and learning and service to the community. The advantage of the grant system is that the institutions respond, quality and efficiency are rewarded, innovation is encouraged—without the federal government meddling in the institution's internal affairs. The federal government, incidentally, is better at this than the states as it is better able to resist institutional pressures that undercut the competitive grant system.

A third opportunity also lies in a traditional area of federal involvement—helping the least advantaged students gain a college education. There are two particular areas where the federal capacity can help overcome the crises of low retention and attainment noted above. Better information, in the form these students can use and in the settings where it will reach them, is essential. This includes key information they need as early as middle school. Affluent students already have access to the key information they need which

gives them a great advantage. The other key federal role is financial aid. The federal forms of aid are the last remaining bulwark of need—based aid and expanding this is urgent.

What could be better, in a world in which a college education matters so much, for a growing competition to break out over how much students are learning rather than the current competition over prestige?

---

[i] Barton, P. E. *The Closing of the Educational Frontier?* Educational Testing Service, September 2002.
[ii] Advisory Committee on Student Financial Assistance, *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity,* Washington, DC, 2001. Pg. 5.
[iii] The National Academy of Sciences, *Mathematical Proficiency For All Students.* [http://www4.nationalacademies.org/WebExtra.nsf/1924512cf0cbdc53852567a1006fac27/c4c82ee2402dcdb4852569ca0074c627?OpenDocument]. Accessed May 11, 2003.
[iv] *Spanning the Chasm: A Blueprint for Action.* Business-Higher Education Forum, September 1999.
[v] Grapevine Project. "50 State Summary Table." [http://www.coe.ilstu.edu/grapevine/50state.htm]. Accessed May 12, 2003; see also Callan, P. M. *Coping with Recession: Public Policy, Economic Downturns and Higher Education.* The National Center for Public Policy and Higher Education, 2002, 6.
[vi] Mumper, M. "The Future of College Access: The Declining Role of Public Higher Education in Promoting Equal Opportunity," *Annals of the American Academy of Political and Social Science* 585 (Jan. 2003) 101.
[vii] College Board. *Trends in College Pricing* (Washington, D.C.: 1999) 3. For information on recent tuition increases, see Trombley, W., "Tuition is Rising as States Face Budget Difficulties." In National Center for Public Policy and Higher Education. *Measuring Up 2002.* San Jose, CA: 2002, 60-63.
[viii] Brownstein, Andrew. "Tuitions Rise Sharply, and This Time Public Colleges Lead the Way." *Chronicle of Higher Education* Nov. 2, 2001, p.A52.
[ix] Twigg, C.A. *Improving Learning and Reducing Costs: Lessons Learned from Round I of the Pew Grant Program in Course Redesign.* New York: Center for Academic Transformation, Rensselaer Polytechnic Institute, 2003.
[x] National Association of Independent Colleges and Universities, *Colleges, Universities, and Accountability.* [http://www.naicu.edu/accountability/Printout%20Cover.htm]. Accessed May 1, 2003.

APPENDIX E -- ADDITIONAL MATERIAL SUBMITTED BY DR. FRANK NEWMAN IN RESPONSE TO CHAIRMAN BOEHNER'S REQUEST

Improving Learning and Reducing Costs

Lessons Learned from Round I of the Pew Grant Program in Course Redesign

By Carol A. Twigg

Center for Academic Transformation
at Rensselaer Polytechnic Institute

Improving Learning and Reducing Costs: Lessons Learned from Round I of the Pew Grant Program in Course Redesign
by Carol A. Twigg
© 2003 Center for Academic Transformation

Center for Academic Transformation
Rensselaer Polytechnic Institute
4th Floor, Walker Lab
110 8th Street, Troy, NY 12180
518-276-6519 (voice)
518-695-5633 (fax)
http://www.center.rpi.edu

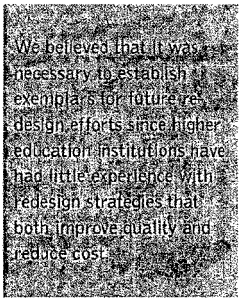
Improving Learning and Reducing Costs: Lessons Learned from Round I

The Center for Academic Transformation at Rensselaer Polytechnic Institute is conducting a Program in Course Redesign with support from the Pew Charitable Trusts. The purpose of this institutional grant program is to encourage colleges and universities to redesign their instructional approaches using technology to achieve cost savings as well as quality enhancements. Redesign projects focus on large-enrollment, introductory courses, which have the potential of impacting significant student numbers and generating substantial cost savings. The Center has awarded $6 million in grants to thirty projects in three rounds of ten projects each.

The first round of redesign projects began in July 1999 and concluded in July 2001. (Detailed descriptions of the ten redesigns and the outcomes each achieved can be found at www.center.rpi.edu/PewGrant/rd1award.html.) The ten institutions and the courses they redesigned are:

- Indiana University-Purdue University at Indianapolis (IUPUI): Sociology
- Penn State University: Elementary Statistics
- Rio Salado College: Mathematics
- University at Buffalo (UB): Computer Literacy
- University of Central Florida (UCF): American Government
- University of Colorado-Boulder (UC): Astronomy
- University of Illinois at Urbana-Champaign (UIUC): Statistics
- University of Southern Maine (USM): Psychology
- University of Wisconsin-Madison (UW): Chemistry
- Virginia Tech: Linear Algebra

Round I was constructed as a pilot for the overall program. Rather than opening the program to a national competition, the Center staff selected representatives from twenty institutions that exhibited a high degree of readiness to develop proposals. Ten of the twenty institutions



were selected to receive grants, and they began their redesign projects in fall 1999. Our intention was to teach the principles of redesign that the Center espouses to those institutions that we considered most "ready" and to work closely with them as they developed proposals. We believed that it was necessary to establish exemplars for future redesign efforts since higher education institutions have had little experience with redesign strategies that both improve quality and reduce cost.

What follows is an analysis of the results of the Round I projects, with a focus on the most important quality improvement and cost reduction techniques used in the redesigns, the implementation issues they encountered, and the projected sustainability of the course redesigns. The Center will produce a similar analysis for Rounds II and III when they have been completed.

Quality Improvement Strategies and Successes

Five of the ten projects reported improved learning outcomes. Four reported no significant difference, and one was inconclusive. Among the findings were the following:

- At IUPUI, students in redesigned sections had significantly higher (.10 level) grades.
- Redesign students at Penn State outperformed traditional students at a statistically significant level on a content-knowledge test: 60 percent correct in the traditional format, and 68 percent in the redesigned classes. Students in the redesigned classes also demonstrated a greater understanding of a number of critical statistical concepts.
- At UB, the redesign resulted in an increase in the percentage of students earning a grade of A- or higher, moving from 37 percent to 56 percent. The mean grade earned in the course increased by one-third of a letter grade, from a C+ to a B-.
- At UCF, students in the traditional format posted a 1.6-point improve-

ment on a content examination, whereas at 2.9, the mean change for students in the redesigned course was almost double that amount.

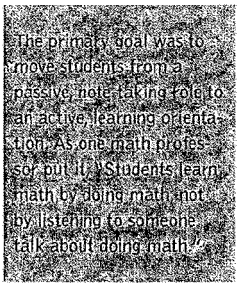
- At USM, the redesign resulted in significant improvements in overall understanding of course content as measured by pre- and post-course assessment of important concepts.

Six of the ten projects measured changes in drop-failure-withdrawal (DFW) rates; five showed improvement. Among the findings were the following:

- At Penn State, the DFW rate decreased from a rate of 12 percent in the traditional course to 9.8 percent in the redesigned course.
- IUPUI reduced the DFW rate from 38.9 percent to 24.8 percent.
- Rio Salado increased completion rates from 59 percent to 64.8 percent.
- At USM, a smaller percentage of students received failing grades, moving from 28 percent in traditional sections to 19 percent in the redesigned course.
- At Virginia Tech, the percentage of students completing the course and achieving grades of D- or better improved from an average of 80.5 percent to an average of 87.25 percent.

All ten projects made significant shifts in the teaching-learning enterprise, making it more active and learner-centered. The primary goal was to move students from a passive, note-taking role to an active, learning orientation. As one math professor put it, "Students learn math by doing math, not by listening to someone talk about doing math." Lectures were replaced with a variety of learning resources, all of which involved more active forms of student learning or more individualized assistance. When the structure of the course moves from an entirely lecture-based to a student-engagement approach, learning was less dependent on the conveying of words by instructors and more on reading, exploring, and problem solving by students. The following is a list of the most effective quality improvement techniques used by the Round I projects.

- *Continuous Assessment and Feedback.* Six of the projects incorporated automated (computer-based) assessment and feedback into their redesigns. Automating assessment and feedback enabled both repetition (student practice) and frequent feedback, pedagogical techniques that have repeatedly been documented to facilitate learning. Students were regularly tested on assigned readings and homework using short quizzes that probed their preparedness and conceptual understanding. These low-stakes quizzes motivated students to keep on top of the course material, structured their studying and encouraged them to spend more time on task. Online quizzing encouraged a "do it till you get it right" approach: students were allowed to take quizzes until they mastered the material.

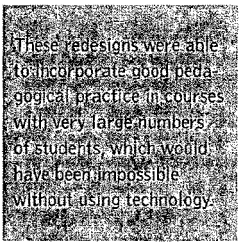


Quizzes also provided powerful formative feedback to both students and faculty members. Faculty could detect those areas where students were not grasping concepts, thereby enabling corrective actions to be taken in a timely manner. Students received diagnostic feedback that pointed out why an incorrect response was inappropriate and directed them to material that needed review. Since students were required to complete quizzes before class, they were better prepared for higher-level activities in class. Consequently, the role of the instructor shifted from one of introducing basic material to one of reviewing and expanding what students had already mastered.

- *Increased Interaction among Students.* Seven of the projects took advantage of the Internet's ability to provide useful and convenient opportunities to increase discussion among students. Students in large lecture classes tend to be passive recipients of information, and student-to-student interaction is often inhibited by class size. In smaller discussion forums, students can participate actively. UCF and IUPUI created small online discussion groups in which students could easily contact one another. Students were able to benefit from participating in the informal learning communities that were created. Software allowed instructors to monitor the frequency and the quality of students' contributions to discussions more easily and carefully than in a crowded classroom.

Five of the projects replaced lecture time with individual and small-group activities that took place in computer labs, staffed by faculty, graduate teaching assistants (GTAs) and/or peer tutors. In several instances, increased lab hours enabled the students to have more one-on-one assistance. Students welcomed the reduction in lectures and the opportunity to work in groups to apply what they had learned from the resource materials. Students learned from each other and increased their skills in working collaboratively on projects. In addition, peer pressure within groups was a powerful incentive for students to keep up with their work.

- *Online Tutorials.* UW and Virginia Tech were the most sophisticated users of online tutorials. Building on substantial experience in using and developing interactive materials, UW has developed thirty-seven Web-based instructional modules in chemistry as of July 2001. Each tutorial module leads a student through a topic in six to ten interactive pages. When the student has completed the tutorial, a debriefing section presents a series of questions that test whether the student has mastered the content of that module. UW also incorporated interactive chemistry materials created by Stanley Smith at UIUC. Students found these online tutorials to be very helpful; they particularly liked the ability to link directly from a problem they had difficulty with to a tutorial that helped them learn the concepts needed to solve the problem. Many reported that they found the online material much more accessible than the textbook. Virginia Tech also used a variety of Web-based course delivery techniques such as tutorials, streaming video lectures and lecture notes as the main tools for presenting course materials. Consisting of exercises with solutions that were explained in built-in video clips, tutorials could be used at home or at a campus lab. Tutorials have taken over the main instructional role: 84 percent of the students reported, "The computer presentations explain the concepts well." Students at UB also found the self-paced tutorials provided by the textbook publisher to be effective and easy to use, and they reported that the materials enhanced their learning.



- *Undergraduate Learning Assistants (ULAs).* UC and UB employed ULAs in lieu of GTAs. Both universities found that ULAs turned out to be better at assisting their peers than GTAs because of their understanding of the course content, their superior communication skills and their awareness of the common misconceptions about computers held by the students. At UC, the instructor met weekly with the ULAs and discussed in detail what was working and where the students were having difficulty. The feedback from these weekly meetings gave the instructor a much better sense of the class as a whole and of the individual students in it than would be possible with a class of 200 students.

Those knowledgeable about the impact of pedagogy on improved student learning will find nothing surprising in this list. Among the well-accepted "Seven Principles for Good Practice in Undergraduate Education" developed by Arthur W. Chickering and Zelda F. Gamson in 1987 are "encourage active learning," "give prompt feedback," "encourage cooperation among students," and "emphasize time on task." Good pedagogy itself has nothing to do with technology. What is significant about these redesigns, however, is that they were able to incorporate good pedagogical practice in courses with very large numbers of students, which would have been impossible without using technology.

Cost Reduction Strategies and Successes

There are a variety of ways to reduce costs and, consequently, a variety of instructional models that can be developed depending upon institutional circumstances. The approach most favored by the Round I projects was to keep student enrollments the same while reducing the instructional resources devoted to the course. Seven of the ten projects employed this approach, which makes sense when student demand for the particular course is relatively stable.

The other three projects—IUPUI, USM and Rio—increased student enrollments with little or no change in course expenditures. In the first two instances, section size was increased; in Rio's case, one faculty member, who had traditionally taught one section, handled four

sections simultaneously with the help of a course assistant. This technique is especially appealing to institutions that face greater student demand than can be met using conventional methods.

A third way to decrease costs is by reducing the number of repetitions required to pass the course. In many community colleges, for example, it takes an average of 2.5 enrollments to pass introductory mathematics courses. This means that the institution and the student must spend 2.5 times what it would cost to pass the course on the first try. Five of the ten projects showed a decrease in drop-failure-withdrawal (DFW) rates, ranging from 10 to 20 percent. Of those five, only UCF calculated the cost savings resulting from higher retention rates. Clearly, the other four could calculate those savings, which, in turn, would produce a higher cost-per-student savings than we report.

What were the most effective cost savings techniques employed by the Round I projects? Since the major cost item in instruction is personnel, reducing the time faculty and other instructional personnel spend and transferring some tasks to technology-assisted activities is key. By reducing the number of hours spent by faculty and others while keeping credit hours constant with no diminution of learning results, all ten projects were able to reduce costs while maintaining quality. The following is a list of the predominant techniques used by the projects.

- *Online Course Management Systems.* Course management systems played a central role in eight of the ten redesigns. Some projects used commercial products like WebCT and Blackboard; others used homegrown systems created for campuswide use or specifically for the redesigned course; and others used instructional software that included an integrated management system. Using a course management system radically reduced (or eliminated) the amount of time faculty spent on nonacademic tasks such as recording, calculating and storing grades; photocopying course materials; posting changes in schedules and course syllabi; sending out special announcements; and transporting syllabi, assignments, and examinations from one semester to the next.
- *Online Automated Assessment of Exercises, Quizzes, and Tests.* Five of the ten projects used automated grading of exercises, quizzes or tests. Some used the quizzing features of commercial products like WebCT; others used homegrown systems created for campuswide use like UIUC's Mallard; and others used specific quizzing software like TEST-PILOT. The amount of time faculty and/or GTAs spent on the time-consuming process of preparing quizzes as well as on grading, recording and posting results was sharply reduced. Automated testing systems, comprised of large databases of questions, enabled individualized tests to be easily generated.
- *Online Tutorials.* Online tutorials at UW helped structure discussion sections by having students come to class prepared to ask questions. This meant less preparation time for GTAs. Virginia Tech's use of similar online course delivery techniques enabled a radical reduction in teaching staff. Individual faculty members were no longer required to present the same content in duplicative efforts, nor were they required to replicate exercises and quizzes for each section.
- *Shared Resources.* When the whole course (or more than one section) is redesigned, substantial amounts of time that faculty spend developing and revising course materials and preparing for classes can be considerably reduced by eliminating duplication of effort. Penn State constructed an easily navigated Web site that contained not only the management aspects of the course but also a large number of student aids and resources (solutions to problems, study guides, supplemental reading materials for topics not otherwise treated in the text, self-assessment activities, etc.). Having assignments, quizzes, exams and other course materials on a community Web site saved a considerable amount of instructional time.
- *Staffing Substitutions.* UC and UB found that using ULAs in lieu of GTAs was a key cost-saving device. By replacing expensive labor (faculty and graduate students) with relatively inexpensive labor, the teams increased the person-hours devoted to the course while cutting costs. Rio Salado employed a course assistant to address nonmath-related questions (which characterized 90 percent of all interactions with students!) and to monitor student progress. This freed the instructor to handle more students and to concentrate on academic rather than logistical interactions with students. Penn State also used ULAs to grade homework assignments, relieving GTAs of this chore, as well as to assist in labs, thus reducing the number of GTAs required for the course.
- *Reduction of Space Requirements.* UCF wanted to utilize classroom space more efficiently and thus

reduce the amount of rented space needed by the university. Delivering portions of a course via the Web as a substitute for face-to-face classroom instruction saved precious classroom space. Two or three sections/courses could be scheduled in the same classroom where only one could be scheduled before. UCF was the only project that detailed the cost savings resulting from reduced space costs, but any of the projects that reduced contact hours could calculate those space savings as well.

In regard to cost savings, the redesign methodology was an unqualified success. All ten of the Round I projects reduced their costs. Some saved more than they had planned; others saved less. The Round I projects planned to reduce costs by about 37 percent on average, with a range of 20 to 71 percent. They actually reduced costs by 33 percent on average, with a range of 16 to 77 percent. Final results from Round I show a collective savings of $1,006,506 for ten courses, compared with the original projection of $1,160,706. (For a detailed comparison of planned versus actual savings, please see www.center.rpi.edu/PewGrant/Rd1saving.html.)

Why is there such a large range of savings among the projects? The differences are directly attributable to the different design decisions made by the teams, especially regarding what to do with the faculty time that was saved. Those with a lower percentage of savings tended to redirect rather than reallocate saved faculty time; in other words, they kept the total amount of faculty time devoted to the course constant but changed the nature of how the faculty spent their time (e.g., lecturing vs. interacting with students.). Others radically reduced the amount of time non-faculty personnel like GTAs spent but kept the amount of faculty time constant. Those decisions cut down on the total savings. In contrast, by reallocating faculty time to other courses and activities, Virginia Tech showed the most substantial cost savings. Other projects could have saved more with no diminution in quality had they made different design decisions.

Higher education has traditionally assumed that high quality means low student-faculty ratios and that large lecture-presentation techniques are the only low-cost alternatives. By using technology-based approaches and learner-centered principles in redesigning their courses, these ten institutions have demonstrated a way out of higher education's historical trade-off between cost and quality. Some of the projects relied on asynchronous, self-paced learning modes; others used a traditional, synchronous classroom setting but with reduced student/faculty contact hours. Both approaches considered how best to use all available resources—including faculty time and technology—to achieve the desired learning objectives. Moving away from the current credit-for-contact mode of instruction and focusing on how to produce more effective and efficient learning by students were fundamental to success.

> When project teams encountered implementation problems, in almost every instance the problem was directly related to a lack of readiness.

Implementation Issues

As part of the grant application process, the Center required institutions to assess and demonstrate their readiness to engage in large-scale redesign by responding to a set of institutional-readiness criteria and to a set of course-readiness criteria, both developed by Center staff. (For a full description of the program's readiness criteria, please see www.center.rpi.edu/PewGrRdi.html.) Our experience in the program has taught us that some institutions, because of their prior investments and experiences, better understand what is required to create these new learning environments and are more ready to engage in redesign efforts. In addition, just as some institutions are more ready than others to engage in large-scale redesign, some faculty members and some courses are more ready than others to be the focus of that redesign effort. Prior experiences with technology-mediated teaching and learning and numerous attitudinal factors give them a head start on the process.

The experiences of the Round I projects corroborated the importance of readiness in completing a successful redesign project. The ten institutions involved in Round I exhibited a high degree of readiness, and all successfully completed their redesigns. When project teams encountered implementation problems, however, in almost every instance the problem was directly related to a lack of readiness. The description of implementation problems that follows is organized in relation to the program's readiness criteria; the italicized portions are taken from commentary about each criterion included in the grant program guidelines.

- *Course Readiness Criteria #3.* Decisions about curriculum in the

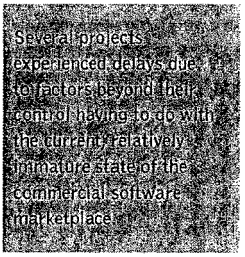
department, program, or school must be made collectively.

Decisions to engage in large-scale course redesign cannot be left to an individual faculty member. An institution's best chance of long-term success involves not a single individual but rather a group of people who, working together, are committed to the objectives of the project. Indicators that the faculty in a particular unit are ready to collaborate include the following: they may have talked among themselves about the need for change; they may have decided to establish common learning objectives and processes for the course in question; and they may have instituted pieces of a common approach, such as a shared final examination.

The biggest implementation issue for several of the projects was achieving consensus among all faculty teaching the course about a variety of issues. Course development is usually done by a single faculty member working on a single course, and the redesign of a single course by multiple faculty presented several challenges. These challenges included gaining agreement on core course outcomes and instructional formats, reaching consensus on textbook selection and topic sequences, and setting up a common Web site. Since instructors were not used to talking about such issues, they needed time to work through them. As one team commented, however, this was a "good" problem to have in that it led to exciting discussions and efforts to design a course freed of past conventional wisdom.

Individual faculty readiness, not only departmental or program readiness, needs to be an integral part of the course redesign process. Identifying the "right" faculty members to teach the redesigned courses—that is, those with attitudes open to change and to collaboration—is important. Two of the projects encountered difficulties when they tried to move beyond the initial course designers to enlist other faculty in teaching the redesigned course.

- *Course Readiness Criteria #4.* The faculty must be able and willing to incorporate existing curricular materials in order to focus work on redesign issues rather than materials creation.



Faculty who are willing to use an appropriate blend of homegrown (created by local faculty) and purchased learning materials in a nondogmatic fashion will have a head start. Faculty who are susceptible to the "not-invented-here syndrome"—that is, who believe that they must create everything themselves from scratch—will be consumed with materials development and will add large amounts of time to the redesign process. Courses taught by faculty who are willing to partner with other content providers, whether commercial software producers or other colleges or universities that have developed technology-based materials, make better candidates for a large-scale redesign project.

In several instances, revising previously developed materials, adapting existing materials and developing new materials turned out to be more work than originally anticipated. As one team put it, these activities were both time- and thought-consuming. One team that decided to develop customized course management software, which was a larger task than they anticipated, now believes that it was a mistake not to adopt a standard course management software package.

- *Institutional Readiness Criteria #3.* The institution's goal must be to integrate computing throughout the campus culture.

Unlike institutions that have established "initiatives" without specific milestones, computing-intensive campuses know the numbers. They know the level of availability of network access and the level of personal computer ownership (or availability) for students and faculty on their campuses because their goal is saturation, and the numbers tell them how close they are to achieving that goal. Ubiquitous networked computing is a prerequisite to achieving a return on institutional investment. Until all members of the campus community have full access to IT resources, it is difficult to implement significant redesign projects.

As they ramped up, two of the projects encountered problems in providing adequate laboratory classroom space and equipment to offer the course in the redesigned format. In both cases, computer lab space on campus was scarce. The institutions involved

view these problems as temporary and see three solutions on the horizon: 1) constructing more smart classrooms, 2) adopting wireless solutions in which students bring laptops to traditional classrooms, and 3) using lab facilities in campus housing sites that have experienced a decline in demand as more students bring their own PCs to campus.

- *Institutional Readiness Criteria #7.* The institution must have established ways to assess and provide for learner readiness to engage in IT-based courses.

  Learner readiness involves more than access to computers and to the network. It also involves access to technical support for using navigation tools and course-management systems. Students also need to be aware of what is required to be successful in technology-intensive courses. Making the change from face-to-face instruction to online learning involves far more than learning to use a computer. Many students are set in their ways after a lifetime (albeit brief) of passive instruction. They need preparation in making the transition to more active learning environments.

  Preparing students (and their parents) for changes in the way a course is offered turned out to be an important ingredient for several projects. Students and their home departments were uneasy at best about the new approaches. Inevitable developmental problems like system crashes and data-handling errors became visible targets of dissatisfaction. Issues of perception were addressed successfully through active communication with departments and patient replies to student e-mail messages. Software and hardware problems were resolved through improvements in equipment, programs and system backups, and eventually these problems decreased to near zero. Finally, both novelty and anxiety wore off as succeeding classes of students moved through and the redesigned approaches blended into the teaching and learning scene.

- *Additional Implementation Problems.* Several projects experienced problems and delays due to factors beyond their control having to do with the current, relatively immature state of the commercial software marketplace. Course management software, for example, is being continuously changed and updated. Upgrades can bring problems, especially in situations where the software is being stretched, such as occurred in these projects. Upgrades in software required rechecking online homework and quiz questions and revising online tutorials. Consequently much time was spent redoing course materials that had been developed and tested earlier.

  Similarly, those project teams committed to using instructional software products developed by textbook publishers encountered some problems in adapting the software to meet both faculty and student needs. If a team decided to change texts, for example, they found themselves having to spend considerable time changing linked feedback for students. Some commercial materials that were originally planned to be included in the redesigns were rejected because of perceived low quality or because they were unable to accommodate large numbers of students. (Many software products assume a small class size in contrast to the projects class sizes of more than 1,000.) One team commented that because the off-the-shelf software they used was not as mature as anticipated, their redesign might have been slightly ahead of its time. They believe, however, that the software will mature sufficiently in the not-too-distant future.

Several of the projects experienced significant backsliding from their original project goals in regard to cost reduction, bringing to mind the importance of Institutional Readiness Criteria #1: *The institution must want to reduce costs and increase academic productivity.* In one case, the projected cost reduction was to be achieved by increasing section size in order to free faculty to offer additional courses. Despite the lead faculty member's confidence that this could be done and increased quality could be preserved, the administration failed to follow through on their responsibility to reduce the number of sections. In another case, a department reneged on its commitment to reduce seat time to the projected percentage, again despite the lead faculty member's confidence that this could be done. Both of these instances suggest a lack of institutional commitment to increasing academic productivity.

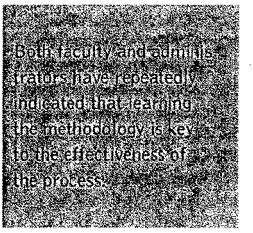
Because we did not require the institutions to redesign the entire course, as we did in subsequent rounds, several of the projects redesigned a single section as a proof of concept. In one instance, the project proved in one section that students were able to learn effectively in the absence of lectures by using Web-based tutorials. The project leader's departmental colleagues, however, were reluctant to reduce the number of lectures in the remaining sections.

Again, this suggests a lack of departmental and institutional commitment. Faculty members on their own have shown spectacular success in creating highly effective new learning environments, but in order for these successes to have a real impact on the institution as a whole, administrative leadership needs to play an active and continuing role.

Sustainability

One way to judge the success of a grant-funded project is to assess its potential to be sustained once the grant funding runs out. All ten of the Round I projects are firmly committed to sustaining their redesigns. Comments include "the team is convinced that the redesign is sustainable," "our efforts are clearly sustainable," "the department is totally committed to its continuation," "there is no desire within the department to return to the traditional design," and "there are overwhelming reasons for continuing with the redesigned course." Several project leaders have said that the redesigned format is now embedded within the department's culture or that a new culture for teaching the introductory course has been created, and "from this there is no going back." As one team put it, "The success of the restructured course—as reflected by cost savings, improved student performance, and instructor satisfaction—ensures that [the redesign] is the preferred mode of instructional delivery."

A second way to evaluate the success of a grant-funded project is to consider its impact on other courses within the department and within the institution. Again, all ten projects report a significant impact on other courses. Penn State is redesigning two additional introductory courses and a 400-level statistics course. In addition, their redesigned statistics course will be distributed for use at Penn State's twenty-two Commonwealth Campuses. UB's redesign methodology is being applied to other courses within the department. Based on what they learned in their initial redesign, Virginia Tech has created a new tutorial system to be used in the Math Emporium in additional courses. UW's team has also implemented a coursewide redesign in General and Analytical Chemistry based on the same principles employed in General Chemistry. UCF's course redesign model is being adopted widely throughout the institution. Three other large enrollment general education courses, English



Composition I and II and College Algebra, are in various stages of planning and implementation of the reduced seat-time instructional model.

To what do we attribute the high level of success achieved by the Round I projects? The innovation, dedication and hard work shown by each of the ten project teams was an essential ingredient. In addition, the Center for Academic Transformation provided leadership in choosing the right participants, teaching them the planning methodology, actively supporting them as they developed their design plans, closely monitoring the implementation process, and insisting on ongoing and final progress reports that include measurable outcomes. The Center created a unique three-stage proposal process that required applicants to assess their readiness to participate in the program, develop a plan for improved learning outcomes, and analyze the cost of traditional methods of instruction as well as new methods of instruction utilizing technology. (See www.center.rpi.edu/PewGrant/Tool.html for a description of the Center's Course Planning Tool, which facilitates this analysis.)

Perhaps the most significant aspect of this process has been the need for the Center to teach the redesign methodology, especially in regard to cost savings, since neither faculty nor administrators traditionally employ this approach to restructuring courses using IT. Prospective grant recipients were supported throughout by a series of invitational workshops that taught these assessment and planning methodologies and by individual consultations with Center staff. Both faculty and administrators have repeatedly indicated that learning the methodology is key to the effectiveness of the process. Once learned, however, the methodology is easily transferable to other courses and disciplines.

The pioneering institutions from Round I have established replicable models for those institutions that want to use technology to improve student learning while reducing instructional costs. Building upon that valuable experience, the Round II and Round III projects have made improvements to these initial efforts and appear to be achieving even stronger results. We look forward to producing an analysis similar to this one for Rounds II and III when their projects are complete.

Access and Achievement Building Block:
Making the Case for All to Achieve

What is the problem?
The New Economy, fueled by globalization and technology, now demands students who are increasingly more knowledgeable and skilled. Education provides students with the skills and knowledge needed to be productive, prosperous, and engaged citizens. Two decades ago a ticket to the middle class could be purchased with a high school diploma. Today, that ticket is more expensive—it requires a college degree. A college diploma serves as the primary signal of one's ability. But, as the wage differential between a worker with a high school diploma and one with a college degree continues to widen, who has access to acquiring this all important signal?

When it comes to college attendance and graduation, statistics show that students of color and low-income students lag behind their White counterparts. Predictive studies suggest that students of color are the fastest growing segment of the population. Given this, it is incumbent on policymakers and academic leaders to figure out how to continue to improve access, while broadening their focus to include efforts aimed at increasing attainment rates for *all* students.

What is the current demographic and educational environment?

- The levels of academic achievement as percentages of the adult U.S. population is as follows[i]:
    - 8th grade or less - 6.9%
    - Some high school, no diploma – 11.5%
    - High-school diploma - 29.5%
    - Some college, no degree - 20.5%
    - Associate degree - 16.1%
    - Bachelor's degree - 16.1%
    - Graduate or professional degree - 9.0%
- In 2001, 68% of the undergraduate enrollment was white, 13% was black, 12% Hispanic, 6% Asian or Pacific Islander, and 1% was American Indian or Alaska Native. 44% of undergraduates were male, and 56% were female.[ii]
- A strong correlation between income, education levels, and health has also been observed. Within specific income ranges, people with a higher levels of education self-reported being in better health than those with lower levels of education. Also, the percentage of the population over 25 in 1997 who reported being in excellent or very good health increased with increasing levels of education across all income ranges[iii]:
    - Less than high school – 38.7%
    - HS diploma or equivalent – 57.8%
    - Some college – 67.6%
    - Bachelor's degree or higher – 79.7%

- Currently, minimum requirements for entry into 4 year colleges are[iv]:
  - 4 years of Math, including Geometry, Algebra II and two years of AP classes.
  - 4 years of Science – 2 Physical Sciences and 2 biological sciences.
  - 4 years of English - including 2 AP.
  - 2 years (minimum) of a foreign language.

The following chart best illustrates persistence and attainment rates by high school curriculum and level of parent's education. What is striking here is that the "Core New Basics" curriculum (4 years of English, 3 years of math, 3 years of science and social studies), prepares too few for a successful post-secondary education. Even for first generation students, those who took a rigorous curriculum had attainment or retention rates similar to non-first generation students. However, the gap between those first generation students taking "Core New Basic" Curriculum and those taking a "Rigorous" program is quite large. In the first year, 9.9% and 1.0 respectively; in the second year, 12.9% compared to 4.4%. We must provide everyone with a "rigorous" curriculum[v].

Table 17—Percentage distribution of 1995–96 beginning postsecondary students according to attainment level and year of postsecondary departure 3 years later (spring 1998), by academic rigor of secondary curriculum and first-generation status

	Total attained or still enrolled spring 1998	Attained by spring 1998	No degree			
			Still enrolled	Left without return in 1997–98	Left without return in 1996–97	Left without return in 1995–96
Total	81.7	4.0	77.7	4.1	7.2	7.0
Overall rigor						
Core New Basics or below	78.6	3.6	75.0	4.9	9.4	7.2
Beyond New Basics I	85.1	3.7	81.4	4.5	5.8	4.6
Beyond New Basics II	86.4	2.5	83.9	4.4	5.4	3.9
Rigorous	95.0	2.4	92.6	1.4	2.4	1.2
			First-generation			
Total	73.1	5.2	67.9	4.9	11.6	10.3
Overall rigor						
Core New Basics or below	70.0	5.5	64.5	7.1	12.9	9.9
Beyond New Basics I	84.9	5.0	79.9	2.4	8.1	4.6
Beyond New Basics II	86.3	3.9	82.4	5.4	6.0	2.4
Rigorous	92.9	5.4	87.5	1.7	4.4	1.0
			Parent had bachelor's or advanced degree			
Total	88.3	2.8	85.5	3.6	4.2	3.9
Overall rigor						
Core New Basics or below	87.6	2.2	85.4	3.3	6.2	2.9
Beyond New Basics I	86.7	3.5	83.2	5.0	3.0	5.4
Beyond New Basics II	85.8	0.9	84.9	4.5	4.6	5.1
Rigorous	96.1	1.7	94.4	1.4	0.9	1.7
			Parent had some college			
Total	76.6	5.6	71.0	4.6	10.0	8.8
Overall rigor						
Core New Basics or below	70.3	2.8	67.5	5.9	12.2	11.6
Beyond New Basics I	82.2	3.0	79.2	5.2	9.9	2.7
Beyond New Basics II	84.4	6.9	77.5	3.4	8.5	3.6
Rigorous	89.5	2.6	86.9	1.6	8.9	0.0

NOTE: Details may not sum to 100 due to rounding. Students in private, for-profit 4-year institutions are excluded from this analysis because the sample size was too small (less than 1 percent). Core New Basics curriculum includes 4 years of English, 3 years of mathematics, 3 years of science and social studies. Beyond New Basics I includes core New Basics and at least two of three science courses (biology, chemistry, or physics), algebra I and geometry, plus 1 year of foreign language. Beyond New Basics II includes core New Basics, advanced science (biology, chemistry, and physics) and advanced math (including algebra I, geometry, algebra II), plus 2 years of foreign language. Rigorous includes core New Basics, advanced science (biology, chemistry, and physics), 4 years of math (including algebra I, geometry, algebra II, precalculus), plus 3 years of foreign language and one honors/Advanced Placement course or Advanced Placement test score. Attained by spring 1998 refers to attainment at any 4-year institution and not only attainment at initial institution attended.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, First Follow-up (BPS:96/98).

- The correlation between income and college attendance is extremely significant: While 85% of high-school graduates from families earning more than $75,000 go to college, only 53% of graduates from families earning less than $25,000 do so.[vi]

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

- The proportion of college students 25 and older increased by 16% between 1970 and 1995.[vii] From 1990-1996 growth in the number of older students enrolling in higher education outpaced the growth of younger students. The enrollment of students aged 25 and over rose by 6%, compared to 2% for students under 25.[viii]
- Considering the current environment, many low-income, first-generation, and students or color struggle to attend and remain at many colleges and universities. The University of Wisconsin System's Design 2008, a comprehensive, outreach and retention program intended to best serve the entire Wisconsin population. For more information on this outstanding program, please see Appendix A.

Why should people get a college education?

- The demand for high-skilled workers is growing rapidly, and the wage differential between those receiving a high school diploma and an associates or bachelor's degree is also very high: The median household income in 1999 for a high school graduate was $42,995, for an associate degree it was $56,602, and for someone with a bachelor's degree it was $76,059.[ix]
- 70% of jobs that are growing require some post-secondary education.[x]
- Between 1973 and 1999, the median family income for a high school graduate decreased by 13.1%, while for someone with 4 years of college it increased by 9.9%.[xi]
- The median household income of many minorities is still far behind that of whites. In 2000, among African-American households median income was $30,439, more than $15,000 below median household income among non-Hispanic whites (which was $45,904), but nearly $1,600 above the 1999 level for African-Americans, a significant gain for a single year. Similarly, among Hispanics median household income rose to $33,447, about $1,700 above the 1999 level, but still far below that of non-Hispanic whites.[xii] Providing minorities with greater access to higher education would help to decrease this disparity.
- According to a study done by the Commission on National Investment in Higher Education, "the single most important factor in determining level of income is level of education." This can be seen by comparing levels of education to changes in income. The wages of men with a college education kept pace with inflation from 1976-1995, while the wages of men with some college dropped 14%, only a high school education dropped 18%, and high school drop-outs decreased by 25%.[xiii]
- According to a 2002 Rand study, "…[T]he highest paid workers will hold their own to 2015. Those in the 50th percentile--workers right in the middle of the distribution—have lost about 14 percent in real wages over the 20 years; by 2015, they will be earning about 25 percent less than they earned in 1976. But the most striking consequence of current trends shows up in the figures for workers in the bottom 10 percent. If current trends continue, these workers will be earning little more than half of what they earned in 1976."[xiv]

- Besides the personal advantages of getting a better education, there are advantages to society as well. These advantages include increased community service activity and greater political participation. Many colleges and universities have used student interest in service to strengthen their institutional commitment to working closely with the surrounding communities. Since its founding in 1985, membership in Campus Compact, a national association of college presidents working to promote civic participation and community service on college campuses, has grown to include 650 institutions. (I think we should also include stats about crime rates)
- Record numbers of freshmen were volunteering in 1998: 74.2% volunteered during their last year in high school, and 20.6% volunteer at least 3 hours per week.[xv]
- The Panetta Institute found that 73% of college students had recently done volunteer work, with 41% having volunteered on more than ten occasions.[xvi] Half of the students surveyed had refused to buy a product or service because they had issues with a company's policies.[xvii]
- Also, college education results in greater political participation. According to the Committee for the Study of the American Electorate, in the 1996 election[xviii]:
    - 49% of 18-24 year olds with 4 years of college voted
    - 39% of 18-24 year olds with 1-3 years of college voted
    - 22% of high school graduates aged 18-24 years old voted

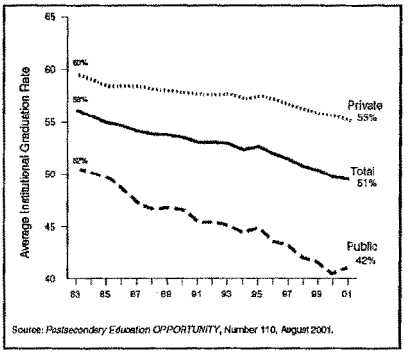
Who is going to college, and who is graduating?

- In 2001, 68% of the undergraduate enrollment was white, 13% was black, 12% Hispanic, 6% Asian or Pacific Islander, and 1% was American Indian or Alaska Native. 44% of undergraduates were male, and 56% were female.[xix]
- In many states, the percentage of black students attending flagship state universities is much less than the percentage of all black college students in the state. For example, at the University of Georgia, in 1993 5.8% of its students were black, compared to 19.1% for the rest of the students enrolled in Georgia public colleges. This suggests that more black students are attending less rigorous and prestigious four-year schools and community colleges.[xx]
- Only 6.1% of lowest-quartile (socio-economic status, or SES) 1990 High School graduates entering post-secondary education had received a Bachelor's degree by 1995, compared to 41.1% of students in the highest quartile SES.[xxi]
- For black students in this same cohort, the rate for completion of a Bachelor's degree was 16.9%, 17.8% of Hispanic students, and 27.3% of all white students.[xxii]
- College completion rates for persons 25 years and older for the year 2000 are as follows[xxiii]:
    - All races – 25.6%
    - White – 26.1%
    - African American – 16.5%

- Hispanic – 10.6%
- The correlation between income and college attendance is extremely significant: While 85% of high-school graduates from families earning more than $75,000 go to college, only 53% of graduates from families earning less than $25,000 do so.[xxiv]

The following graph illustrates the general downward trend in graduation rates over the past 8 years[xxv]:

Figure 5: Average 5-Year Institutional Graduation Rates at Public and Private 4-Year Institutions, 1983 to 2001



This graph was taken from page 12 of Paul E. Barton's report "The Closing of the Education Frontier?" published by the Educational Testing Service in September 2002.

How is the population changing?

- According to the National Center for Education Statistics, in 2015 Hispanics will make up 48.8% of the growth in the traditional college age population. Asian/Pacific Islanders will account for 16.2%, Blacks 16.0%, Native Americans 0.8%, and whites 18.2%.[xxvi]
- In 1989-90 minority students represented about one-quarter of all undergrads, in 1999-2000 they represented nearly a third.[xxvii]
- Percentage of students working full time rose 7 points, while the percentage of part-workers fell 9 points.[xxviii]
- The proportion of college students 25 and older increased by 16% between 1970 and 1995.[xxix] From 1990-1996 growth in the number of older students enrolling in higher education outpaced the growth of younger students. The enrollment of students aged 25 and over rose by 6%, compared to 2% for students under 25.[xxx]

Achieving Access: Preparation and Outreach

Before focusing on how to keep students in college, obstacles facing admission and attendance must be examined. Statistics show that family income and parent's education are indicators for whether students enroll in higher education. Other, more discrete institutional structures, such as tracking and financial obstacles, also result in lower access for certain students. However, many high schools and colleges have been collaborating to develop programs specifically designed to help students overcome these obstacles. These programs often include help with applications and understanding financial aid as well as improving student's academics while still in high school.

What are the access obstacles?

- Between 1970 and 2000, the high school graduation rates for the bottom income quartile remained consistently below 70%, while the rates for the top income quartile were between 90 and 100%.[xxxi]
- Many studies have shown that there is often a gap between the percentage of students planning on secondary education and those who actually enroll. The two biggest factors affecting this are family income and parent's education. Of all students planning on attending post-secondary education immediately after high school graduation in 1992, 83.0% of students from low-income families had enrolled by 1994, compared to 96.2% from high income families. 78.1% of students whose parents were high school graduates or less had enrolled by 1994, compared to 88.1% of students whose parents had had some college, and 95.9% for college graduate parents.[xxxii]
- While 97% of all 1992 graduating seniors planned to continue their education, only 75% of all seniors had enrolled by 1994.[xxxiii]
- There is also evidence of clear gaps in achievement in upper-level classes at high school, especially along racial lines. For example, 306 Black students (2.0% of total test-takers) took a total of 535 AP tests in Pennsylvania in 1999, scored a 3 or higher on 205 tests (38.3%). A three is the lowest score to qualify for credit at most colleges. On the other hand, white students accounted for 82.5% of all tests taken, and had a pass rate (3 or higher) of 65.6%.[xxxiv]
- The types of academic courses that students take in high school also have proven to be a crucial factor in keeping students on the path to college. For example, students who take a rigorous high school mathematics curriculum are much more likely to enroll in college than those who do not. In fact, of those students whose parents' education did not extend beyond high school:
    - 64% of students who took math beyond Algebra II enrolled in a four-year institution.
    - 34% of students who stopped at Algebra II enrolled in a four-year institution.[xxxv]

  The breakdown of students by race taking advanced-level math courses is as follows:

- 64.6% of white high school graduates took Algebra II, as did 55.6% of black students, 48.3% of Hispanic, 70.1% of Asian/Pacific Islander, and 46.6% of American Indian/Alaskan Native.[xxxvi]
- The discrepancies by race only become more significant as the level of math increases: 12.1% of white graduates took Calculus, while only 6.6% of black students, 6.2% of Hispanic students, and 6.2% of American Indian/Alaskan Native students did. On the other hand, 18.4% of Asian/Pacific Islander high school graduates took Calculus.[xxxvii]

How is financial aid a barrier to access?
"Throughout their academic lives, students are taught that in order to a have money in the future they have to get a college education. Today they are being confronted with the fact that in order to get a college education they need to have money."[xxxviii]

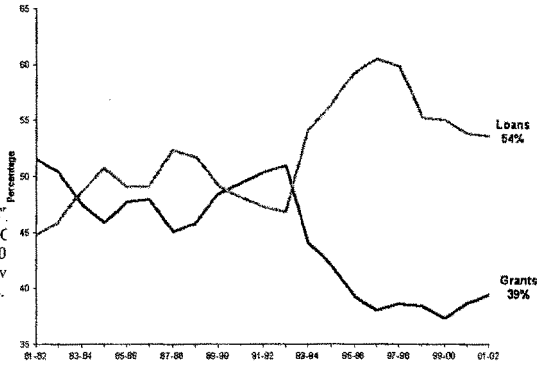
At precisely the time when higher education is becoming more important than ever for full participation in society, tuition is skyrocketing[xxxix] and many state aid programs are shifting their focus to non-need based aid. This combination will likely result in fewer opportunities for low-income students. If tuition continues to increase at the current rates, by 2015 half of those students who want to pursue higher education will be shut out because they can no longer afford it. On the other hand, if tuition increases at the rate of inflation, by 2015 US colleges and universities will fall $38 billion short of what is needed to educate the student population.[xl]

These rising costs of higher education fall unevenly on the backs of low, middle, and upper-income families. On average, poor families spent 25% of their annual income on tuition at four-year public colleges in 2000, as compared to the 7% that middle income families spent, and the 2% that upper-income families spent. The statistics for both low- and middle-income families has doubled since 1980, while it has stayed about the same for upper-income.[xli]

What is the current condition of financial aid?

- In 1991-1992, 50% of student aid was in the form of grants, 47% in the form of loans, and 2% in work-study aid. By 2001-2002, the amount of grant money had decreased to 42% of aid, and loans had increased to 57%.[xlii] The

Exhibit 4. *Grants vs. Loans, Percent Share of Total Aid, 1981-1982 to 2001-2002*



DRAF
Not for C
5/16/200
Last Rev
Jamie E.

percentage changes for Federal Aid only can be evidenced by the following graph[xliii]:

This graph was taken from page 12 of the report "Trends in Student Aid," published by The College Board in 2002.

- In 1997-98, the portion of state aid dedicated to undergraduate need-based programs fell 5.5%, increasing non-need based aid by that same amount.[xliv]
- While the number of need grants grew the fastest from AY 1989/90 to AY 1995/96, the size of non-need based grants grew the fastest in the same period.[xlv]
- 33 states offer some form of non-need based aid.[xlvi]
- Over the past 20 years, the affordability gap has increased in many ways. For example, the share of family income required to pay college costs has increased for all but the wealthiest, and has gone up the most for those with low incomes.[xlvii]
- The Carnegie Commission reports that tuition costs at public institutions tuition have risen primarily in response to decreases in state spending on higher education, while tuition increases at private institutions are largely due to increased expenditures on merit scholarships.[xlviii]
- A $1000 drop in tuition increases college attendance by 4 percentage points, and by 5.2 percentage points for low-income youth.[xlix]
- The percentage of educational expenditures supported by family contributions has increased in the last few decades, while the amount funded through taxes has decreased. In 1970, 30% of college funds came from families, and 60% from taxpayer money, while in 1995 39% came from families and only 49% came from taxpayers.[l]
- Currently, families of low-income, college-qualified high school graduates face an annual unmet need of $3,800 that is not covered by the current financial aid system. This barrier effectively prevents 48% of those low-income students from attending a four-year college. As a result, more than 400,000 qualified high-school graduates, with the credentials to attend college, will be unable to attend a four-year college. 170,000 will attend no college at all.[li]
- Issues of debt affect students of different racial groups in unequal ways: According to a study by Nellie May, 69% of African Americans who enrolled in college and dropped out did so because of their high student loan debt. In comparison, only 43% of white students who dropped out cited that as a reason.[lii]
- Financial aid is not enough to cover the total costs of education for many students: 50.9% of all full-time college students in 2001 were also employed, as were 84.5% of all part-time college students.[liii]

- Thomas Kane, in his book *The Price of Admission: Rethinking How Americans Pay for College*, argues that the lack of information about financial aid and the complexity of the form itself constitute two significant barriers to access to financial aid. He says that low-income students are less likely to apply because, while they are aware of the tuition levels at state and private universities, they "may be less able to anticipate how aid they could receive or how to clear all the bureaucratic hurdles on the way to receiving it." Simplicity and transparency should be made fundamental to the financial aid system. Kane proposes a simplification of the financial aid application process as a way of avoiding this problem: "...shorten the list of factors included in the need-analysis formula itself - for instance, basing expected family contributions to college education solely on family size and income." [liv]

- Bridget Terry Long, Assistant Professor at Harvard University School of Education, proposes using measurements already in place for determining financial aid. In an interview, Long illustrated this idea: "...the government already knows a great deal about who is the poor in this country, due to the welfare system and the free lunch program. It would be more sensible for these students to be automatically eligible for college financial aid."[lv]

What is the effect of financial aid on access and retention?

- In a study of low-income first year students who were recipients of Indiana's 21st Century Scholars Program, St. John et al. found that "the receipt of a student aid package had a substantial and direct influence on persistence."[lvi]
- Aid was also found to equalize for access: family income variables "were no longer statistically significant (in predicting persistence) when aid packages were considered."[lvii] Loan amounts, however, were found to be negatively associated with persistence for first year students.[lviii] Black students have been found to be "more sensitive" to fluctuations in aid and tuition than white students.[lix]

Merit vs. Need-based aid

- Since 1993, merit-based aid has significantly replaced need-based aid in more than 25% of the states. Only five "populous" states dedicate substantial funds to need-based aid.[lx] In 1998-99, the 13 states with large merit-based aid programs[lxi] spent 37% more on merit-based aid compared to need-based aid expenditures.[lxii]

- In the shift to merit-based financial aid, schools end up competing for the best students, who are already more likely to have ample financial and social resources to attend the colleges of their choice. Students with less academic preparation are left without the financial support they often require to participate in postsecondary education.

- Also, often times the determinants of non-need based aid can be very alarming. The following data represents the percentage of institutions that awarded non-need institutional aid to undergraduates by institution type and criteria used to distribute grants for the 1999-2000 school year[lxiii]:

Institutional Type	Race or Ethnicity	Athletics	Alumni Affiliation
4-Year Public	47%	78%	31%
4-Year Private	43%	47%	37%
2-Year Public	26%	48%	10%
2-Year Private	<1%	25%	12%
All Institutional Types	37%	53%	27%

- Given that academic achievement often—though not exclusively—correlates with income, one could argue that merit-based aid often ends up serving wealthy, high-achieving students who would have gone to college without any aid. For example, in New Mexico, which has shifted largely to merit-aid, 64% of state aid now goes to families with annual incomes of $50,000 a year and higher; 15% goes to families who earn $20,000 or less.[lxiv]
- Large state expenditures on merit scholarships generally erode funds available for need-based aid: Georgia no longer offers any need-based aid. In Louisiana, one of the poorest states in the nation, 97.5% of all state grants are non-need-based.[lxv]
- In order for low-income students to gain access and opportunity, when looking just at state aid, states must have at minimum a balance between need-based and non-need based grants. At best, states should offer comprehensive need-based programs that give all students the opportunity for a post-secondary education and with that the opportunity for greater participation in society.
- The negative effects of merit-based aid can be seen through the example of the Hope Scholarship in Georgia. This program, funded by a state-run lottery system, waives tuition and fees at Georgia schools for graduates with GPA of 3.0 or higher. 75,000 scholarships were given out for 2000-2001. There is no income gap or requirement, however, families with incomes of less than $50,000 have to fill out FAFSA in order to be eligible, while families with incomes greater than $50,000 only have to write a one-page explanation of what their income is. Already, the negative effects are evident – the lottery basis for funding tends to fall disproportionately on low-income residents, and also many low-income families may find the FAFSA form too difficult to understand or complete. [lxvi]

  The effect of the Hope Scholarship on attendance had a positive impact on mostly higher income and white students. For example, the effect of the Hope Scholarship on attendance by 18 and 19 year olds was a 3.3% decrease for blacks and a 12.2% increase for whites. Families with incomes of less than $50,000 experienced a 1.4% decrease in college attendance, while families with incomes greater than $50,000 saw a 11.4% increase.[lxvii] The only diversity factor that the

Hope Scholarship did help was geographic diversity. It also altered college choice; students post-Hope were more likely to attend a four-year than a two-year college, and also more likely to go to school in-state.

In the end, the Hope Scholarship has only served to increase the actual tuition costs of public schools (increases of 21% over four years as opposed to 8% for the rest of the US) and increase the already-wide racial gap. Before the Hope Scholarship, whites were 11% more likely than blacks to go to school, after Hope, they were 26% more likely.[lxviii]

What is "tracking" and how is it a barrier to higher education for students?

- A huge barrier to many students towards becoming prepared for college is the tracking – institutional or not – that is in place in most high schools. Recently, many schools have adopted "freedom of choice" policies in hopes of eliminating tracking from their schools
- Historically, "tracking" is the grouping of students by presumed ability or achievement into a series of courses with differentiated curriculums. There has been much research proving critical of tracking, and since then many schools have shifted to ability grouping – course-by-course placement of students as determined by perceived ability and prerequisites. However, ability grouping can become defacto tracking by continuing to support the racial, ethnic, and social-class segregation within schools.[lxix]
- "Tracking" is clearly evident in the distribution of students in AP classes, especially math and science. This table lists the percentage of students taking particular classes by race/ethnicity between the years 1982 and 1998 (for example. 7.5% of white students took AP Calculus)[lxx]:

Race/Ethnicity	AP Calculus	AP Biology	AP Chemistry	AP Physics
White	7.5	16.7	4.8	3.0
Black	3.4	15.4	3.5	2.1
Hispanic	3.7	12.6	4.0	2.1
Asian/Pacific Islander	13.4	22.2	10.9	7.6
American Indian/Alaskan Native	0.6	6.0	0.9	0.9

It is clear from this that white and Asian/Pacific Islander students experience a much higher participation in AP students than to Black, Hispanic, or American Indian/Alaskan Native students.

- According to a study done by the *American Research Journal*, there are three key factors that prevent the success of choice-based class-grouping:
  - 1) *Institutional Barriers*: The study showed quite clearly that there were several institutional barriers that prevented low-income and minority students from joining higher-level classes. It was found that information about classes and opportunities was distributed unevenly from educators to students, educators responded selectively (ie along race/class lines) to students' requests for higher placements, and students encountered hidden prerequisites when attempting to enroll in classes. The neighborhood networks and parental involvement that gave some students access to information concerning classes was not an option for many low-income and minority students.[lxxi]
  - 2) *Tracked Aspirations*: Many previously lower-track students quite simply didn't believe that they could succeed or that they belonged in the higher-track classes. When left to choose classes for themselves, many students who had been in low-track for so long chose to stay in the familiarity of the lower-track, re-segregating themselves along the same lines. Similarly, students seemed to choose classes based on an internalized sense of their social class and what they were entitled to. Some upper-track students saw their honors placement as the result of a natural progression, stating that it honors classes were "just kind of programmed in me." These students and their parents operated from powerful places in the local hierarchy to reinforce existing educational inequities and garner the best teachers and courses.[lxxii]
  - 3) *Choosing Respect*: The study also found that many students rejected high-track classes because they believed that their contributions wouldn't be valued. Some black students were apprehensive about majority-white honors courses for fear of being ostracized by black peers. For many students, entering an upper-level (and mostly white) course would require them to be willing to abandon peer group ideologies and identities that they have formed. Finally, students felt that they were sacrificing their self-respect by entering upper-level courses. Many held the belief that education should reflect their culture, knowledge, and lived experiences. They sought out "safe places" or "homeplaces" where they could explore their racial identities and strengthen their self-worth free from the white-dominated society they usually inhabit. As a result, many minority students choose to stay in lower-level classes where they felt comfortable and powerful.[lxxiii]

How can these barriers be overcome?

There have been many attempts to develop programs to reduce these access barriers. Many have proven effective – in fact, according to a study, students who participated in high school outreach programs almost doubled their odds of enrolling in a four-year college. But unfortunately, these programs aren't always reaching the people they need to

reach - only 5 percent of at-risk students participated in some sort of outreach or preparation programs.[lxxiv] Three examples of outreach/preparation programs are AVID, High Schools that Work, COACH, Texas' Top Ten Percent Law, and Indiana's 21st Century Scholars Program. These programs are all in different stages of development; AVID has been established in 1,275 schools in 21 states, High Schools that Work has just begun to spread from the southern region of the US, COACH is a pilot program based out of Harvard, the Texas Ten Percent Law was recently implemented, and the 21st Century Scholars Program has been running for several years. The different techniques and strategies that these programs have used are very helpful. **For more information on these exemplary programs, please see Appendix B.**

Promoting Achievement: Remediation and Retention

Remediation

Nationwide, minority and low-income students tend to have unequal access to quality primary and secondary education and often arrive at the university's door step under - prepared. Thus, without offering remediation on college campuses, the number of historically disadvantaged students allowed to enroll at four-year institutions would be much lower than it is now. While whites make up the greatest percentage of remedial learners, other historical disadvantages such as income are a significant factor. The reason white students make up the majority of remedial students is simply because, as shown above, they have greater access to higher education than minority students in the first place.

Robert McCabe, a researcher focused on remedial education, defines the need for remediation as "deficiencies in reading, writing, and math." Other realities contributing to the need for remedial education at post-secondary institutions include: gaps between high school graduation requirements and college-level entrance requirements, as well as failed communication and collaboration between high schools and colleges in articulating and implementing these requirements. Research has established that there is not only a clear need for remediation, but that the benefits of remedial learning are great.

It is equally important to establish the importance of remedial learning as many states are cutting such programs in reaction to the recent economic downturn. At least eight states now refuse to accept any student requiring remedial learning at four-year public universities, banishing them to community colleges. In Tennessee, for example, there is a move toward banning the use of state money for any remediation, even at community colleges. In Utah, legislators are considering whether or not to charge remedial students extra for taking those classes.[lxxv]

Why do we need remediation on college campuses?

- Percentage of students by race who graduated from high school marginally or not qualified[lxxvi] for college, according to a study by the National Center for Education Statistics[lxxvii]:
    - American Indian/Alaskan Native – 55.2%
    - African-American – 53.1%
    - Hispanic – 47%
    - White – 31.9%
    - Asian – 27.3%
- 47% of high school graduates from low-income families are unprepared for college. 20% more are only minimally qualified. In contrast, among students from high-income families, only 14% leave high school unprepared for college.[lxxviii]
- In Maryland, among public high school graduates who had followed a college prep track and were enrolled at public two-year colleges:
    - 40% still required remediation in math;
    - 24% required remediation in reading;
    - and 19% required remediation in English.
    - At four-year public campuses:
    - 14% required math remediation;
    - 7% required English remediation;
    - and 6% required reading remediation.[lxxix]

Who uses remedial learning on campus?

- A study by the NCES found in 1995 that 29% of first-time freshman enrolled in at least one remedial reading, writing, or mathematics course.[lxxx]
- Racial make-up of remedial learners[lxxxi]:
    - White students—62%
    - Black students—27%
    - Hispanic students—6.6%
    - Asian—2.3%
    - American Indian—1.5%
- Remedial learners cover a wide range of characteristics and levels of intelligence, and cannot be pigeon-holed into any particular category[lxxxii]:
    - According to the American Council on Education, 18% of students in remedial classes have SAT scores above 1000 and about 5% have scores about 1200.
    - Over 80% of those developmental students are US citizens
    - Two out of three receive financial aid, one in three work 35 hours a week.
    - Their ages range from 16 to 60 years old, with almost three in five being 24 years old or younger.
- In California's community college system, half of all learners are over the age of 25 who require content-based "refresher courses" to prepare them for degree coursework.[lxxxiii]

- 55% of remedial students require only one course.[lxxxiv]

Does remediation work?
Numerous studies have documented improved academic performance and degree completion rates for students who successfully complete one or two remedial courses that are comparable to, or even slightly higher, than completion rates for non-remedial students.

- Community College of Denver (CCD) students who had completed remedial courses graduated at a rate of 40%, compared to a 39% graduation rate for the entire student body.
- Anther study cites community colleges in which 24% of students enrolling in developmental education courses achieve an associate's degree at that institution, compared to a completion rate of 22% for all students.
- Students who need and take remedial courses are less likely to drop out, more likely to have higher GPAs, and more likely to complete degree requirements than students who need and do not enroll in remedial courses.[lxxxv]
- Students who need and successfully take remedial courses are about as likely as non-remedial students to complete degree programs.[lxxxvi]
- In Kentucky community colleges, 69% of students who passed remedial math courses also passed entry-level math courses, while only 53% of all students who took entry-level math passed. The difference was smaller, with 71% of remedial students passing entry-level classes and 66% of all students passing. At four-year universities, the differences were different – for math, 56% of remedial students and 55% of all students passed, and for English, only 73% of remedial students and 75% of all students passed.[lxxxvii]

What characteristics make for an effective remediation program?
According to the Benchmark Steering Team's Best Practices in Developmental Education, the following represent trademarks of effective remediation programs:

- Schools have a distinct, centralized remedial (or developmental) education department.[lxxxviii]
- Remedial education faculty collaborate with other academic departments and even conduct professional development workshops that focus on the special needs of remedial learners who are taking general for-credit courses.[lxxxix]
- Institutions pay for continued professional development opportunities (for example workshops and conferences) for remedial education staff.[xc]
- Faculty teaching remedial and for-credit courses are trained to monitor student performance in order to intervene with supplemental academic support in cases of need.[xci]
- Students enrolled in remedial courses are simultaneously enrolled in for-credit courses.[xcii]
- Remedial departments regularly evaluate and mold their programs based on student feedback and performance indicators.[xciii]
- Remedial instruction incorporates a range of learning methods and is comprehensive in nature, utilizing individualized instruction and tutoring, self-instruction (for example

using computers), small-group learning, and hands-on applications of skills being cultivated in remedial courses.

• Remedial or developmental programs provide a barrage of academic support beyond remedial courses, such as academic and career counseling, pre-college orientation and skills preparation workshops, peer-support groups, professional internship opportunities and school-to-work programs that make skills and content from courses relevant to students' career aspirations.

For examples of the nation's top remediation programs, please see Appendix C.

General Remediation Policy Suggestions:

• Examine statistics and demographics on a state to state basis when making policy and funding decisions, because national statistics can distort state-by-state realities.[xciv]

• Evaluate systematically remedial program success with student and faculty feedback, and short- and long-term measures of student success (year-to-year retention rates, degree completion, career satisfaction, and other positive life outcomes). Koski and Levin found a positive relationship between student retention and "ongoing" program evaluation.[xcv]

• Track outcomes for students diagnosed "in need" of remediation who do not enroll in remedial courses in order to obtain comparative data to measure remedial-enrolled student results against.

• Facilitate the transfer process and provide scholarship/aid incentives for students who complete remedial requirements at community colleges their pursue bachelor's degrees.

• Institute mandatory assessment measures for all enrolling students to determine remedial need. Because it will equip poorly-performing students with necessary skills, such a policy will enable all students to benefit the most from the educational opportunities their universities or colleges provide.[xcvi,xcvii]

• Implement an "early alert system"[xcviii] for students demonstrating struggle during their first year and mandatory, immediate intervention in the form of tutoring, advising, mentoring, and remedial placement if appropriate.

• Employ longer-term follow-up studies to measure student degree completion rates when evaluating the success of remedial programs.[xcix]

• Combine remediation/retainment efforts with need-based grants that *increase* with each successive semester or year of enrollment.[c]

• Instead of eliminating non-credit (remedial) instruction at senior campuses, consider limiting the total number of not-for-credit semester units in which a student can enroll.[ci]

• Allow four-year public institutions that *want* to continue providing remediation to do so, with continued state funding, if the institutions demonstrate an ability to remediate students successfully and efficiently (given that cost-to-benefit ratios must be systematized first)[cii].

• Rethink the role of community colleges in the spectrum of higher education. For example, delineate the community college specifically as a *teaching* institution and

community college faculty as *teachers* (with appropriate training and professional development opportunities).[ciii]

• Consider having four-year institutions contract out remediation at two-year campuses.[civ]

• Devote serious resources and effort to intervening with "seriously deficient" students, whose success rates are much lower than those for "deficient" students who complete remediation.[cv]

• While improving remediation, simultaneously work to eliminate its need, through outreach programs, early intervention, and secondary teacher development, communication between secondary and tertiary levels.[cvi,cvii]

• If remediation is eliminated, or seriously downsized on four-year campuses those with the authority to allocate funds should accordingly increase funding to two-year colleges whose campus enrollment may swell.

Retention

What is retention?

While the numbers of students enrolling in colleges and universities is increasing, the number of students who actually graduate with a degree is much smaller. These statistics are especially disproportionate when graduation rates are compared by race, income, and socio-economic status. Minority and low-income students tend to have lower rates of retention beyond the first year as well as overall graduation rates.

In his landmark work on retention, Vincent Tinto advocates institutional retention efforts that consider degree completion a byproduct of an overall "concern for the education of students, (for) their social and intellectual growth."[cviii] Throughout his book *Leaving College: Rethinking the Causes and Cures of Student Attrition* Tinto stresses the importance of the quality of student experience on student attrition and persistence rates.

When considering the issue of retention, it is important to establish what student populations are at risk of dropout, and in which cases a student's dropout could have been prevented by the institution. As Tinto points out, "…a potentially large number of individuals will choose to depart from an institution of higher education because they have come to see that further participation in that institution no longer serves their best interests… a good many may view their leaving as quite positive forms of behavior."[cix] In these cases, institutional retention efforts would most likely be fruitless.

Why is retention a problem?

Colleges are having problems retaining minority and low-SES (Socio-economic Status) students for a variety of reasons, including:

• academic unpreparedness (inadequate high school preparation and study habits[cx], unrealistic perceptions of college academic demands)

• economic burdens (the threat of long-term indebtedness after college, working while studying, and not sharing a similar class background with a majority of students)[cxi] • unbalanced gender demographics among students of color[cxii]
• student perceptions of being unwelcome on campus[cxiii]
• lack of culturally familiar foods, activities, and (in some cases) people and language
• stereotypes associated with remedial education (prevents some needy students from seeking help, which may lead to lower success rates and higher likelihood of dropping out)
• lack of professional role models (faculty, deans, and mentors) with whom students of color identify[cxiv]
• quality of college experience[cxv]

How can retention be increased at colleges and universities?
Tinto identifies several strategies for boosting retention, including encouraging extra-curricular involvement—which has been shown to have a positive impact on retention rates.[cxvi] Work-study has also been found to impact positively on retention,[cxvii] perhaps because work-study participation connects students to sub-communities within the campus culture.[cxviii]

Belonging has been identified as a key component of students' decisions to re-enroll. For this reason, retention efforts that create tight communities and offer social support and a sense of inclusion can be effective, especially for retaining minority students, for whom a sense of welcome on campus may not be immediately (or ever) accessible.[cxix]

Another key aspect of retention is the impact of diversity and multiculturalism on the academic performance, comfort, and overall retention of minority and non-minority students on campus. According to a study done by the Association of American Colleges and Universities, dealing with such issues through a few isolated programs is insufficient: "institutions of higher education cannot deal with diversity issues merely by providing services to remedy student deficits. Instead, the institution must change to more adequately address educational issues and organize for a more diverse future."[cxx] While many such transformational retention plans have been implemented, there is as of yet sufficient data-based evidence showing the success of such efforts to improve the campus climate for diversity. This lack of data on "what works" has two negative effects: 1) there is no base of evidence that other schools can use to build their own strategies from, and 2) with the current economic crisis the lack of substantial data threatens the funding of existing programs.[cxxi]

Tinto has also established several specific traits of effective retention programs[cxxii]:
• promote active student learning
• allocate adequate resources and staff for retention efforts
• front-load retention efforts
• accurately communicate pre-admission expectations

- create learning communities in which groups of students co-enroll in a group of classes
- create monitoring and early-warning systems
- communicate institutional expectations of students

What is being done by colleges and universities to increase retention?

Following is a list of retention goal statements from various universities. *A selection of highly effective retention programs can be found in Appendix D.*

University of Texas at El Paso: "In its [strategic] plan, UTEP emphasized its commitment to creating educational opportunities rather than erecting educational barriers for students whose talents and motivations enabled them to meet the rigorous standards characteristic of university degree programs."[cxxiii]

Appalachian State University: "A strong commitment to excellence in instruction, as well as to a tradition of attention to individual needs of the students."[cxxiv]

Connecticut State University: "Reshape the culture of the institution."[cxxv]

State University of New York, College at New Paltz: "The creation of a campus environment that welcomes every aspect of human diversity and sets an expectation that everyone who works, learns, and lives on the campus has a responsibility to contribute to the development of an environment where everyone is respected."[cxxvi]

Eastern Illinois University: "To provide a quality education to each student in an environment which encourages personal growth and success."[cxxvii]

Morehead State University: "To develop a network of advising and other support services designed to help students reach their academic goals."[cxxviii]

St. Cloud State University: "The goal of retention should not be retention, but rather, providing an environment that meets the individual's needs and promotes student success. The university should provide a rite of passage in which students are supported, welcomed, and assimilated into the university's academic and social life. A wide variety of experiences are valuable to students, but some of these experiences must be linked to the institution. Finally, functions and services are not an end unto themselves, but play the role of creating a proper environment for persistence."[cxxix]

Concluding Thoughts on Retention

Student retention should occur at Universities not simply through a few isolated programs aimed at high-risk groups, but by creating an environment on campus that makes all

students feel welcome, valued, and supported. As Tinto said, "belonging" is the key to a student returning for a second year. Research seems to show that this can most effectively happen by coordinating three different levels of programs into the culture of a campus:

1) Personal attention to students' individual background, goals, and expectations.
2) The creation of small communities and mentoring system that give students a support system
3) A factor should be in place that unifies each entering class.

Each level is crucial to creating an environment that will promote retention. Students will feel as though they are valued as individuals by the school, and that they are more than just a number. They will have a small community of students with similar interests, classes, etc., which can act as a support system and create a sense of family and belonging. Finally, implementing class-wide programs gives every student something in common with each other student. Several schools listed here have programs resembling this, but only a few (such as Appalachian State) have accomplished this. In schools were there is a proportion of the population at high-risk for drop-out, special care should be taken to make sure that these students have the resources and support that they need.

Ideally, campuses should not need specific retention programs, but instead have the mechanisms in place for all students to feel welcome, supported, and valued, personally connected to and invested in their experience at a university.

In conclusion, it is important when thinking about and designing retention programs to remember that it is the diversity amongst individuals, not amongst racial, gender, or other such distinct lines, that is the most influential. Kenneth D. Richardson, Associate Professor of Psychology at Ursinus College, in a Letter to the Editor of *The Chronicle of Higher Education* critiqued the lack of attention that many programs give to this type of diversity:

> "Among other tendencies, these include a propensity for holding demographic categorizations in higher regard than the individual persons who are being categorized. In this kind of thinking, one's designation on the basis of ethnicity, culture, or gender is one's identity. Individual differences within categories drop out of the analysis, which makes any realistic dialogue or discussion about inter-group relations difficult at best... They (epistemological styles of identification) encourage stereotyping, confuse nature and nurture, and focus discourse on separateness and incompatibilities among those bearing different demographic designations."[cxxx]

APPENDIX A: University of Wisconsin's Plan 2008

While there are many schools which have specific preparation and outreach programs, and many that have remediation and retention programs in place, few schools have undergone comprehensive restructuring of their institutions in order to solve the access and achievement problem. University of Wisconsin's Plan 2008 is one such program. With a focus on increasing minority enrollment, the system-wide plan encompasses all aspects of this building block: outreach, preparation, remediation and retention.

The foundation of Plan 2008 is that it forgives the use of racial preferences in admissions in favor of outreach aimed at expanding the pool of qualified minority students. Plan 2008 leaves many of the details up to the individual campuses, and has no timeline or numerical goals/quotas. The basic philosophy of Plan 2008 is a commitment to "maintaining educational opportunities for all citizens." The proportion of Wisconsin's college-age minority population is projected to be 21.7% in 2008 (up from 12.9% in 1998), and the University wants their minority population to reflect this. Currently, the retention stats for minority students in the University of Wisconsin system is rather low – only 34% of black students graduate, as compared to 57% of white students.[cxxxi] Other components of Plan 2008 include an expanded financial aid program for minority and low-income students, as well as training programs to help professors understand the learning styles of minority students.

The seven specific goals of Plan 2008 are as follows[cxxxii]:

1) Increase the number of Wisconsin High School graduates of color who apply, are accepted, and who enroll at UW System institutions. This will be accomplished by: increasing pre-college programming and funding, adult recruitment programs targeting minority adults ages 25 and up and working toward a balance of enrollment of minority students across different academic disciplines.

2) Encourage partnerships that build the educational pipeline by reaching children and their parents at an earlier age. The use of K-12 partnerships and collaboration amongst teachers, administrators and parents, targeting people of color and economically disadvantaged students through UW System outreach.

3) Close the gap in educational achievement, by bringing retention and graduation rates for students of color in line with those of the student body as a whole. They will take a 2-pronged approach toward improving retention rates:

- create organized opportunities for administrators, faculty and staff to learn about intercultural differences in communication and learning styles that can help improve learning outcomes for students of color.
- bolster campus initiatives to ensure summer employment/earnings to help meet college costs.

4) Increase the amount of financial aid available to needy students and reduce their reliance on loans. Both scholarship programs and assistantship awards will be increased and targeting students of color and economic disadvantage.

5) Increase the number of faculty, academic staff, classified staff, and administrators of color so that they are represented in the UW System workforce in proportion to their current availability in relevant job pools. In addition, work to increase their future availability as potential employees. Mentoring of graduate and professional students, recruitment of students of color from graduate schools and creation of a work-site-based English as a Second Language (ESL) program are all ways UW intends to accomplish this goal. They also plan on regularly seeking feedback from \faculty and staff on ways to improve campus climate, in addition to conducting exit surveys with those who leave the system.

6) Foster institutional environments and course development that enhance learning and a respect for racial and ethnic diversity. Ways of accomplishing this include: encouraging discussion of *Plan 2008* amongst faculty and students, accountability surveys of students to measure and report the status of campus climate and how it can be improved, increased funding for the Institute on Race and Ethnicity, and encouraging institutions to consider the use of distances learning technologies.

7) Improve accountability of the UW System and its institutions. This will be done through the Multicultural/Disadvantaged Annual Report and the annual Accountability for Achievement report.

The University of Wisconsin System has shown a great deal of success in meeting these goals[cxxxiii]:

- In 2000-2001, 10,262 students participated in pre-college programs, 88% of whom were students of color.
- 2000-2001 also showed an increase of new targeted undergraduates of color enrolled of 7.7% from the previous fall. From 1991-2001, this increase was 63%.
- Bachelor degrees earned by students of color also increased by 10.6% between 1999 and 2000.
- In the category of financial aid, there was a clear preference of grants given to minority students as opposed to white students. For example, for 2000-2001, 49% of minority students' financial aid was loans, and 45% grants. For white students, those numbers were 68% and 29%, respectively.
- At the University of Wisconsin Oshkosh, the amount of financial aid being given to minority students is increasing. In 2000-2001, 249 students of color and 93 disadvantaged students received a total of $550,952 in scholarships and grants, while in 1998-1999, 232 and 69 students received $444,301.[cxxxiv]

APPENDIX B – PREPARATION AND OUTREACH PROGRAMS

AVID (Advanced Via Individual Determination)[cxxiv]:
AVID is a class offered in high school for the students in the middle, those who don't fall in the remedial or the most talented groups. It gives students organizational, study and learning skills, providing a teacher mentor and pushing the students towards the final goal of going to college. The program began in San Diego 22 years ago, and now is in 1,275 schools in 21 states. AVID begins with time management and organizational skills – each student receives a three-ring binder where they keep notes for each class (taken in a specific format), a log of what they learn in class and all of their grades. These binders are checked and graded randomly. They are also often tutored by college students during their AVID class, and receive support, encouragement, and advice from their faculty advisor. All the while, college is the goal – Danielle Steele, an 18-year old AVID student, explains the effect the program has had on her: "Instead of working, I'll go to college and make something of my life. I haven't been in AVID a day they haven't talked about college. They push you. They make sure you're doing what you're supposed to be doing. It's just like an extra parent."

Statistics prove AVID's success:
- 95% of AVID seniors go to college, 71% of them to four-year colleges.
- 40% of AVID students take AP courses in high school.
- AVID students are well prepared for college, too – the retention rate is 80%.

Southern Regional Education Board (SREB)'s "High Schools That Work"(HSTW) program:
HSTW was initially developed in 1987 by the Southern Regional Education Boad-State Vocational Education Consortium. Since its initial 28 sites in 13 states, it has grown to 1,100 sites in 27 states. Its mission is focused around academic preparation for post-secondary education and/or a career. Targeting students who are usually not challenged to meet high academic standards, HSTW hopes to raise math, science, communication, problem-solving and technical achievement of students to above the national average and also blend traditional academics with technical and vocational studies. Outside of the classroom, HSTW also looks to advance state and local policies and leadership initiatives to sustain school improvement.[cxxxvi]

HSTW accomplishes these goals through the implementation of a specific curriculum for students to complete, as well as requiring students to complete a "major," achieving some "technical literacy" in a particular area. Outside of a curriculum, HSTW encourages cooperation between teachers, hands-on learning experiences, and increased involvement of parents in their child's education.[cxxxvii]

College Opportunity and Career Help (COACH)[cxxxviii]

COACH was created by two economists, Tom Kane and Christopher Avery, at Harvard's John F. Kennedy School of Government and implemented at three Boston area high schools, including Dorchester High. The program's goal is to try and determine why low income students are less likely to go to college than their more well-off counterparts, and to find ways to overcome that discrepancy. One hour every week, for eight months, a group of six Harvard (3 male/female, five are black and one is Hispanic) graduate students (referred to as "coaches") gave 30 seniors a crash-course in the college application process, helping them on everything from picking schools to filing for financial aid. COACH targets low-income students, hoping to give them some of the college-prep advantages that their richer peers already have. As Mr. Kane says, "We weren't interested in targeting those students who were obviously college-bound. We wanted to reach those kids who had vague plans but had done nothing concrete to make their plans a reality." The program has had proven success – in the last year of the three-year study, 77% of students who participated in the program are expected to enroll in college or enter a vocational-education program (prior to COACH, 60% of the entire student body enrolled in some sort of post-secondary education).

COACH is still in a trial and testing phase, and there have been many critiques of the program so far. Many of the coaches have complained about the limits on their interactions with the high school students due to time constraints, too many students per coach, and the constricting structure of the program's research protocols. Outside critics question whether COACH is setting students up for failure, by pushing students into college who are not adequately prepared, academically and/or financially. Problems also arise with the issue of inadequate financial aid; programs such as COACH are fruitless if students cannot afford to pay tuition through graduation.

Texas and the Top Ten Percent Law[cxxxix]

In 1996, in response to a lawsuit banning the use of race as a factor in admissions at public colleges and universities, the Texas legislature passed a law requiring those institutions to admit any graduate of a Texas high school who ranked in the top 10% of their class. While the intent of this law was to increase minority enrollment without using affirmative action, it is unclear exactly what the actual results will be.

The preliminary findings from a study of the program done by Princeton Professor Marta Tienda demonstrate that the law benefits both minority and non-minority groups. Tienda also pointed out that the proportion of minorities enrolled in the state's public universities is still far below the percentage of their total population.

The biggest diversity impact that this law has had is in regards to geographical location. The freshman class of 2000 at the University of Texas included students from 135 schools that had not been previously represented there. Increases in racial diversity have been uneven, with Asian Americans gaining the most, while the percentage of African-Americans actually decreased slightly. Also, the performance of the top-ten-percent

students in the Universities has proven to be comparable with other students who scored 200-300 points higher on their SATs.

Indiana's 21st Century Scholars Program

This program began in 1990 and has been expanded since with state funding and federal support. The program pays full in-state tuition for low-income students that meet academic and behavioral standards. "Low-income" is determined by whether a student qualifies for the federal free and reduced lunch program in the eighth grade. In addition, students must graduate from an Indiana high school with a 2.0 GPA, apply for financial aid, use no illegal drugs or alcohol, and have no criminal record. Besides paying for full tuition and fees, this program provides tutoring, mentoring, college visits, activities for parents, and other support and information services. Since 1995, when the first group graduated from high school, almost 15,000 students have received scholarships to attend college in Indiana. The program begins offering support and academic services in the ninth grade, and follows the students through graduation. Evidence has shown that these students have higher college-enrollment rates than non-scholars: In 1999, only 15.26% of 21st Century Scholars showed no evidence of enrollment in some form of higher education, as opposed to 44.26% of all Non-Scholars.[cxl] Overall, this program tended to have the greatest positive impact on access for low-income students.

One of the central features of this program, something that makes it very unique, is its emphasis on parent involvement and student support. For example, some of the goals for the nine "Indiana Career and Postsecondary Advancement Centers" include: Three campus visits per student by the end of junior year, one with parents, and an increase in parent participation of at least 5% each year. Collaboration with local community organizations and post secondary institutions are also important.[cxli] By attacking the preparation and outreach problem from several angles - academic, social support, and financial aid – the 21st Century Scholars Program has been successful in increasing access for all students, specifically low-income.

APPENDIX C – REMEDIATION PROGRAMS

Xavier University (Louisiana): SuperScholar/EXCEL Summer Program[cxlii]
SuperScholar/EXCEL is a four-week summer program originally designed to prepare African-American students for post-secondary education. SuperScholar/EXCEL incorporates rigorous academic instruction, cultural activities, continuity of faculty-student relationships, and an emphasis on continuing education to the graduate level, in this summer program, which is attended both by high achievers and under-prepared students.

During the four weeks, students engage in content and skills learning. Areas of study are philosophy, speech and debate, and African American history. Students also practice writing and verbal and quantitative reasoning. The program also offers cultural learning activities and extra-curricular opportunities such as academic quiz bowls, motivational speakers, and recreational field trips that create a sense of community and shared learning.

The program has documented positive outcomes when comparing participants to control groups such as improved performance on ACT/SAT and GRE/LSAT exams, increased degree completion rates, and a first- to second-year retention rate of 78.2%.[cxliii]

Community College of Denver (Colorado)

Close to 60% of the student body at the Community College of Denver takes at least one remedial class;[cxliv] compared to 18% of Colorado's community college statewide student body.[cxlv] CCD students who have taken a remedial course are more likely to graduate and/or transfer to a four-year college than their classmates.[cxlvi] The percentage of CCD graduates who are minorities has increased from 13% in 1986-7 to 47% in 1999-2000.[cxlvii] Among the students enrolled in CCD's Division of Education and Academic Services, 84.5% maintained a GPA of 2.00 or higher, as did 92% of students using the reading lab at least three hours a week and 97% of students using the writing lab at least three hours a week.[cxlviii]

CCD also houses all remedial/developmental education efforts within one central department, creating a coherent and organized effort that has been found to be a predictor of success in numerous studies.[cxlix] CCD also makes it easy for students in need of academic support to seek out the help they need. The "one-stop" Academic Support Center (ASC) offers ESOL, GED, literacy, math, writing, and speech learning services along with TRIO services, in one location. CCD also offers on-line math and writing labs.

The multiple arms of the ASC converge around the shared, identified goals of facilitating faculty/student communication; enhancing student self-esteem (crucial to success), focusing instruction on students' individual needs, and creating sense of community and

connection to the college. The fact that the college has identified these goals in writing reflects a proactive campus-wide commitment to remedial education.

La Familia is another innovative CCD program. Learning communities[cl] are creating for entering first generation, low-income students. These learning communities establish a supportive learning environment, in which members take linked classes, are matched with peer mentors, and receive career and academic counseling. La Familia Participants enroll in their second year of study at a rate of 80%, compared to a 60% second-year return rate for all first-generation CCD students.[cli]

Another component of CCD's success has been identified as a qualified faculty dedicated to remedial education, and a commitment/embracing of diversity. [cliii] An extensive peer and faculty tutoring system also ensures that any student wanting quality one-on-one assistance can get it. Tutors and mentors are complete ongoing professional training.

CCD performs a systematic evaluation of its remedial programs and responds to its findings. Orlando Griego, dean of remedial education, recognizes the college's need for better measures of success outcomes which can "defend its programs against budget cuts and to keep them from being outsourced to private entrepreneurs."[cliii]

Delgado Community College (Louisiana)

Developmental education is clearly a priority of the college: around 50% of Delgado's full-time faculty in math and science, and over 60% of full-time faculty in English and communication also teach developmental courses,[cliv] allowing for "close co-ordination of educational goals.[clv] Students enrolled in developmental courses must also take a college-level study skills course.

Brien et al. attribute Delgado's developmental education accomplishments (indicated by high rates of "student persistence and academic success"[clvi]) to the integration of its developmental program with regular college programs. They also applaud an organizational structure that facilitates faculty coordination of curriculum, skills, and educational outcome goals

Like CCD, Delgado Community College seeks outside contributions to supplement insufficient state reimbursement. Louisiana will not allocate state funds to community colleges for non-credit courses.

University of Texas Austin

UT Austin boasts high remedial education success rates as well as high retention rates for at-risk student groups. Crucial components of its campus-wide efforts include a Learning Skills Center, drop-in and online tutoring, and a Study Skills Lab. Online content and skills handouts, an online writing center, and online resources for ESL students provide study resources available for free to all students, 24 hours a day.[clvii] The University's Learning Center webpage is extremely user-friendly, with helpful, accurate links to a variety of university and non-university resources.

Tex Talk is an automated telephone-tape service. Students can receive automated talks on study skills such as effective reading, writing papers, test preparation, time management, and "being assertive in class."[clviii]

UT Austin offers short Direct Instruction Programs in similar college success areas. Through the Supplemental Instruction program students can participate voluntarily in "content-based discussion sections attached to large entry-level courses."[clix] These discussions are led by TA's and cover the course content as well as study skills. The university claims gains between 0.5 and 1.0 grade point for SI students.[clx] Students may also enroll in free non-credit classes in subjects such as GRE test prep, speed reading, and conversational English.[clxi]

UT Austin also boasts a Retention Services Department that harbors numerous programs designed to retain student groups traditionally at-risk for dropping out. ACE is designed to facilitate the transition to UT Austin for first-years and transfer students. Students who chose to participate enjoy peer counseling, academic support, year-long progress checks by their advisors, and study skills workshops.[clxii] Gateway is a 2-year program for students who are identified by a committee for their academic potential. Selected students can enroll in small, for-credit classes that allow individualized assistance. Participants also have access to special support services, group activities, academic monitoring, and professional academic advising. This program incorporates effective pedagogic techniques such as collaborative learning, peer advising, and the creation of a small shared community.[clxiii]

The Preview Program is a 7-week summer program created to introduce at-risk students to campus life and services. After a week-long university introduction students take six weeks of credit-classes to prepare them for the semester.

Greenville Technical College (South Carolina)

Greenville Tech has contracted out some of its remedial course instruction to Kaplan, a national for-profit education company well known for its SAT and MCAT preparatory courses. Kaplan runs short content workshops to prepare incoming students for placement tests; these workshops are voluntary. Greenville Tech covers 75% of the

workshop cost; students cover the remaining 25%. Kaplan also offers a College Success Skills workshop before the fall semester, student participation in which has lowered remedial coursework need.[clxiv]

Greenville also pays Kaplan to run remedial courses during the semester for identified students. 60% of Greenville Tech's remedial courses are now taught through Kaplan; the rest are taught by Greenville Tech faculty.[clxv] Kaplan now offers courses all over the campus, better integrating remedial courses into campus life. Kaplan instructors are also employing using more innovative pedagogy, including an "immersion approach" to reading instruction, and "learning contracts" rather than grades outlining specific skills to master in each unit.

In 1998, more Kaplan students than non-Kaplan students earned As in lower-level reading and English courses. Among remedial math students, more Kaplan students than non-Kaplan students were found to go on to achieve passing grades in upper level math courses. 6% more Kaplan students re-enrolled from 1997 to 1998 than did non-Kaplan students.[clxvi]

La Guardia Community College (New York): New Student House Program

Tinto and Riemer document the success of La Guardia's New Student House Program, which creates small learning communities for students identified as under-prepared. Participating students take four of six basic skills courses together; they may change levels as their learning needs change. The New Student House program employs group learning, class meetings, "improvisatory theatre pedagogy," a required speech course, and computer-based learning.[clxvii] The Learning Community meets together periodically with a staff member who works as both a "course facilitator and a student counselor"[clxviii] creating a link between students' academic and extracurricular experiences.

Rather than isolating remedial education students, learning communities integrate these students into the general curriculum, while creating a source of support and allowing them to earn credit at the same time they acquire the requisite skills and content to thrive in for-credit classes. Tinto and Riemer describe learning communities as "a kind of co-registration or block scheduling that enables students to take courses together. The same students register for two or more courses, forming a sort of study team."[clxix] Sometimes a group of students will co-enroll in linked courses, for example a course in writing and a course in history, or a course in math and a course in science. Students in a learning community may also participate in discussion sections to supplement large lecture courses. Effective learning communities are often centered around a core theme linking the courses together, a technique which Tinto and Riemer suggest "provides students with a coherent interdisciplinary experience that promotes a deeper type of learning than is possible in stand alone courses."[clxx]

Tinto and Riemer found that participating La Guardia students appreciated "participation in the learning community as an important part of being able to manage the many struggles they faced in getting to and participating in class." New Student House students reported high levels of satisfaction with their college experience and persisted between years at a rate of 69.8%, compared to a 62.5% persistence rate among a comparison group.[clxxi] Similar persistence rates have been reported for learning community students at Seattle Central Community College. Pass rates among New Student House students were higher than those in the comparison group *and* college-wide in four out of five examined courses, sometimes by as much as 18.3%.[clxxii] At Spokane Falls Community College, teachers reported a reduced number of Ds and Fs in science courses among learning community students.[clxxiii] Other community colleges report similar positive trends in academic performance at Hunter College, Sacramento City College, and Skagit Valley College, among others.

OREGON UNIVERSITY SYSTEM (OUS)[clxxiv]

One factor contributing to a demand for remedial courses at the tertiary level is a frequent gap between high school graduation requirements and university expectations for incoming students. Proficiency-based Admissions Standards System (PASS), is OUS's "admission policy,"[clxxv] which the university system has been working to align with state high school graduation standards, determined by student acquisition of either a Certificate of Initial Mastery (CIM) or a Certificate of Advanced Mastery (CAM). Correlating PASS and CIM/CAM standards helps school systems and teachers prepare their students accordingly for OUS admission.

Requirements for attaining a Certificate of Initial Mastery (CIM) upon high school completion now match base OUS admissions standards. When a student achieves a CIM in English, for example, she or he simultaneously meets some, but not all, PASS standards for competency in English adequate for admission. Some areas of PASS requisite proficiency must be measured through standardized tests (such as the SAT-II and AP exams) and/or PASS Teacher Verification (PTV), in which teachers determine student proficiency from portfolios of work collected throughout the academic year.

As of fall 2001, OUS hopefuls must meet PASS standards in English, math, and science. By 2005 students will be required to meet PASS standards in English, math, science, and their choice of visual and performing arts, second languages, and social science.

OUS provides incentives to high schools to tailor their curricula to PASS standards. For example OUS officially approves high school courses which comply with PASS standards through the OUS Course Approval Process. OUS has provided support to secondary school administrators, counselors and teachers in the form of orientation training for secondary school teachers and high school counselor forums. It has also issued extensive literature, detailing exact admission/PASS criteria and showing how

these criteria line up with CIM and CAM standards. OUS maintains a comprehensive, up-to-date website with information on OUS admissions policies and PASS standards.

APPENDIX D – RETENTION PROGRAMS

Indiana University – Bloomington
Undergraduate Enrollment[clxxvi]*:*
Total full time: 27,052
Total part time: 2,331

Race/Ethnicity:
African-American: 4%
Asian-American: 3%
Hispanic: 2%
Native American: N/A
White: 87%
International: 3%

Retention/Graduation Rates:
Freshman retention rate: 88%
Four-year graduation rate: 40%
Five-year graduation rate: 61%
Average six-year graduation rate: 67%

In 1998, Indiana University received an 8 million-dollar grant from the Lily foundation to examine issues of retention and implement new programs. Since then, IU has developed several small, targeted retention efforts instead of a one-size-fits-all solution. Since 1994, freshman-sophomore year retention rates have jumped from 80% to 84%. The success of the targeted programs can be seen especially with the improvement in rates for Latino and African American students: they have jumped from 64% to 82%.[clxxvii]

Intensive Freshman Seminar (IFS)[clxxviii]: IFS is a three-week program in August that is open to all first-years. During those three weeks, students are taught by senior professors with whom they usually form valuable relationships. They live in dorms with older students and their fellow freshman. Besides academics, students are taught time management and study skills. These programs have been successful in

Freshman Interest Groups (FIGs)[clxxix]: This 12-year-old program allows students to lie and study with other students who share their academic interests. Residence halls are comprehensive, including academic support centers and tutoring facilities that are open until 11.

Groups[clxxx]: Groups is open to all students, but focused on first-years. It offers a summer course and financial and academic support throughout the year for 300 low-income and first-generation freshman. Many students describe the people they meet and become close with through this program as being like "family."

Prairie View A&M University
Undergraduate Enrollment[clxxxi]*:*
Total full time: 4,922
Total part time: 460

Race/Ethnicity:
African-American: 92%
Asian-American: 1%
Hispanic: 2%
Native American: N/A
White: 4%
International: 2%

Retention/Graduation Rates:
Freshman retention rate: 67%
Four-year graduation rate: 9%
Five-year graduation rate: 26%
Average six-year graduation rate: 30%

In 1998, PVAMU increased the number of math, reading, and writing courses and made tutoring, developmental lab, and academic advising mandatory. Since the implementation of these programs, retention rates have risen steadily, from 52.3% in 1998 to 68.25% in 2001.[clxxxii] Another program that has aided in retention is the Student Leadership Institute (SLI). The SLI is a program designed to help students develop their leadership, communication, conflict resolution, ethics, goal-setting, etc. skills. It is for freshman only, and the institute also emphasizes school pride and spirit, parliamentary procedure, and team building. These activities are intended to address student recruitment and retention through peer involvement.[clxxxiii]

Appalachian State University
Undergraduate Enrollment[clxxxiv]*:*
Total full time: 11,016
Total Part time: 1,096

Race/Ethnicity:
African-American: 3%
Asian-American: 1%
Hispanic: 1%
Native American: N/A
White: 94%
International: N/A

Retention/Graduation Rates:
Freshman retention rate: 83%
Four-year graduation rate: 31%
Five-year graduation rate: 55%
Average six-year graduation rate: 62%

Freshman Learning Communities (FLC)[clxxxv]: An FLC is a group of 15-25 students who are enrolled in one to three fall semester classes that are organized around a common theme, skill, or career direction. Because the classes are so small, it is easier for students to form study groups, discover potential career choices, and make friends with similar academic interests. Each FLC has an academic success team consisting of the course faculty member, an academic advisor, a librarian, and a peer mentor. Students who participate in Watauga College, Honors, Summer Preview, or other special programs are not eligible to join a FLC.

Freshman seminar: This is a course designed especially for first semester freshman, and is often used in conjunction with the FLC program, and is required of all students that participate in Summer Preview. The course is described as follows in the college catalog: "Designed especially for first semester freshmen, this course acquaints the student with the opportunities and demands of higher education and supports students in their transition to the University. The course involves students in the Appalachian community through a mix of activities, lectures, discussions, and participation in cultural events. In small classes, students build learning skills, practice time management and other life skills; examine the purpose and value of higher education and learn to set goals for this semester and beyond.[clxxxvi]"

Summer Preview[clxxxvii]: Appalachian State offers this six-week program as a way to start college early, feel comfortable at Appalachian in the relaxed summer environment, and earn six semester hours of graded credit. Summer Preview students all live in the same dorm , participate in campus cultural programs and mountain adventure activities, and are required to take Freshman Seminar in addition to one other class.

Watauga College Freshman Program[clxxxviii]: Watauga is described by an Appalachian State website as a "unique opportunity to connect their [students] academic and intellectual life with their personal and social development" the intent of which is to create a "comprehensive learning community." Students must apply for this program, and if they are accepted they get the benefit of small courses (12-18 students) that are inter-disciplinary, integrative, and provide hands-on experience such that "your education leads to a growing insight of the world." The most unique aspect of this program is that all Watauga students live together in East Residence Hall, which also holds their classes and faculty offices. The program consists of a wide range of people from many ethnic, political, religious, and academic backgrounds.

Orientation Program[clxxxix]: The summer before they start school, freshman come to Appalachian State for a 2-day Orientation program where they take placement tests and register for classes. This program is academically-focused, students are assigned their summer reading book and introduced to Appalachian's academic expectations. Parent orientation is held concurrently to student orientation, giving them insight to what their child might experience academically and socially in the fall. Then, in September, students participate in a second orientation exposing them to clubs, organizations, and leadership opportunities. During this time students also break into small groups and discuss the summer reading book with a faculty member.

Summer Reading Program: All incoming freshman at ASU are asked to read a book the summer before their freshman year that subsequently will be required reading in many classes. ASU has used this program since 1997. The SRP's website describes the purpose of this program: "By participating in the Summer Reading Program, students establish a common experience with other new students that will help develop a sense of community with their new environment and

introduce them to a part of the academic life they are beginning at Appalachian."[cxc] For the Fall of 2002, freshmen are asked to read *The Things They Carried* by Tim O'Brien. In conjunction with reading the book, students are encouraged to explore "The Virtual Wall," and O'Brien will be at ASU in early September as the Fall Convocation speaker.

Evidence of Success: The retention rate for students enrolling in freshman seminars vs. those not enrolling in freshman seminars: 90% vs. 84% for 1999.[cxci] For 2000, the freshman-sophomore retention rate was as follows for students participating in specific programs: Freshman Learning Communities: 87.8%, Freshman Seminar course alone: 86.4%, Watauga College Freshman Program: 85.3%. Also, five and six-year graduation rates for Freshman Seminar students typically exceed other cohorts' graduation rates (5 year rate by 2-4% points, 6 year rate by 1-3% points).[cxcii]

William Jewel College
Undergraduate Enrollment[cxciii]*:*
Total full time: 1,116
Total part time: 37

Race/Ethnicity:
African-American: 3%
Asian-American: 1%
Hispanic: 2%
Native American: N/A
White: 92%
International: 2%

Retention/Graduation Rates:
Freshman retention rate: 76%
Four-year graduation rate: 43%
Five-year graduation rate: 55%
Average six-year graduation rate: 60%

Retention Program: "First Year Experience"

- Since 1996, William Jewel College has offered a first-year seminar course called "The Responsible Self," required of all entering students. This course offers a small class size (20), and is taught by full-time faculty from diverse disciplines and explores individualism and responsibility in various literary, historical, and cultural traditions. This course meets four times a week for an entire semester, and is structured upon discussions and various reading and writing assignments. They are asked to reflect up on the self as an individual, in relation to the community, and as a members of a team or group. Students will potentially form a strong bond by meeting these intellectual challenges as a first-year class.
- Students are introduced to the "common course" concept through an event called "Adventure Day," in which students work in their cohorts for "The Responsible Self" with faculty members on group initiatives involving physical activity. After each activity, the groups debrief what happened, reflect on how they participated as individuals, and discuss how the lessons learned here can be applied to college and the challenging academic environment that

awaits them. These activities aid in the development of a sense of trust amongst the students that helps them to engage in dialogue about sensitive issues

- Emerging Leaders Conference: First-year students with demonstrated leadership skills are invited to attend this conference, where they will build those skills and abilities and step up to leadership challenges. In addition, participants have the opportunity to become mentors the following year and all first-years are invited to apply to other experience-based leadership and service projects.
- Demonstrated success of the program: Since the early 1990s, when the FYE program began, the first-year retention rates have jumped from 72% to 85% for fall of 2001 (retention through the 3rd semester).

Community College of Denver, Denver, CO

Undergraduate Enrollment

- 2/3 of student body is low income
- 65% are first-generation college students
- 10% has a disability
- 8% use English as second language
- 58% are students of color

Student Body breakdown by Race/Ethnicity:

- African-American: 13%
- Native American: 2%
- Asian and Pacific Islander: 9%
- Hispanic: 30%
- White: 46%

- CCD Integrated Advising – a three-tiered advising model administered by the Integrated Advising committee, including basic skills assessment, general core advising, referral to support services, and policies on declaration of major and program-major advising.
- First Generation Student Success Program – Enrolls students in first-year experience classes, learning community initiatives, tutoring and peer mentor programs, service-learning opportunities and other community service. Special staff and specific faculty members work closely with students to help them adapt. This program has an annual retention rate of 80%.
- Title V H.S.I. (Hispanic Serving Institutions) Access and Success Project – This project is a five year grant to strengthen the retention and success rates of degree-seeking, low-income, first-generation and minority students within CCD's academic centers. Educational Case Management (ECM) teams work with learning community faculty to develop instructional strategies to increase the retention and success of students. Students participate in first-year-experience and pre-professional learning communities, and supplemental/enrichment activities to help ensure their success in health, math, science, and information technology disciplines. This is for all classes. In Spring 2002, after the second year of the project, 60 title V first-generation students will graduate from the college with 2-yr degrees.

University of Texas – El Paso
Undergraduate Enrollment[cxciv]*:*
Total full time: 9,243
Total part time: 3,712

Race/Ethnicity:
African-American: 2%
Asian-American: 1%
Hispanic: 72%
Native American: N/A
White: 12%
International: 11%

Retention/Graduation Rates:
Freshman retention rate: 67%
Four-year graduation rate: 2%
Five-year graduation rate: 13%
Average six-year graduation rate: 23%

UTEP, a largely non-residential college located in the economically disadvantaged city of El Paso, faces a unique set of challenges because it's student population is very non-traditional. Students come with high expectations and few survival skills, and over the past few years UTEP has been developing programs with the intention of creating "an environment in which they (students) would learn to succeed at being a college student."[cxcv] Their intention is to focus not just on creating an atmosphere conducive to academic success, but a climate of support that allows the whole person to thrive.

First Year Seminar[cxcvi]: This course, entitled "Seminar in Critical Inquiry," is required of all freshmen, who will take it either first or second semester of their first year. Class sizes are small (20-25 students each), and are team-taught by an instructor, student peer leader, and university librarian. Hopefully, this class will encourage students' self-assessment and goal clarification and increase their involvement with UTEP activities and resources. Specific goals of the First Year Seminar include:

- Strengthen students' academic performance and ease their transition to UTEP
- Enhance students' essential academic skills
- Increase students' interaction with faculty members and each other.

This program has been very successful, as the retention rate and GPA of those who complete the seminar are higher than that of those who don't.[cxcvii]

CircLES (Circles of Learning for Entering Students)[cxcviii]: The CircLES program is designed to help incoming freshman succeed in their critical freshmen-level classes. Students are grouped into classroom "circles" of 25 people who study English, math, science or engineering together under a team of professors. Because the professors work

together, they are better able to keep track of students' progress and coordinate assignments. It also provides the opportunity for students to help each other with homework, and create an academic atmosphere of teamwork and cooperation. Students who join CircLES are more likely to graduate on time and finish college with a higher GPA than students not involved in the program. There is also a one-week mandatory orientation program for CircLES, guided by upper-class students and college faculty and staff. During this program, students are told what to look for at college, what to avoid, how to find resources and get their questions and concerns answered. Besides offering a substantial academic foundation, the orientation also provides students with a network of familiar faces to know and see on campus so they aren't as surprised or overwhelmed at the start of the school year.

Student Leadership Institute (SLI)[excix]: This course-based program, consisting of no more than 75 students, prepares students for on-campus employment and leadership roles. The program offers internship-like experience, with the opportunity for employment at the end.

The Academic Center for Engineers and Scientists (ACES)[cc]: This center, located at the heart of the campus, is a multi-functional, state-of-the-art facility serving Science, Engineering, and Math students. ACES is a resource hub designed to serve the academic, personal, and professional growth of SEM (Science, Engineering, and Math) students. It has space for group and individual study, meetings, relaxation, workshops, etc. Often, the Center will invite speakers in from on- or off-campus for presentations and training sessions. Additionally, the Center has a vast library of resources, offers free tutoring, and gives students access to computers and other useful technology. The Center lists some specific goals on its website:

- Engage and network engineering and science majors early in their college careers
- Provide a central facility for academic advising, professional skills development, and campus networking
- Serve to provide a "safe haven" for science and engineering students to study, work, and commune, with those peers experiencing similar academic and personal challenges.

---

[i] http://chronicle.com/free/almanac/2002/nation/nation.htm

[ii] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002*, NCES 2002–025, Washington, DC: U.S. Government Printing Office (2002): 99.

[iii] US Department of Education, National Center for Education Statistics, *The Condition of Education 2002*, Washington, DC: U.S. Government Printing Office, (2002): 152, 153.

[iv] Anthony Carnevale, Closing the Gap Plenary, Ed Trust Conference 11/18/02

[v] [v]Edward C. Warburton, Rosio Bugarin, and Anne-Marie Nunez, "Bridging the Gap: Academic Preparation and Post-Secondary Success of First-generation Students." Washington, DC: National Center for Education Statistics. August (2001): Table 17.

[vi] Stephen Burd. "Rift Grows Over What Keeps Low-Income Students Out of College," *Chronicle of Higher Education*. 25 January 2002.
[vii] Edmund J. Hansen, "Essential Demographics of Today's College Students." *AAHA Bulletin* 51 November (1998) www.emporia.edu/tec/t_idea8.htm.
[viii] University of Illinois Faculty Seminar. "Teaching at an Internet Distance: The Pedagogy of Online Teaching and Learning." 7 December (1999).
[ix] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA: (2002).
[x] Anthony Carnevale, Closing the Gap Plenary, Ed Trust Conference 11/18/02
[xi] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA: (2002).
[xii] "Poverty Rates Fell In 2000 as Unemployment Reached 31-Year Low: Upturn in Unemployment Combined with Weaknesses in Safety Net Raise Red Flags for 2001"
Center on Budget and Policy Priorities. 26 September (2001). http://www.cbpp.org/9-25-01pov.htm
[xiii] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 6. http://www.rand.org/publications/CAE/CAE100/index.html
[xiv] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 5. http://www.rand.org/publications/CAE/CAE100/index.html
[xv] L. J. Sax, A. W. Astin, W.S. Korn, and K.M. Mahoney, "The American Freshman: National Norms for Fall 1998," Higher Education Research Institute, UCLA Graduate School of Education: (1998).
[xvi] Adam Clymer, "College Students Not Drawn to Voting or Politics, Poll Shows," *New York Times* New England final ed. 12 January (2000): A14.
[xvii] "Institute Poll Shows College Students Turned Off by Politics, Turned On by Other Public Service," Panetta Institute, Cited January 2000. Access date: 28 Jun. 2002 <www.pantettainstitute.org/news.html>.
[xviii] Adam Clymer, "College Students Not Drawn to Voting or Politics, Poll Shows," *New York Times* New England final ed. 12 January (2000): A14.
[xix] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2002*, NCES 2002–025, Washington, DC: U.S. Government Printing Office (2002): 99.
[xx] Robert Bruce Slater, "The Progress of Black Students at the Flagship State Universities," *The Journal of Blacks in Higher Education*. 0.11 (1996): 73.
[xxi] Advisory Committee on Student Financial Assistance, *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*, Washington, DC, 2001. Pg 5
[xxii] Advisory Committee on Student Financial Assistance, *Access Denied: Restoring the Nation's Commitment to Equal Educational Opportunity*, Washington, DC. (2001): 5.
[xxiii] William B. Harvey, "Minorities in Higher Education 2001-2002: Nineteenth Annual Status Report," American Council on Education (2002): 12.
[xxiv] Stephen Burd. "Rift Grows Over What Keeps Low-Income Students Out of College," *Chronicle of Higher Education*. 25 January 2002.
[xxv] Paul E. Barton, "The Closing of the Education Frontier?" Educational Testing Service, September (2002): 12. http://www.ets.org/research/pic/frontier.pdf
[xxvi] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 6.
[xxvii] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 99.
[xxviii] U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 2001*, Washington, DC: U.S. Government Printing Office. (2001): 99.
[xxix] Edmund J. Hansen, "Essential Demographics of Today's College Students." *AAHA Bulletin* 51 November (1998) www.emporia.edu/tec/t_idea8.htm.
[xxx] University of Illinois Faculty Seminar. "Teaching at an Internet Distance: The Pedagogy of Online Teaching and Learning." 7 December (1999).

[xxxi] Thomas G. Mortenson, "Shutting the College Doors: Are We Cutting off the Middle Class?" Education Commission of the States, 2002 National Forum on Education Policy. Hollywood, CA. (2002).
[xxxii] Lutz Berkner and Lisa Chavez, *Access to Postsecondary Education for the 1992 High School Graduates*. Washington, DC: U.S. Department of Education. National Center for Education Statistics. (1997): 17.
[xxxiii] Lutz Berkner and Lisa Chavez, *Access to Postsecondary Education for the 1992 High School Graduates*. Washington, DC: U.S. Department of Education. National Center for Education Statistics. (1997): 17.
[xxxiv] *Statewide Insights: Commonwealth of Pennsylvania.* New York, NY: Standard and Poor's School Evaluation Services, (2002): 17-18. http://www.ses.standardandpoors.com/pdf/pa_swi_fullreport.pdf
[xxxv] Susan P. Choy, *Access and Persistence: Findings from 10 years of Longitudinal Research on Students.* American Council on Education Center for Policy Analysis (2002): 15.
[xxxvi] US Department of Education, National Center for Education Statistics. *Digest of Education Statistics* 2001, NCES 2000-130, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman. Washington, DC: (2002): Table 142.
[xxxvii] US Department of Education, National Center for Education Statistics. *Digest of Education Statistics* 2001, NCES 2000-130, by Thomas D. Snyder. Production Manager, Charlene M. Hoffman. Washington, DC: (2002): Table 142.
[xxxviii] Susan Varga, "Paying for College: The Gold Standard", *The New York Times* 23 October (2002): 12.
[xxxix] College Board, *Trends in College Pricing*, Washington, DC. (1999)
[xl] "Breaking the Social Contract: The Fiscal Crisis in Higher Education," Council for Aid to Education. (1997): 3. http://www.rand.org/publications/CAE/CAE100/index.html
[xli] "Losing Ground: A National Status Report on the Affordability of American Higher Education," *National Center for Public Policy and Higher Education.* 2002.
[xlii] "Trends in Student Aid." New York: The College Board (2002): 4.
[xliii] "Trends in Student Aid." New York: The College Board (2002): 12.
[xliv] *State Student Financial Aid: Tough Choices and Trade-Offs for a New Generation.* Washington, DC: American Association of State Colleges and Universities (2000).
[xlv] Donald E. Heller, "Merit and Need-Based Aid: Recent Changes in State, Federal, and Institutional Policy and the Impact on College Affordability," Donald E. NACUBO Forum on Tuition Discounting, Dallas, 3 February (2000).
[xlvi] *State Student Financial Aid: Tough Choices and Trade-Offs for a New Generation.* Washington, DC: American Association of State Colleges and Universities (2000).
[xlvii] "Trends in Student Aid." New York: The College Board (2002): 5.
[xlviii] Jennifer Wellman, "Looking Back, Going Forward: The Carnegie Commission Tuition Policy," Working Paper, January (2001): 1.
[xlix] Susan Dynarksi, "Hope for Whom? Financial Aid for the Middle Class and its Impact on College Attendance," Working Paper 7756, National Bureau of Economic Research, June 2000, Cambridge, 16 June (2001). http://papers.nber.org/papers/W7756.pdf
[l] Jane Wellman, *Looking Back, Going Forward: The Carnegie Commission Tuition Policy* 4,8.
[li] Scott Stephens, "Conference Sees Roadblocks in College Path," *The Plain Dealer* 26 September 2002.
[lii] Theodore Cross, "The Thernstrom Fallacy: Why Affirmative Action Is Not Responsible for High Dropout Rates of African-American College Students," *The Journal of Blacks in Higher Education*. 0.20 (1998): 98.
[liii] "Post Secondary Education Opportunity: The Environmental Scanning Research Letter of Opportunity for Postsecondary Education." September (2002): 13.
[liv] Thomas Kane. *The Price of Admission: Rethinking How Americans Pay for College*. Washington, D.C.: The Brookings Institution, 1999. 11-15.
[lv] Abigail Bucuvalas, "Who Benefits From Financial Aid?" *HGSE News* 1 October (2002).
[lvi] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 13. http://www.indiana.edu/~iepc/21century.pdf

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

[lvii] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 13. http://www.indiana.edu/~iepc/21century.pdf

[lviii] Edward St. John et al., "Keeping the Promise: The Impact of Indiana's 21st Century Scholars Program," 23 July (2001): 14. http://www.indiana.edu/~iepc/21century.pdf

[lix] "State of Diffusion: Defining Student Aid in an Era of Multiple Purposes," The Institute for Higher Education Policy, Aug. 1999: 9.

[lx] Jeffrey Selingo, "Questioning the Merit of Merit Scholarships," *Chronicle of Higher Education on the Web* 19 Jan. 2001. http://chronicle.com/weekly/v47/i19/19a02001.htm

[lxi] Selingo, "Questioning the Merit". These states are Alaska, Arkansas, Florida, Georgia, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Nevada, New Mexico, South Carolina, and Washington.

[lxii] Jeffrey Selingo, "Questioning the Merit of Merit Scholarships," *Chronicle of Higher Education on the Web* 19 Jan. 2001. http://chronicle.com/weekly/v47/i19/19a02001.htm

[lxiii] "Financial Aid Professionals at Work in 1999-2000: Results from the 2001 Survey of Undergraduate Financial Aid Policies, Practices, and Procedures," Washington, DC: The College Board and The National Association of Student Financial Aid Administrators (2002): 19.

[lxiv] Selingo "Questioning the Merit." Selingo adds, from the Census Bureau, that New Mexico's median family household income in 1999 was $32,000.

[lxv] "Table One: Total Grant Aid Awarded by State Grant Programs, 1998-99," *30th Annual NASSGAP Survey Report*, 30 July 2001: 1. http://www.nassgap.org/researchsurveys/30thsur&rep.pdf

[lxvi] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002): 75,76.

[lxvii] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002): 78, 80.

[lxviii] D.E. Heller and P. Martin (Eds.). *Who should we help? The negative social consequences of merit scholarships*. Cambridge, MA: The Civil Rights Project at Harvard University. (2002):84, 85.

[lxix] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 40-41.

[lxx] "Table 142: Percentage of public high school graduates taking selected mathematics and science courses in high school, by sex and race/ethnicity: 1982 to 1998." *Digest of Education Statistics, 2001*.

[lxxi] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 46-49.

[lxxii] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 51-52.

[lxxiii] Susan Yonezawa. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools," *American Educational Research Journal*. 39.1 (2002): 55-59.

[lxxiv] Stephanie Desmon. "AVID puts college in sight for the in-between students." *SunSpot* 29 May (2002): 16. http://www.sunspot.net/news/local/bal-md.avid29may29.story?coll=bal-local-headlines

[lxxv] John Cloud, "Who's Ready for College?; Conservatives want to get rid of remedial education." *Time* 14 October (2002): 60.

[lxxvi] According to Supplemental Note 9 to *The Condition of Education 2000*, "marginally or not qualified" is defined as being in the lowest quartile of 4-year college students for all of the following criteria: class rank, GPA, the NELS test, and ACT or SAT scores, or were enrolled in vocational programs according to their high school transcript.

[lxxvii] "Student Effort and Academic Progress: Who is Prepared for College," *The Condition of Education 2000* Washington, DC: National Center for Education Statistics, 9 August (2000). http://nces.ed.gov/pubs2000/coe/2000/section3/s_table30_1.html

[lxxviii] Edward P. St. John et al., *State Policy and the Affordability of Public Higher Education: The Influence of State Grants on Persistence in Indiana*. Bloomington: Indiana Education Policy Center, 19 June (2001). http://www.indiana.edu~/iepc/welcome.html

[lxxix] Ronald Phipps, *College Remediation: What It Is, What It Costs, What's at Stake*. Washington, DC: The Institution for Higher Education Policy, (1998): 8.

[lxxx] U.S. Department of Education, National Center for Education Statistics, *Remedial Education at Higher Education Institutions in Fall 1995.* U.S. Department of Education Office of Educational Research and Improvement, October (1996): iv.
[lxxxi] Sara Hebel, "Georgia Strives to Raise Standards," *The Chronicle of Higher Education* April 9 (1999): A34
[lxxxii] Hunter R. Boylan, "Developmental Education: Demographics, Outcomes, and Activities," *Journal of Developmental Education* 23.2 (1999).
[lxxxiii] David W. Breneman and William N. Haarlow, "Remedial Education: Costs and Consequences," *Remediation in Higher Education: A Symposium.* Washington, DC: The Fordham Foundation (1998): 13. http://www.edexcellence.net/library/remed.html
[lxxxiv] John Cloud, "Who's Ready for College?; Conservatives want to get rid of remedial education." *Time* 14 October (2002): 60.
[lxxxv] J. Linn Allen, "Colleges Take Up Burden of Remedial Instruction," *Chicago Tribune* 26 December (2000) http://chicagotribune.com/...n/article/0,2669,SAV-0012260156,FF.html Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders.* Washington, DC: Community College Press (2000): 31-34.
[lxxxvi] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders.* Washington, DC: Community College Press (2000): 31.
[lxxxvii] Southern Regional Education Board (SREB), "Reducing Remedial Education: What Progress are States Making?" Educational Benchmarks 2000 Series (2000) pg. 17.
[lxxxviii] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[lxxxix] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[xc] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[xci] Benchmarking Steering Team, "Best Practices in Developmental Education," 31 May (2000), http://planet.tvi.cc.nm.us/best/
[xcii] McCabe and Day, Jr.; Benchmark Steering Team. Research has shown that simultaneous enrollment motivates remedial students who can apply the skills they are learning in remedial courses to other coursework.
[xciii] McCabe and Day, Jr. 21. McCabe and Day, Jr. identify a positive correlation between program evaluation, student retention, and student achievement in math and English.
[xciv] Anthony P. Carnevale and Richard A. Fry. "Crossing the Great Divide: Can We Achieve Equity When Generation Y Goes to College?" Washington, DC: Educational Testing Service (2000): 5.
[xcv] William S. Koski and Henry M. Levin, "Replacing Remediation with Acceleration: Preliminary Report on Literature Review and Initial Interviews" Stanford: National Center for Postsecondary Education (1998): 16.
[xcvi] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders.* Washington, DC: Community College Press (2000): 50. This suggestion is echoed in much of the literature on remediation at the post-secondary level.
[xcvii] SREB 9. The SREB reports: "As (remedial) standards are established, remedial rates rise initially—sometimes substantially. But the remedial rates decline over time. Holding all students who enter college to a single standard—even a low standard—results in higher percentages of students who need at least one remedial course."
[xcviii] Sara Hebel, "Community College of Denver Wins Fans With Ability to Tackle Touch Issues," *The Chronicle of Higher Education*, 7 May (1999): 5. http://chronicle.com/weekly/v45/i35/35a03701.htm
[xcix] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders.* Washington, DC: Community College Press (2000): 42.
[c] See the explanation of the Cal Grant system in the paper on financial aid.
[ci] For example at CSU students can take no more than 30 credit hours of non-credit courses.

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

[cii] Albany State, for example, prides itself on its successful remediation. What options can be created for public institutions that want to continue offering remedial when the state refuses funding?
[ciii] Allen Budny, "Basic Skills Problems at Community Colleges And How to Resolve Them," *Change* May/Jun. (2000): 46.
[civ] Sara Hebel, "Georgia Strives to Raise Standards," *The Chronicle of Higher Education* 9 Apr. (1999): A34. 37 miles away, East Georgia College is the closest community college to Georgia Southern University, too long and costly a commute for many learners. To accommodate the needs of enrolled students who do not meet basic competency requirements, East Georgia College and Georgia Southern University created a center on GSU's campus where East Georgia College faculty provide remedial education courses. Students report appreciating the convenience of the arrangement and the smaller classes.
[cv] Robert H. McCabe, *No One to Waste: A Report To Public Decision-Makers and Community College Leaders*. Washington, DC: Community College Press (2000): 38.
[cvi] Numerous tactics for reducing the need for remediation are currently underway. See the paper on outreach, partnership, and retention.
[cvii] SREB 12. Maryland reports about an 11% decrease in the need for remediation at two-year colleges for students who completed a college-prep curriculum in high school.
[cviii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 4.
[cix] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 142.
[cx] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 6.
[cxi] The impact of financial burdens on college persistence is dealt with more extensively in the paper on financial aid.
[cxii] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 7.
[cxiii] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 7.
[cxiv] Francine G. McNairy, *Leveling the Playing Field: Promoting Academic Success for Students of Color*, San Francisco: Jossey-Bass Inc. (1996): 12.
[cxv] "State Policy and the Affordability of Public Higher Education…" 14, 17. St. John et al. found that controlling for quality of college experience explained consistently lower persistence rates for African American students at an Indiana public postsecondary institution.
[cxvi] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 178.
[cxvii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 179.
[cxviii] For a more detailed discussion of financial need's impact on persistence, including a discussion of work, see the paper on financial aid.
[cxix] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. Chicago: U. of Chicago Press (1993): 185.
[cxx] Morgan Appel, "The Impact of Diversity on Students: A Preliminary Review of the Research Literature." Association of American Colleges and Universities. (1996): v.
[cxxi] Morgan Appel, "The Impact of Diversity on Students: A Preliminary Review of the Research Literature." Association of American Colleges and Universities. (1996): 2.
[cxxii] Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: University of Chicago Press (1993).
[cxxiii] Alfredo G. De Los Sandos, Jr., in Richardson and Skinner 1991, chapter 13. www.tamu.edu/marshome/assess/retgoals.html
[cxxiv] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html
[cxxv] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

[cxxvi] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html
[cxxvii] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html
[cxxviii] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html
[cxxix] AASCU, 1994 www.tamu.edu/marshome/assess/retgoals.html
[cxxx] Kenneth D. Richardson, "Letters: Orientation Programs for Minority Students: Segregation on College Campuses," *The Chronicle of Higher Education* 2 October (1998).
[cxxxi] Jeffrey Selingo, "Affirmative Action Plan for the '90s?: Wisconsin Tries for Diversity Without Numerical Goals." *The Chronicle of Higher Education* 8 May (1998): A40.
[cxxxii] "University of Wisconsin System: Plan 2008: Educational Quality Through Racial and Ethnic Diversity," US System Board of Regents, May 1998. Pg 19-25. http://www.uwsa.edu/multcult/plan/planfinl.htm.
[cxxxiii] "University of Wisconsin System Minority and Disadvantaged Student Annual Report." April, 2002.
[cxxxiv] "University of Wisconsin Oshkosh Plan 2008 Biennial Report," 1998-2001. http://www.uwosh.edu/strategic/pdf/Plan2008Report.pdf
[cxxxv] Stephanie Desmon. "AVID puts college in sight for the in-between students." *SunSpot* 29 May (2002). http://www.sunspot.net/news/local/bal-md.avid29may29.story?coll=bal-local-headlines
[cxxxvi] "High Schools That Work: An evidence-based design for improving the nation's schools and raising student achievement," *Southern Regional Education Board* Atlanta: SREB (2002): 1-4. http://www.sreb.org/programs/hstw/background/2002_HSTW_Brochure.pdf
[cxxxvii] "High Schools That Work: An evidence-based design for improving the nation's schools and raising student achievement," *Southern Regional Education Board* Atlanta: SREB (2002): 5. http://www.sreb.org/programs/hstw/background/2002_HSTW_Brochure.pdf
[cxxxviii] Stephen Burd. "Bridging the Gap," *The Chronicle of Higher Education* August 9 (2002)
[cxxxix] Rose Gutfeld, "Ten Percent in Texas: The jury is still out on an alternative to affirmative action," *Ford Foundation Report* Fall 2002.
[cxl] Edward P. St John, "Meeting the Access Challenge: Indiana's Twenty-first Century Scholars Program," Lumina New Agenda Series., Indiana Education Policy Center. 4.4 (2002): 17.
[cxli] Edward P. St John, "Meeting the Access Challenge: Indiana's Twenty-first Century Scholars Program," Lumina New Agenda Series., Indiana Education Policy Center. 4.4 (2002): 8.
[cxlii] "SuperScholar/EXCEL," *Special Programs*, Xavier University of New Orleans, 23 June (2001) http://www.xula.edu/SS-Excel.html
[cxliii] "SuperScholar/EXCEL," *Special Programs*, Xavier University of New Orleans, 23 June (2001) http://www.xula.edu/SS-Excel.html
[cxliv] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999): A37.
[cxlv] "Executive Summary Chapter 7 -- Remedial Education: Too much, not enough?", Colorado Department of Higher Education, 20 Jun. 2001 http://www.state.co.us/cche_dir/1289-7.html
[cxlvi] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999): A37.
[cxlvii] Byron N. McClenney and Ruben Michael Flores, "Community College of Denver Developmental Education," *Developmental Education: A Twenty-First Century Social and Economic Imperative.* Mission Viejo: League for Innovation in the Community College (1998): 45.
[cxlviii] John E. Roueche and Suanne D. Roueche, *High Stakes, High Performance: Making Remedial Education Work.* Washington, DC, Community College Press (1999): 37.
[cxlix] Byron N. McClenney and Ruben Michael Flores, "Community College of Denver Developmental Education," *Developmental Education: A Twenty-First Century Social and Economic Imperative.* Mission Viejo: League for Innovation in the Community College (1998): 48-9.
[cl] See discussion of La Guardia Community College's New Student House Program.
[cli] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)
[clii] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

[cliii] Sara Hebel, "Community College of Denver Wins Fans," *The Chronicle of Higher Education* 7 May (1999)
[cliv] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative.* League for Innovation in the Community College, The College Board. June (1998): 57.
[clv] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative.* League for Innovation in the Community College, The College Board. June (1998): 55.
[clvi] Randy Brien, Charles A. Duffy, Madeleine Fulwiler, Pamela Andrea Neill, and Cindy Siegrist. "Delgado Community College." *Developmental Education: A Twenty-First Century Social and Economic Imperative.* League for Innovation in the Community College, The College Board. June (1998): 55.
[clvii] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clviii] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clix] "What Is Supplemental Instruction?" UT Austin Learning Center. 6 April (2001) http://146.6.156.120/si/siread.html.
[clx] "What Is Supplemental Instruction?" UT Austin Learning Center. 6 April (2001) http://146.6.156.120/si/siread.html.
[clxi] *UT Learning Center*, University of Texas 11 May (2001) http://www.utexas.edu/student/utlc/
[clxii] "ACE Program: Achieving College Excellence," *Retention Programs*, U. of Texas, Austin. 1 September (1998) http://www.utexas.edu/depts/dos/ret/ace.html
[clxiii] "Gateway Program," *Retention Programs*, U. of Texas, Austin 1 September (1998) http://www.utexas.edu/depts/dos/ret/gateway.html
[clxiv] Ben Gose, "Tutoring Companies Take Over Remedial Teaching at Some Colleges," *Chronicle of Higher Education*, 19 Sept. (1997): A44.
[clxv] Ben Gose, "Tutoring Companies Take Over Remedial Teaching at Some Colleges," *Chronicle of Higher Education*, 19 Sept. (1997): A44.
[clxvi] John E. Roueche and Suanne D. Roueche, *High Stakes, High Performance: Making Remedial Education Work* Washington, DC: Community College Press (1999): 39.
[clxvii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxviii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxix] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxx] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxi] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxiii] Vincent Tinto and Stacy Riemer, *Remedial Education in Higher Education: Learning Communities*, Syracuse U., Syracuse, 22 Jun. 2001 < http://soeweb.syr.edu/hed/tinto/ncpi.htm>.
[clxxiv] "PASS: Proficiency-based Admission Standards System," Oregon Univesrity System, http://www.ous.edu/pass
[clxxv] "PASS: Proficiency-based Admissions Standards System." Oregon University System. 22 November 2002. http://www.ous.edu/pass/
[clxxvi] "Education: College: Indiana University – Bloomington: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_1809.htm
[clxxvii] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html

DRAFT
Not for Citation
5/16/2003
Last Revised 3/1/2003
Jamie E. Scurry

[clxxviii] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxix] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxx] Barovick, Harriet. "Colleges of the Year: Indiana University," *Time*, www.time.com/time/2001/coy/university.html
[clxxxi] "Education: College: Prairie View A&M University: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_3630.htm
[clxxxii] "Prairie View cited for Successful Developmental Education Program" http://www.pvamu.edu/netpub/December%20Newsletter/Page%202.htm
[clxxxiii] Student Leadership Institute Description http://www.pvamu.edu/gridold/studentactivities/OSAL-Office/SLI/SLIProgDesptn.html
[clxxxiv] "Education: College: Appalachian State University: Student Body," US News and World Report, http://www.usnews.com/usnews/edu/college/directory/drstudent_2906.htm
[clxxxv] "Learning Communities at Appalachian" www.fpext.appstate.edu/gstudies/lc/details.htm
[clxxxvi] "Freshman Seminar Program Description Guide" http://www.appstate.edu/www_docs/depart/freshman/cd.htm
[clxxxvii] "Summer Preview" http://www.appstate.edu/www_docs/depart/freshman/info.htm
[clxxxviii] "Freshman Seminar Program Description Guide" http://www.appstate.edu/www_docs/depart/freshman/cd.htm

[clxxxix] "Rationale for Appalachian State," Policy Center on the First Year of College http://www.brevard.edu/fyc/instofexcellence/appalachianst/narrative.htm
[cxc] "About the Summer Reading Program," Appalachian State University Website. http://fpext.appstate.edu/gstudies/srp/about.htm
[cxci] Rutherford, Megan. "Master College: Appalachian State," *Time*, http://www.time.com/time/2001/coy/master.html
[cxcii] "Rationale for Appalachian State," Policy Center on the First Year of College http://www.brevard.edu/fyc/instofexcellence/appalachianst/narrative.htm
[cxciii] "Education: College: William Jewell College: Student Body," US News and World Report http://www.usnews.com/usnews/edu/college/directory/drstudent_2524.htm
[cxciv] "Education: College: University of Texas-El Paso: Student Body," US News and World Report http://www.usnews.com/usnews/edu/college/directory/drstudent_3661.htm
[cxcv] "Rationale for UTEP," Policy Center on the First Year of College www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cxcvi] "University Studies," University of Texas – El Paso http://dmc.utep.edu/univcoll/studies/home.htm
[cxcvii] "Rationale for UTEP," Policy Center on the First Year of College www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cxcviii] "CircLES," University of Texas – El Paso http://www.utep.edu/mie/circles/circles.htm
[cxcix] "Rationale for UTEP," Policy Center on the First Year of College, www.brevard.edu/fyc/instofexcellence/univoftexaselpaso/narrative.htm
[cc] "Academic Center for Engineers and Scientists," University of Texas-El Paso www.utep.edu/sces/info.html

APPENDIX F -- RESPONSES FROM CHARLES MILLER AND DR. MARY ELLEN DUNCAN TO REPRESENTATIVE RUBEN HINOJOSA'S SUBMITTED WRITTEN QUESTIONS

REP. RUBÉN HINOJOSA
EDUCATION AND THE WORKFORCE COMMITTEE HEARING
MAY 13, 2003

QUESTIONS FOR CHARLES MILLER, CHAIR OF THE UNIVERSITY OF TEXAS REGENTS BOARD

THE TEXAS HIGHER EDUCATION COORDINATING BOARD HAS DEVELOPED A PLAN CALLED CLOSING THE GAPS. THE PLAN CALLS FOR THE STATE OF TEXAS TO CLOSE THE GAPS IN COLLEGE PARTICIPATION AND DEGREE COMPLETION BETWEEN TEXAS AND OTHER STATES AND TO CLOSE THE GAPS BETWEEN BLACKS AND HISPANICS AND WHITES. OUR LEADERS – IN EDUCATION, IN GOVERNMENT, AND BUSINESS – RECOGNIZED THE SIMPLE TRUTH THAT IF TEXAS DOES NOT DO A BETTER JOB OF EDUCATING ITS POPULATION, IT WILL BE LEFT BEHIND IN THE GLOBAL ECONOMY. HOWEVER, NOW THE STATE OF TEXAS IS IN FISCAL CRISIS AND HIGHER EDUCATION IS FACING DEEP CUTS, THREATENING THE PROMISE AND THE PROGRESS OF THE CLOSING THE GAPS INITIATIVE. WHAT ARE THE APPROPRIATE MEASURES FOR HOLDING STATES AND THE FEDERAL GOVERNMENT ACCOUNTABLE FOR ENSURING ACCESS TO AND SUCCESS IN POSTSECONDARY EDUCATION?

WHAT ARE THE UNIVERSITY OF TEXAS AND THE UNIVERSITY OF TEXAS SYSTEM DOING TO INCREASE ACCESS FOR MINORITIES, GIVEN THAT A MAJORITY OF TEXAS SCHOOL AGE CHILDREN ARE MINORITIES?

WHAT IS THE UNIVERSITY OF TEXAS SYSTEM DOING TO PROVIDE ACCESS TO GRADUATE AND PROFESSIONAL SCHOOL OPPORTUNITIES FOR MINORITIES?

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Charles Miller, Chairman
201 West Seventh Street, Suite 820
Austin, Texas 78701-2981
(512) 499-4402
Fax: (512) 499-4425

May 27, 2003

The Honorable Rubén Hinojosa
2463 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Hinojosa:

Thank you for the opportunity to respond to the questions you asked about efforts being made in Texas to address the gaps between Black, Hispanic, and Anglo students in higher education.

I am pleased to provide information about measures related to access and success, and increasing access and opportunities for undergraduate, graduate, and professional students.

Sincerely,

Charles Miller
Chairman

CM:ps
Attachment
c: Members, U. T. Board of Regents
Chancellor Mark G. Yudof
Executive Officers, U. T. System
Presidents, U. T. Components

Responses to Questions from Representative Rubén Hinojosa

1. What are the appropriate measures for holding States and the federal government accountable for ensuring access to and success in postsecondary education?

The State of Texas's Closing the Gaps master plan for postsecondary education outlines several critical, basic measures and important steps that could be considered nationally. Its "Uniform Recruitment and Retention Strategy" is intended to increase diversity in postsecondary education to reflect the population of Texas.
(See --http://www.thecb.state.tx.us/SAMC/index.cfm, and http://www.thecb.state.tx.us/ane/urrs/revised2002.htm).

- The two critical measures used by Texas are: participation targets and numbers of degrees and certificates, disaggregated by racial and ethnic categories. The state sets participation targets that are aligned with projected regional demographic changes.
- These measures are part of a broad, well-articulated policy context. The state has clearly articulated its commitment to increase the participation rate of underrepresented groups in postsecondary education.
- It collects, analyzes, and publishes data that track enrollment and graduation trends, broken down by racial/ethnic groups, and by degrees in critical fields, e.g., nursing or teaching.
- In addition, the state tracks high school graduates enrolled in postsecondary education, by racial and ethnic categories. This link is vital, since success in high school is a critical first step to access and success in postsecondary education. Through its Texas Academic Skills Program (TASP test) and other policies, Texas is making a state-wide effort to prepare students for postsecondary study. (See http://www.thecb.state.tx.us/TASP/default.htm .)

2. What are the University of Texas and the University of Texas System doing to increase access for minorities, given that a majority of Texas school children are minorities?

Through its academic and health-related components, The University of Texas System has established stand alone programs at the respective institutions and collaborative partnerships with a number of Texas universities, colleges, community colleges, and public high schools, to assist with the recruitment, matriculation, retention and graduation of economically disadvantaged students. A few examples include:

- The **Every Child Every Advantage (ECEA)** is a U. T. System-wide K-16 initiative to ensure that all Texas public school students are prepared to move forward into higher education. It seeks to bridge the gap between high school and college to ensure completion to first degree, building on many K-16 collaborations already in place at component institutions. Based on an earlier, three-year project to stimulate

and enhance K-16 initiatives at all of its component institutions, the U. T. System launched ECEA in 2002 to enhance the quality of education in the public schools. Its three areas of focus are: to strengthen university-based teacher preparation programs, create high-quality training and instructional tools for public school teachers, and initiate an aggressive research agenda to develop the best teaching techniques.

- With generous support from the Houston Endowment and Meadows Foundation, the U. T. System has undertaken a three-part initiative to improve scores on high-school exit exams and enhance teacher education programs. This project includes: 1) assisting students in preparing for the 11th grade exit exam which they must pass in order to graduate from high school; 2) providing professional development for teachers of subjects covered by the exit exam; and 3) assessing the performance of the nine teacher education programs in the System.

- The **Texas Longhorn PREP Initiative** is an educational partnership that was initially designed to support and enhance House Bill 588 by the 75th Texas Legislature, which guarantees automatic admissions to first-time freshmen who graduate in the top 10% from an accredited Texas high school.

  - As participants in the Texas Longhorn PREP Initiative, secondary English teachers in Texas public high schools, through The University of Texas at Austin/Public School collaborative partnership, provide practical, hands-on opportunities for all students including those who are minority and/or economically disadvantaged seniors to improve their pre-collegiate academic skills and to develop a better understanding of the basic aspects of college level freshman courses.

  - This collaborative effort has continued to impact positively student and educator performance at participating high schools in Austin, Beaumont, Dallas (including Wilmer-Hutchins), Houston, Port Arthur, and San Antonio.

- The **Health Recruitment and Exposure Program** is a collaborative effort between U. T. Southwestern Medical Center at Dallas and the Dallas Independent School District exposes the district's 9th and 10th graders to careers in the health professions at a time in their lives sufficient enough to prepare themselves for possible careers in the health professions.

- The **Joint Admission Medical Program (JAMP)**, established under Senate Bill 940 by the 77th Texas Legislature, was created to provide services to support and encourage highly qualified, economically disadvantaged students pursing a medical education. Students selected for the program will receive undergraduate and graduate scholarships and summer stipends and guarantees admission of those students who are qualified to at least one participating medical school.

- The **Advanced Placement (AP) Initiative** continues to be successful in providing opportunities for minority students to achieve at the highest levels of academic performance.
  - The number of minority AP candidates increased by 15 per cent from 2001 to 2002.
  - In 2002 AP minority candidates in Texas represented 41 per cent of the total candidates.
  - With 25 per cent participation rate, Hispanic students comprise the largest minority group taking AP exams in Texas. This participation rate greatly exceeds the national Hispanic AP participation rate of 10.8 per cent.
  - Growth in AP participation in the counties surrounding the U. T. academic components has increased by 33 per cent from 1999 to 2001. This can be attributed in part to the increase in teachers receiving AP training at the U. T. components.

- **Minority baccalaureate graduates from U. T. System institutions.** One measure of the success of these various programs is the number of minority students who have graduated from our component institutions.
  - The University of Texas System continues to be the top producer of Hispanic bachelor degree students in the state and one of the top in the nation. During the 2000-2001 academic year, four of the top 10 positions were held by University of Texas System schools, holding the 2nd, 3rd, 4th, and 6th spots nationally.
  - Of the bachelor's degrees in Health Sciences awarded to Hispanics during the 2000-01 academic year, U.T. System schools ranked 2nd, 3rd, and 4th nationally, and captured the top six spots among Texas institutions.
  - Of the bachelor's degrees awarded in the Health Sciences to African Americans, U. T. system schools ranked 3rd and 4th among other Texas schools.

3. What is the University of Texas System doing to provide access to graduate and professional school opportunities for minorities?

Similar to our undergraduate programs, our component institutions have established various stand alone and collaborative efforts across the state to increase graduate and professional opportunities for minorities.

- Through the **Louis Stokes Alliance for Minority Participation**, The University of Texas System Alliance for Minority Participation (U. T. System AMP) brings together all academic components of The University of Texas System and regional community college partners in an effort to increase the number of students from underserved populations enrolling in and graduating from baccalaureate programs in science, mathematics, engineering and technology (SMET) and entering graduate programs in SMET fields at U. T. System universities.
  - Community colleges with existing strong ties to the U. T. System universities participate as full partners in the alliance. The activities of the U. T. System

AMP are supported by partnerships with industry and government agencies, particularly national laboratories.

- The educational institutions in the Alliance serve a rapidly growing region where, by the decade's end, minorities will comprise a majority of the population. Prominent among the institutions are those in the U.S.-Mexico border regions serving large numbers of Hispanic students and those in metropolitan areas serving mainly commuter students, including many minorities. More than 7,500 underrepresented students are enrolled in undergraduate mathematics, science, and engineering programs at U. T. System universities. More than 25,000 underrepresented students take mathematics, science, and engineering courses in participating community colleges. Thus, the U. T. System AMP is making a significant contribution to the attainment of the National Science Foundation's goals of 50,000 new baccalaureate and 2,000 new doctoral underrepresented students by the end of the decade.

- The **Summer Undergraduate Research Fellowship** (SURF). The SURF program of the Graduate School for Biomedical Sciences at U. T. Southwestern Medical Center - Dallas has been an important method for orienting minority and/or disadvantaged students to careers in biomedical research and the academic programs of the graduate school. For many minority and disadvantaged undergraduates, intensive research experiences are not available on their home campuses; hence, SURF can fill an important need for those students. Typically, minority and disadvantaged students make up approximately 30% of SURF students each summer. Informal agreements with mentors from five minority universities have evolved to assure SURF opportunities for their best students. These five universities are Grambling University, St. Mary's University, The University of Texas at El Paso, San Angelo State University, and Howard University. Similar relationships are being developed with other colleges and universities with significant enrollments of minority and disadvantaged students.

- The **Academic Enrichment Summer Program** is an example of collaboration between U. T. System schools and other Texas state universities, involving The Universities of Texas at El Paso (UTEP) and The University of Texas - Pan American (UTPA). This summer program is an intensely structured six-week program designed to enhance the academic performance of the students matriculated at the designated partnership universities. These programs are conducted at UTPA and UTEP campuses. UTEP selects 20 students each year and UTPA hosts 30 students selected from the partnering schools (10-UTPA; 5-U. T. Brownsville; 5-Texas A&M International at Laredo; 5-Texas A&M University at Corpus Christi, and 5-Texas A&M University at Kingsville). This program provides a preview of academic courses that are to be taken in the next academic year and reinforces principles that are essential for the mastery of upper level material. Students are selected to enter the Academic Enrichment Summer Program at the end of the freshman year.

- The **South Texas/Border Region Partnership for Health Professions Education** is an example of collaboration among school districts, community colleges, health science centers, and community-based organizations. The Partnership is putting into place a "seamless pipeline" of students from the middle and high schools of the region, through the community colleges and universities of the region, and into the schools of The University of Texas Health Science Center at San Antonio, the TAMU-Health Science Center, and the Texas Tech Health Science at El Paso. The Partnership recruits into the pipeline, retains students through preliminary education and facilitated entry activities, and provides financial aid information and management, summer research opportunities, and understanding of information resources and curricula. The Partnership also provides opportunities for faculty from the regional institutions to engage in research activities to develop and broaden their own skills.

- **Minority graduate and professional degrees from University of Texas institutions.** Like the undergraduate programs, the graduate and professional schools in The University of Texas System rank among the top 100 Producers of minority masters, Ph.D. and M.D. producers in the nation.
  - The University of Texas at Austin ranked 12th nationally in the number of doctoral degrees conferred to African Americans. During the 2000-2001 academic year the 24 degrees awarded at U. T. Austin made it the top producers of Ph.D.'s to Black students in the state.
  - Of the Ph.D.'s awarded nationally during the 2000-2001 academic year, our component institutions ranked 4th, 50th, and 90th in degrees conferred to Hispanics. When compared with other Texas schools, U. T. System schools ranked 1st, 4th and 9th.
  - Four of our academic components ranked among the top 100 schools in awarding the Masters degree to Hispanic students during the 2000-2001. Three of them capturing the 5th, 10th, 13th spots. Among Texas institutions, those same schools ranked 1st, 2nd, 3rd, 6th, and 9th.
  - The University of Texas System schools ranked 5th, 9th, 15th, and 41st in awarding masters degrees in the Health Sciences to Hispanics. U. T. System Schools garnered the top four spots when compared to other schools in Texas.
  - During the 2000-2001 academic year, The University of Texas Health Science Center at Houston ranked 4th nationally in doctoral degrees awarded to African Americans in the Health Sciences.
  - The System's health related institutions ranked among the top 10 institutions in conferring medical degrees to Hispanics during the 2000-2001 years - capturing the 2nd, 3rd, 9th, and 10th spots.

REP. RUBÉN HINOJOSA
EDUCATION AND THE WORKFORCE COMMITTEE HEARING
MAY 13, 2003

QUESTIONS FOR MARY ELLEN DUNCAN, HOWARD COUNTY COMMUNITY COLLEGE

DR. DUNCAN, YOU ARE ABSOLUTELY ON THE MARK WHEN YOU DESCRIBE COMMUNITY COLLEGES AS THE "ELLIS ISLAND" OF HIGHER EDUCATION. HOWEVER, FOR ONE GROUP OF STUDENTS EVEN THIS ELLIS ISLAND OF EDUCATION MAY BE BEYOND THEIR REACH. I AM TALKING ABOUT YOUNG PEOPLE WHO WERE BROUGHT TO THIS COUNTRY AS CHILDREN, WHO HAVE ATTENDED AND GRADUATED FROM AMERICAN SCHOOLS, WHO ARE OFTEN AT THE TOP OF THEIR CLASS, AND YET, CANNOT GO TO COLLEGE BECAUSE THEY DO NOT HAVE DOCUMENTATION. SOME STATES HAVE TRIED TO ADDRESS THIS ISSUE BY ALLOWING THESE STUDENTS TO PAY IN-STATE TUITION -- CLEARLY ONLY A PARTIAL SOLUTION THAT DOES NOT ADDRESS THE UNDERLYING BARRIER TO ACCESS. HOW DOES YOUR ASSOCIATION RECOMMEND THAT THE FEDERAL GOVERNMENT ADDRESS THIS ISSUE?

COMMUNITY COLLEGES ARE CERTAINLY THE GATEWAY TO POSTSECONDARY EDUCATION FOR MOST HISPANICS. UNFORTUNATELY, MANY IN OUR COMMUNITY, WHO START AT A COMMUNITY COLLEGE WITH THE HOPE OF COMPLETING A FOUR-YEAR DEGREE, NEVER REACH THEIR GOAL. THEY DO NOT MAKE THE TRANSFER. WHAT CAN BE DONE TO IMPROVE THE TRANSFER RATES FROM COMMUNITY COLLEGES TO BACCALAUREATE DEGREE PROGRAMS? HOW CAN COMMUNITY COLLEGES AND FOUR-YEAR COLLEGES FACILITATE THIS TRANSITION?

Responses from Dr. Mary Ellen Duncan to Rep. Hinojosa's submitted Questions:

1) The American Association of Community Colleges supports legislation that would allow states to determine state residency for higher education purposes. Giving states this authority would enable them to allow undocumented students to qualify for student financial assistance. AACC believes that this change will provide needed opportunity to individuals who want to improve their lives by attending college, and at the same time help boost the national economy. Higher education is too integral to individual success to deny it to individuals on the basis of how they came to live in this country.

2) It is useful to put the issue of transfer in context. It should be understood that many students attending community college never intend to transfer to a four-year institution. Their age, other commitments, and career goals do not recommend such a course. However, the transfer rates for traditionally-aged, full-time community college students is higher than is commonly perceived. According to data from the Department of Education, 32% of all 1992 high school graduates who earned ten credits or more at a community college later transferred to a four-year institutions. 44% later took at least some courses at a community college.

AACC has made it a priority to help those students who do want to continue on to a four year college. With support from the Lumina Foundation, AACC is partnering with the American Association of State Colleges and Universities (AASCU) to examine ways to improve access to the baccalaureate degree for community college students. Two national meetings have been held and much progress has been made, although more work remains to be done, particularly in the area of out-of-state transfer. Another effort, the National Articulation and Transfer Network (NATN), is designed to facilitate the transfer of community college students into Minority Serving Institutions, primarily HBCUs and HSIs. The NATN now has more than 200 members and is growing.

Congress also can help facilitate transfer by providing funding for institutions to develop new articulation frameworks. AACC supports a new articulation program that would initially be funded at $10 million in 2005. The three-year, peer-reviewed competitive grants could be used for analysis of courses, technical assistance, development of publications to assist students wanting to transfer credit, development of programs and services, and training. Out-of-state, and between sector partnerships would be emphasized. Support for the development of voluntary agreements is preferable to having the federal government mandate the acceptance of courses paid for with federal student aid funds or refuse to provide funds for courses already paid for at another institution.

APPENDIX G – WRITTEN STATEMENT SUBMITTED FOR THE RECORD BY REPRESENTATIVE DENNIS J. KUCINICH, COMMITTEE ON EDUCATION AND THE WORKFORCE, U.S. HOUSE OF REPRESENTATIVES

Rep. Dennis J. Kucinich
Hearing: ***The State of American Higher Education: What are Parents, Students, and Taxpayers Getting for their Money?"***

In 1965, Congress passed the Higher Education Act (HEA) to provide all Americans, regardless of their income-level, with greater educational opportunities. The Act recognizes the shared benefits, by both society and the individual, of a higher education, including increased economic prosperity, greater civic involvement, and national security.

I believe ensuring greater access to higher educational opportunities is one of the most important aims this Committee, and indeed this Congress, has been charged with legislating. For that reason I am pleased to have the opportunity to work closely with my colleagues on this critical re-authorization.

And today, I greatly look forward to learning about the important issues we will be confronted with during this process. For instance, since 1965, participation in higher education has increased significantly. However, participation among low-income and minority students remains well below that of their peers. Students from high-income families are almost 30 percent more likely than low-income students to attend college. Whites are 21 percent more likely to attend college than Hispanics, and 7 percent more likely than African Americans. This situation is unacceptable, and we must work to find ways to increase minority enrollment in higher education. The doors of educational opportunity must swing widely for all students, regardless of race or background.

We must also recognize the declining purchasing power of the Pell Grant, which today only covers 42 percent of the cost of a four-year public university, down from 84 percent in 1976. At the same time, 64 percent of all students borrow for their education, and the typical student now graduates with $17,000 in federal education loan debt, almost double from seven years ago. In addition, of students who work to earn money for college, half work 25 or more hours a week, and a third of low income students who work to pay for college work 35 or more hours a week.

We must find ways to alleviate the financial burden higher education places on students. We must also investigate if the process to apply for financial aid is too complicated, discouraging many students from applying for aid altogether.

At the same time, there is strong evidence that college costs are rising faster than inflation or the median family income. Today a 4-year public college costs an average of $4,081, up from under $2,000 in the early 1980s. I look forward to learning from our panel the reasons behind such rising costs and what Congress can do to help both students and institutions.

Ensuring a quality system of education for our citizens represents in many ways the bedrock of our democracy. Ensuring access to that system must also be a primary

priority. I look forward to listening and learning from our panel the best ways in which Congress can use this reauthorization to that end.

TABLE OF INDEXES

Chairman Boehner, 1, 5, 6, 7, 9, 11, 12, 13, 14, 20, 24, 26, 27
Mr. Andrews, 45, 46, 47, 48
Mr. Bishop, 24, 25, 26, 27
Mr. Burns, 32, 33, 34
Mr. Carter, 5, 16, 17, 18
Mr. Castle, 20, 22, 23, 24, 27
Mr. Charles Miller, 5, 6, 11, 14, 16, 21, 22, 24, 25, 26, 28, 29, 31, 32, 35, 45, 47
Mr. Ehlers, 41, 43, 44, 45, 48
Mr. Hinojosa, 30, 31, 32
Mr. Keller, 27, 28, 29, 30
Mr. Kildee, 3, 14, 15
Mr. McKeon, 3, 15, 16, 18, 30, 31, 32, 34, 36, 38
Mr. Newman, 9, 13, 16, 19, 23, 24, 27, 28, 33, 38, 39, 40, 42, 44, 46, 47
Mr. Van Hollen, 39, 40
Mrs. McCarthy, 18, 19, 20
Ms. Duncan, 8, 12, 15, 17, 18, 22, 23, 26, 29, 30, 31, 33, 36, 43, 44, 47
Ms. Majette, 34, 35, 36