S. HRG. 113–816

ATTAINING A QUALITY DEGREE: INNOVATIONS TO IMPROVE STUDENT SUCCESS

HEARING

OF THE

COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS

UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

ON

EXAMINING ATTAINING A QUALITY DEGREE, FOCUSING ON INNOVATIONS TO IMPROVE STUDENT SUCCESS

OCTOBER 31, 2013

Printed for the use of the Committee on Health, Education, Labor, and Pensions

Available via the World Wide Web: http://www.gpo.gov/fdsys/

U.S. GOVERNMENT PUBLISHING OFFICE

21–537 PDF WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON HEALTH, EDUCATION, LABOR, AND PENSIONS

TOM HARKIN, Iowa, *Chairman*

BARBARA A. MIKULSKI, Maryland
PATTY MURRAY, Washington
BERNARD SANDERS (I), Vermont
ROBERT P. CASEY, JR., Pennsylvania
KAY R. HAGAN, North Carolina
AL FRANKEN, Minnesota
MICHAEL F. BENNET, Colorado
SHELDON WHITEHOUSE, Rhode Island
TAMMY BALDWIN, Wisconsin
CHRISTOPHER S. MURPHY, Connecticut
ELIZABETH WARREN, Massachusetts

LAMAR ALEXANDER, Tennessee
MICHAEL B. ENZI, Wyoming
RICHARD BURR, North Carolina
JOHNNY ISAKSON, Georgia
RAND PAUL, Kentucky
ORRIN G. HATCH, Utah
PAT ROBERTS, Kansas
LISA MURKOWSKI, Alaska
MARK KIRK, Illinois
TIM SCOTT, South Carolina

PAMELA J. SMITH, *Staff Director*
LAUREN MCFERRAN, *Deputy Staff Director and Chief Counsel*
DAVID P. CLEARY, *Republican Staff Director*

CONTENTS

STATEMENTS

THURSDAY, OCTOBER 31, 2013

ATTAINING A QUALITY DEGREE: INNOVATIONS TO IMPROVE STUDENT SUCCESS

THURSDAY, OCTOBER 31, 2013

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

The committee met, pursuant to notice, at 10:05 a.m. in room SD–430, Dirksen Senate Office Building, Hon. Tom Harkin, chairman of the committee, presiding.

Present: Senators Harkin, Alexander, Mikulski, Hagan, Franken, Bennet, Whitehouse, Baldwin, Murphy, Warren, and Burr.

OPENING STATEMENT OF SENATOR HARKIN

The CHAIRMAN. The Senate Committee on Health, Education, Labor, and Pensions will come to order.

Today's hearing is the second in our series to examine critical issues in postsecondary education as we look to reauthorize the Higher Education Act next year.

The topic we will discuss today is of great interest to policymakers and the public, and that is, innovation; innovation in higher education. We have spent time previously in this committee discussing the role of innovation, but much of that was focused just on college affordability. While that is, of course, of paramount importance—and will probably be discussed again here today—I would like to spend this hearing examining an equally important and related subject: the landscape of innovations in higher education that increase student learning, engagement, and degree completion.

If our Nation is going to educate more students—and by the year 2020, reclaim its status of having the highest proportion of college graduates in the world—we need to do more to ensure that students are persisting toward and attaining quality degrees. So a key question is, what can colleges and universities do to maximize learning and supports to ensure students are getting through on-time or faster and earning a meaningful credential?

Today's panel explores efforts in progress at the institution and system-wide level, both high- and low-tech, to increase student success in higher education. These innovations can inform our committee's work in designing Federal policy, and determine the role the Federal Government can play in promoting effective change to help America regain and retain its global leadership.

Too often, good innovation can be siloed either within an individual classroom, college, or system. So a key focus of today's con-

versation will be to discuss what we can do to allow proven innovations to be replicated or scaled up.

Our panel of experts will walk us through the impetus for the changes they have developed, and the impact that these innovations are having on their students' learning experience and success in completing a degree.

As I said at the start of this series of hearings focusing on the reauthorization of the Higher Education Act, this is no time to be complacent with the status quo; "Everything is OK," is not acceptable to this committee. The stakes are too high, so we will need to take a tough look at reimagining how our higher education system can work better. But I would also caution, we should not waste time entertaining innovation just for the sake of innovation; we want to know what that innovation is doing to make sure that students are getting the most out of their college experience.

The make up of this panel, I think, is indicative of the very broad scope of our higher education system and how that system needs to continue to innovate to meet the disparate needs of all the students they serve at whatever point those students enter our higher education system. We all understand that a one-size-fits-all approach simply will not do. We are witnessing the emergence of many new, innovative models, and this is a great strength of America's system. While I am proud that we have such a diverse system, we must ensure that all current and future models are rigorously focused on student success and degree attainment.

I look forward to working with my Ranking Member, and all members of this committee on both sides to get a good higher education bill. One of the main parts of this is what we can do to further promote, stimulate, expand, and scale up innovations that have proven to be effective in different areas.

I invite Senator Alexander for his opening statement.

OPENING STATEMENT OF SENATOR ALEXANDER

Senator ALEXANDER. Thanks, Mr. Chairman. And thanks for this second in the series of hearings on the Higher Education reauthorization.

I am really looking forward to this. This is a distinguished panel of people who know what they are talking about, and so, that ought to inform us in terms of what we should be doing and what we ought not be doing.

There was a lot of talk in our last hearing about: where is the innovation in higher education? In thinking about that, it occurs to me that innovation for its own sake is not what we are after. As the Chairman said, I think the goal of innovation in higher education is to, No. 1, improve student performance; No. 2, increase retention rates; and No. 3, do it in a way that reduces or maintains costs and encourages efficiency that benefits taxpayers and students.

Two things come to mind about this approach that I will be looking for. You would think we have the perfect environment to encourage innovation in higher education unlike many other countries in the world. I mean in America, we think the American way is to have a marketplace and entrepreneurial spirit. We do not have a State church, we have lots of churches. Music springs up

from various places. And that is the case with our colleges and universities; 6,000 different colleges and universities of many different types from Yeshiva, to Nashville's Auto-Diesel College, to Harvard, to the University of Maryland. I mean, these are all different places and we honor the autonomy of each institution. They really operate in a marketplace where students have a chance to choose them and they compete for students and scholars. So that environment ought to produce the largest amount of innovation.

I think it is important to be reminded that innovation does not always work. I used to be involved with venture capital and helped to start a business that made its way from scratch to the Stock Exchange, and I learned along the way that most new businesses do not succeed and the ideas do not work.

For example, in the 1980s when I was Governor—and we will hear from Mr. Hall about this—we were worried about the number of students who were in colleges and universities who were not prepared, and we thought that was wrong. We said the way to deal with that was to say to them, "You can come to the college," or the community college, "But you will not get credit for a course if you are not prepared for college." We are very proud of ourselves for that innovation.

Well, it turns out, 20 years later, that probably is not the right thing to do. What we will hear from Mr. Hall and what our State is now doing is abandoning that approach, and admitting more people, and working harder to move them through the system faster. That seems to be working a lot better.

What seems to be a good innovation at one point might not be later. It is a caution to us that we should be careful about coming up with even a very good sounding idea here and expecting that it will work 10 years from now, or imposing it on all 6,000 institutions around the country.

A second concern I have, though, is that one would think that at a time when the world is changing so rapidly, and we have this marketplace of 6,000 institutions, that we would be seeing more innovation; that we would be seeing more. Now, maybe you will tell us that it is there, but we just do not see it.

But there are some obvious things that, perhaps, we should do to correct that. One may be that the Federal Government is in the way, for example, with too many rules and regulations that consume time. I talked to Dr. Kirwan for a minute, and Senator Mikulski and I have talked many times about deregulation of higher education, and creating more of an environment in which innovation can occur.

But also, the definition of a credit hour, not having the Pell grant available year-round, Federal aid rules that do not allow students to accelerate through coursework. I would like to hear your comments about that and whether these are impediments or there are other impediments that we, in the Federal Government, have erected that make it more difficult for you to innovate.

The one area that seems to me that would be obvious for more innovation—and I think I understand a lot about why it has not happened, but it seems to me it has to happen—is a more efficient use of time and facilities at colleges and universities.

George Washington University's former president, Stephen Trachtenberg, once told me this. He said,

> "You could run two complete colleges with two complete faculties in the facilities now used half the year for one. That is without cutting the length of students' vacations, increasing class sizes, or requiring faculty to teach more."

He also pointed out that Dartmouth College has one mandatory summer session for every student in 4 years, and his estimate was that would improve, Dr. Trachtenberg's institution's bottom line by $10 to $15 million a year. Those were his ideas, yet he never did that at George Washington University. I understand some of the reasons for that, but maybe we need more of a culture of innovation.

What I am looking forward to today is: how do we encourage a culture of innovation in our 6,000 institutions without throwing a big, wet blanket over, that smothers you, by giving you an order from Washington that might work at Austin Peay but not work at the University of Maryland? It might be good at Yeshiva, but not at Harvard. How do we do that? How do we get out of the way?

I look forward very much to this and I thank the chairman for the hearing and for these excellent witnesses.

The CHAIRMAN. Thank you very much, Senator Alexander.

I listened very carefully to your opening remarks, and I thought I heard you say that music can spring from someplace other than Nashville, TN?

[Laughter.]

Senator ALEXANDER. In fact, the Everly Brothers grew up in Iowa.

The CHAIRMAN. Iowa, that is right, but they made their mark in Nashville.

Senator ALEXANDER. They moved to Knoxville and then to Nashville. That is right.

The CHAIRMAN. Exactly.

Senator ALEXANDER. Shenandoah, right?

The CHAIRMAN. Shenandoah, IA. Very good.

Senator ALEXANDER. Yes, I studied Iowa.

The CHAIRMAN. You and a few people have been to every county in Iowa more than once.

Senator ALEXANDER. Yes.

The CHAIRMAN. Well, thank you very much.

Senator ALEXANDER. Most of the Senate has.

[Laughter.]

The CHAIRMAN. That is true.

We have a great panel and I am going to call on various Senators for purposes of introduction. We will start with Senator Warren.

STATEMENT OF SENATOR WARREN

Senator WARREN. Thank you very much, Mr. Chairman.

I am pleased to introduce Richard Kazis, who is Senior Vice President of Jobs for the Future in Boston, MA, which is home of the World Series Champions, the Boston Red Sox. I just wanted to be sure we got that in.

Mr. Kazis leads the policy and advocacy efforts at Jobs for the Future, an organization that is dedicated to improving educational and economic opportunities for low-income Americans.

His work at JFF focuses on policies that would improve outcomes for low-income community college students, promote college and career readiness for struggling students, expand effective high school models, and foster better school to career transitions. Mr. Kazis' dedication to expanding opportunity is making a real difference for students in Massachusetts and across the country.

Welcome to Mr. Kazis. Thank you for taking the time to share your expertise.

The CHAIRMAN. OK. Thanks.

Senator WARREN. Thank you.

The CHAIRMAN. Thank you very much, Senator Warren.

I invite Senator Mikulski for purposes of an introduction.

STATEMENT OF SENATOR MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman.

It is with great pleasure that I introduce to the committee Dr. William Kirwan, who is the Chancellor of the University of Maryland System. Dr. Kirwan has a distinguished career in higher education—himself actually having been a faculty member for over 20 years.

He also served as the president of College Park, the flagship university of the University System of Maryland. And for the last 11 years, he has been Chancellor of the University System. Now, that means he is essentially, and do not tell Governor O'Malley this, but he is like the Governor of the University of Maryland. He has 13 undergraduate schools, primarily undergraduate, though they have higher education tracks, and then the professional schools in downtown Baltimore: medicine, law, nursing, social work, and pharmacy.

During that time, he has faced all the big challenges that higher education faces: rising tuitions, a changing demographic of the student body. Some students come prepared to get their degrees in 3 years; others are not prepared at all to even start their first year. He faced declining State aid, rising costs, and increased change. He established something called the Effective and Efficiency Initiative in which he brought new ideas and the concept of the faculty senate.

Senator Alexander, I know you know—you are familiar with the faculty senate, because you were president of Vanderbilt—that the faculty is very difficult. Elizabeth Warren and I taught in higher education, so we know what it is like to be members of a faculty senate. In our senate, at least we have rules of engagement.

You had to really bring a lot of people together. When we talk about innovation, we have to remember that behind every great leader there is a Board of Regents, a State legislative body, and an internal governing body like a faculty senate. Dr. Kirwan was able to then, through his ideas, listen to faculty members and get them to take on newer courses, getting students to take online courses, and did many other things, including an increase in transfer rates from community colleges.

His goal was to get more people in, but also make sure more people graduate. We will learn a lot from listening to him.

The CHAIRMAN. Thank you very much, Senator Mikulski.

I will turn first to Senator Hagan and then to Senator Burr for purposes of introduction.

Senator Hagan.

STATEMENT OF SENATOR HAGAN

Senator HAGAN. Thank you, Mr. Chairman.

It is my honor and pleasure today, with Senator Burr, to introduce Dr. Scott Ralls, president of the North Carolina Community College System, which comprises 58 community colleges across North Carolina, population of about 9.5 million people. It is about a 30-minute drive to one of our community colleges from just about any place within the State, and the System has about 800,000 students. Dr. Ralls truly understands the needs of our students and the importance of a cohesive community college system.

In 2009, Dr. Ralls began an initiative within the System called SuccessNC, with the ultimate goal of fostering students' success and completion of the program. SuccessNC is about more than registering students for classes. It is about helping each student who walks through the door at our community college reach their educational and career goals.

Students can earn multiple nationally recognized industry credentials while working toward an Associate Degree. We have a successful model in North Carolina and it has received a lot of well-deserved national attention.

Dr. Ralls has helped make our System one of the best in the Nation. Employers, when I talk to them in the State, they tell me all the time, they come to North Carolina because of our strong community college system and the work ethic of our employees and our workers.

I can proudly say that many of our community colleges in North Carolina have really been working diligently over the past 4 years to ensure that the schools and the faculty are doing everything possible to better prepare students for success in the workforce. A couple of examples.

Guilford Tech is working with several companies right now in the aircraft maintenance business, TIMCO and HondaJet, training students, creating employees to work for their company.

Central Carolina Community College in Sanford partners with local companies, Coty and Caterpillar, to prepare students for those jobs.

Recently, I visited Cape Fear Community College. There was a woman, Teresa Handy. She was unemployed. She had been laid off from a pharmaceutical company where she had worked for 21 years, and she was wondering, "What can I do next?" She took classes at Cape Fear and had partnered with GE Aviation programs. She now has a great job at GE Aviation.

I believe these kinds of partnerships between employers and our community colleges are exactly what we need to get our economy back on track, look at innovation, what are the 21st century job skills, and how can community colleges and educational systems make a big difference in that area.

Dr. Ralls and many of our community college presidents throughout North Carolina are discussing bipartisan legislation called the AMERICA Works Act that I introduced with many others. We look forward to continuing this partnership and finding these innovative ways to forge these relationships to better prepare our students for success.

Dr. Ralls, we certainly welcome you to the committee and we look forward to hearing your testimony.

The CHAIRMAN. Thank you, Senator Hagan.

Senator Burr.

STATEMENT OF SENATOR BURR

Senator BURR. Thank you, Mr. Chairman.

Let me take this opportunity to welcome all the witnesses today. This is a start of a very important process as we talk about reauthorizing.

I am delighted to have Scott Ralls here, the seventh president of the North Carolina Community College System, a system that is over 50 years old. When you are an individual that comes in to change a system, to make it innovative, you can imagine that after 50 years exactly how many challenges he has run into.

Scott is unique in many ways, but let me say that his rare skill is that of being an expert on both postsecondary education and the workforce system. I am not sure there is a combination that is needed more within the community college structure than that. And I might suggest it is not limited to the community college anymore; it is to all postsecondary education.

I think that since taking over the helm of those 58 community colleges, Scott has led a course redesign so that students are taking relevant courses that prepare them for employment, but also engage them in ways that promote completion. What a novel approach, but it is something that we all have to take at heart.

He has also made, in my view, the critical connection that the community college system and the K–12 system cannot be siloed, an early understanding that has led to the dual enrollment and early college high school opportunities in our State, indeed. Dr. Ralls was talking about these opportunities long before they were fashionable in Federal education debates.

I hope today that my colleagues will have an opportunity, not just from all the witnesses, but particularly from Scott Ralls. He is where the rubber meets the road. He has the students that we need as a productive part of a vibrant economy, and they are a crucial part to this economy becoming vibrant.

Jobs in the 21st century look a lot different than 20th century jobs. Students in the 21st century must look much different than 20th century students. I recognize that. More importantly, he recognizes that, and I thank him for being here today.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you both. Did I understand that correctly? Did I hear that they are making the HondaJet in North Carolina?

Senator BURR. We are the State of First Flight, and I know you might claim that for Iowa but——

The CHAIRMAN. I know that. But the HondaJet is being made there?

Senator BURR. It is. It is the first new private jet in 30 years.

The CHAIRMAN. It is a fantastic concept. Can you get me a ride in one?

Senator BURR. I can get you a jet, if the price is right.

[Laughter.]

The CHAIRMAN. I want to sit in the right seat of that one.

Now, I will turn to Senator Alexander.

Senator ALEXANDER. Thanks, Mr. Chairman.

I would say to Senator Mikulski that I am proud to have been a graduate of Vanderbilt, but I am proud to have been president of the University of Tennessee and it is important that I make that distinction when I go home.

As far as the faculty senate, I once asked a former university president, "What was the best thing about the job?" And he said, "The faculty as individuals." I said, "What was the worse thing?" He said, "The faculty as a whole."

[Laughter.]

You may remember that Dwight David Eisenhower, after he won World War II, went to be president of Columbia University, which we never hear about very much, and the reason we do not is because the first day he was on the job, he said, "On the first day on any new job, I like to assemble the people under my command." And he had the faculty in and he was gone in about a year.

I admire university presidents very much. It is a challenging job. One of the best is Tim Hall. He came from Ole Miss to make Austin Peay University in Tennessee the fastest growing university in our State, enrolling almost 11,000 students last year. The number of degrees has gone up 27 percent, undergraduate enrollment 16 percent.

But the more important thing for today's hearing, as a result of Tennessee's outcome-based formula, Austin Peay is the No. 1 public university in Tennessee in terms of increased funding. That means they have done the best job of graduating students more rapidly, learning what they are supposed to learn in their undergraduate experience.

So I look forward to hearing from him about those innovations, and we are proud of the work that he does there in Clarksville.

The CHAIRMAN. Thanks, Senator Alexander.

Since we do not have a Senator from New Hampshire, I have the privilege of introducing Dr. Paul LeBlanc because Iowa and New Hampshire have a very interesting symbiotic relationship.

Senator ALEXANDER. I have been there too.

The CHAIRMAN. I think it transcends party lines and everything else.

Dr. LeBlanc is the president of Southern New Hampshire University. Over the past 9 years, under his leadership, Southern New Hampshire University has become the largest provider of online higher education in New England, and the first to have a full competency-based degree program approved by a regional accreditor and the U.S. Department of Education.

Prior to his current position, Dr. LeBlanc directed a technology startup for Houghton-Mifflin publishing company and served as president of Marlborough College in Vermont. He was the first person in his family to attend college and received his bachelor's from

Framingham State University, his master's degree from Boston College, and his Ph.D. from the University of Massachusetts.

We welcome you all here, this is a very distinguished panel, indeed. All of your statements will be made a part of the record in their entirety. We will start with Mr. Kazis, and move down the line. I read your testimonies yesterday. The summaries were very good. If you could sum up in 5 to 7 minutes the major points you wish to make, and then we would like to engage in a conversation with you.

Again, welcome and please proceed, Mr. Kazis.

STATEMENT OF RICHARD KAZIS, SENIOR VICE PRESIDENT, JOBS FOR THE FUTURE, BOSTON, MA

Mr. KAZIS. Thank you, Mr. Chairman, and members of the committee for inviting me here today.

I commend you for taking on this critical issue of innovation in higher education, and I am thrilled to be here for two reasons. One, because it is such a terrific panel, but also because it was a long night in Boston last night; I was nervous that I was not going to make my plane this morning.

This morning I want to briefly characterize certain trends in higher education innovation to improve student success particularly for low-income, first generation, and nontraditional students who are the fastest growing segment of college goers, and whose success is critical to national competitiveness. I will then suggest some actions Congress can take to promote some of these promising trends.

As you know, higher education is in a period of great foment driven by rising student costs, State budget constraints, the explosion of new technologies, and better data on student outcomes in college and in the labor market. These forces create pressures on higher education, but they also create openings.

A growing number of entrepreneurial leaders, like those on this panel, are rethinking the structure and delivery of college programs, expectations about student learning, and what it takes to help more students choose well in college, persist, and succeed. This is particularly true among sectors that serve the majority of college students, community colleges, and less selective 4-year public institutions, as well as online providers.

Of the many challenges facing students in higher education today, I want to highlight one that is driving significant innovation. Too many college students never find their way, or lose their way, before they earn credentials particularly students with limited experience of what college demands.

For far too many students, as one Columbia University researcher put it, finding a path to a degree is the equivalent of navigating a shapeless river on a dark night. Students do not have the information they need about available programs. They have limited guidance and are overwhelmed by their options. Traditional program delivery is often too rigid, but program requirements are often too flexible.

The institutional and State innovations represented on this panel respond to this challenge. They help more students get the tools

that they need to navigate the shapeless river before they enroll and throughout college, and they give the river itself more shape.

While they may seem quite different, many promising higher education learning innovations are built from a handful of core design principles. These include acceleration, changes in program structure and delivery that help students move faster to earn credits and credentials. More personalized learning and support, which means more choices in how, when, and where learning occurs coupled with active advising about options and responsibilities. Clear pathways to credentials with value, meaning streamlined programs of study that guide students to successful transfer or a range of credentials in demand in the labor market. And more effective precollege on ramps for underprepared students, both youth and adults that help these students get ready for and transition smoothly into college programs. You are going to hear about all of these principles in today's presentations.

There are a number of reform methods based on these principles that are demonstrating results, evidence of success and moving toward large scale implementation. Many States, Tennessee being one of them—North Carolina, Colorado, Connecticut, Massachusetts—are involved in dramatic redesigns of developmental education based on the evidence that long, standalone remedial sequences are an obstacle to student success. These States are changing policy and their institutions are changing police and practice to encourage many more underprepared students to enroll directly in college level courses, coupled with targeted academic supports. And this model is yielding impressive early results.

Many postsecondary institutions and systems are implementing and expanding career pathway programs, and you will hear about some of that today.

These simplified routes to credentials that employers value use up-to-date labor market information to help design learning programs, they contextualize remediation into college-level instruction, they move underprepared students more quickly to college learning.

Several dozen States are embracing these models, drawing lessons from the pioneer of Washington's I–BEST program. Other States, including North Carolina with its success in SEED program, are supporting college completion pathways for transfer and occupational students that combine a lot of these principles: mandatory and intensive advising, developmental education redesign, streamlined programs of study, much tighter employer engagement, and interventions to keep students on track.

There are two other types of innovations described in my written testimony that I do not have time to go into detail in here. One is competency-based learning. Flexible online, you are going to hear a lot of that from Paul LeBlanc. And also dual enrollment and early college models for accelerating college credits in high school that are helping students save money and time on their way to a degree.

I want to say that many of these higher education reform efforts, many of these ambitious efforts, use Federal innovation funds to get started and expand, including Department of Labor TAACCCT Grants and Workforce Investment fund grants; Department of Edu-

cation Investing in Innovation, i3 Grants; and also Federal financial aid is often critical if the innovations that we are talking about for low-income students are to get to scale.

As you consider the Higher Education Act Reauthorization, I encourage Congress to increase its commitment to the important role it plays as a catalyst and support for evidence-based, game-changing innovations.

First, Congress should provide incentives for innovation and the expansion of evidence-based models that can be through FIPSE, community-college innovation competitions, Race to the Top, and other initiatives that provide States and institutions resources and the flexibility needed to test, develop, and take successful strategies to scale. The incentives should include priority on the principles of reform discussed here today. And they could include incentives that encourage States to implement policies that support these directions.

In addition, Congress should carefully remove existing barriers to these flexible approaches in current Federal law and regulation on student financial aid. And finally, better alignment of requirements across higher education-related laws would make it easier to braid funding to scale some of these effective innovations, particularly those that straddled different parts of the education and training system.

I am happy to take questions later in discussion. And thank you, again, for having me here.

[The prepared statement of Mr. Kazis follows:]

PREPARED STATEMENT OF RICHARD KAZIS

SUMMARY

This is an era of great change in higher education. Factors shaping opportunity and outcomes include: the rising cost of college, constraints on higher education budgets, the advent of online learning and other technological innovations, better longitudinal data on how students fare in postsecondary education and the workplace, and the growing recognition that students need a postsecondary credential to succeed in the job market.

These changes are making student success much more of an imperative than in the past, elevating it alongside access and affordability as a critical national goal. As institutions and States work to increase access to and affordability of a postsecondary credential, they are also looking hard at research and trends on strategies to overcome significant gaps in student enrollment, persistence, and completion of high quality credentials and degrees, particularly for low-income, first-generation, and non-traditional students, many of whom enter college unprepared for persistence and success.

Based on evidence and best practices, the higher education community has coalesced around a set of core principles of promising and effective innovations that promise to help more students move quickly and efficiently into and through credential programs with value in the labor market and for further education. These include:

- Acceleration;
- More personalized learning and advising;
- Clear pathways through college to credentials with value;
- Effective on ramps for underprepared students;
- Better assessment of learning quality and value; and
- Reforms built for large-scale impact from the outset.

In implementing these priorities, a growing number of State systems and institutions of higher education are building out and scaling evidence-based reforms that can help more students advance more quickly and efficiently, including:

- Redesign of developmental education to remove obstacles to college work;
- Structured career pathways tied to high-demand industry sectors;

• More flexible program design and delivery, including "stackable credentials," modular coursework, competency-based learning, credit for prior learning, and online or blended learning options;
• More efficient on ramps for underprepared youth and adults to postsecondary education programs and credentials; and
• More active advising and counseling—informed by up-to-date labor market information and student outcome data, and designed to help students make good choices and persist in their chosen program.

The Federal Government can both encourage further strides in innovation and encourage more States to take evidence-based innovations to scale, while also breaking down barriers to innovation and scale. Federal legislation can also play an important role in ensuring that innovations and access to innovations focus on the success of all students, including non-traditional and underprepared students. Congress should:

PROMOTE INNOVATIONS THAT ACCELERATE STUDENT PROGRESS TO QUALITY CREDENTIALS

Provide incentives for innovation and for the expansion of evidence-based models through FIPSE, community college innovation programs, Race to the Top, or other initiatives that provide States and institutions with the resources and flexibility needed to test, develop, and take successful strategies to scale.

Provide incentives for States and postsecondary institutions to develop policies and approaches that help accelerate student progress into and through quality programs of study to credentials, prioritizing innovations based on the above principles

Reward colleges, or encourage States to reward colleges, that serve low-income students well, as measured by college enrollment, persistence, completion, and employment outcomes. Rewards could include funding and flexibility to innovate.

Provide incentives for employers and institutions to partner in the development and delivery of career pathways to credentials with value in the labor market.

Provide incentives for developing competency-based programs of study that are not based solely on the credit hour and that result in significant acceleration of credential attainment, particularly for nontraditional, low-income and underprepared students.

Encourage and support technical assistance and peer connections to promote the rapid spread of promising and effective innovations, so Federal investments maximize impact.

REDUCE EXISTING FEDERAL POLICY BARRIERS TO INNOVATIONS THAT SUPPORT STUDENT SUCCESS

Revise financial aid policies so they encourage broad access to success innovations and remove existing obstacles for non-traditional and underprepared students.

Restore Ability to Benefit, a Federal student aid provision eliminated in the fiscal year 2012 Appropriations bill that was a key route into quality career pathways for adults without high school credentials.

Reinstate Year-Round Pell, which is increasingly important as institutions move toward modular coursework, stackable credentials, and programs that fit students' schedules.

Encourage Federal financial aid rules, experimental sites, and waivers for flexibility, that allow low-income students to access aid for innovative accelerated pathways, including non-semester coursework, that decrease time to completion and reduce student costs.

Align Federal laws related to higher education and workforce preparation—HEA, ESEA, Perkins, WIA—so that requirements (e.g., eligibility, reporting, performance metrics) are not an obstacle to institution and system-level success innovations.

These Federal education laws can support State and institutional efforts by consistently placing a specific emphasis and premium on student success among underrepresented and underprepared students.

Thank you, Mr. Chairman and members of the committee for inviting me here today—and for assembling such a strong group of panelists to discuss innovative strategies for student success.

My name is Richard Kazis. I am senior vice president at Jobs for the Future, a 25-year-old national research and policy organization based in Boston committed to helping increase the number of underprepared youth and adults who earn a first postsecondary credential. JFF works with innovators around the country—with K–12 and higher education leaders, State education and workforce systems, community-based organizations, employers and their associations—to identify and increase the scale of programs and approaches that help more Americans succeed in quality higher education programs aligned with labor market demand.

A PERIOD OF CHANGE AND INNOVATION IN HIGHER EDUCATION

Higher education is frequently derided as resistant to change, an immovable defender of tradition. If we went back to the colleges we attended, the argument goes, we would feel pretty much at home, even after several decades away.

But in fact this is not an accurate characterization of higher education today, particularly at those institutions that serve the majority of college students—community colleges, less-selective 4-year public institutions, and the growing online segment of higher education.

Higher education is in the early stages of a period of significant innovation, of rethinking the structure and delivery of college programs, expectations about student learning, and what it takes to help more students choose well in college, persist in their chosen program, and succeed. Across the country, there has been a sea change in the past decade in the commitment of forward-looking colleges and universities to student success. We have a long way to go, but a growing cadre of innovative institutional and State system leaders are demonstrating that significant improvements in learning and completion for large numbers of students are within reach.

Four of the best are on the panel today.

The past decade has witnessed a huge shift in thinking about higher education's goals: from a dominant focus on student *access* to higher education to a recognition that higher education institutions have an equal responsibility to improve student *success*—entry into quality programs, persistence, completion, and advancement in the labor market. Several factors have combined to drive this change.

- Higher education has become the primary gateway to economic success, and tuition and debt have risen steadily. The economic costs of poor performance have become very high.
- At the same time, in this era of increasingly constrained public investment, accountability for results from every public dollar has become a central concern in debates on State higher education budgets and investments.
- Data systems tracking student performance have become more robust, thanks in part to significant Federal investment in State longitudinal data systems. Gaps in college persistence and completion have become more visible. And better data has also helped fuel the growth of solid research on effective strategies for helping different population groups learn at higher levels and succeed in college.

This is the context within which institutional and State-level innovations to improve student success are taking shape. Persistence, quality, and completion have become equal legs of the higher education stool, along with access and affordability. And institutional and State leaders are responding. While innovation needs to spread farther and faster, with the help of supportive policies and the diffusion of effective practices, many States and their colleges and universities are taking on this agenda—and beginning to see results.

Today, I will comment on the innovation we see getting traction in higher education institutions and systems around the country. I will: (1) characterize the problem that many of the most promising efforts are addressing and the kinds of solutions that are emerging; (2) provide examples of how States and institutions are reforming basic aspects of instruction and delivery to achieve better outcomes; and (3) suggest actions Congress can take to support and accelerate these trends, with particular attention to ensuring improved learning and labor market outcomes for low-income, traditional and first-generation college-goers.

"A SHAPELESS RIVER ON A DARK NIGHT"

Too many students in higher education never find their way, lose their way early in their college career, or have to drop out before they earn credentials that help them move ahead. The structure of higher education itself stands in the way of many students' success, particularly first-generation, underprepared, and low-income students with limited experience of what college demands.

Students underprepared for college level work face huge challenges, and over 40 percent of all college students require some math or English remediation. Yet only 25 percent of developmental education students in community college earn *any* cre-

dential within 8 years. The current model of delivering basic skills as a stand-alone pre-requisite results in the loss of too many students who could have quickly succeeded in college-level courses with well-designed academic support.

Students who balance family, school and work need alternatives to traditional programs and delivery strategies that take too long to complete. Forty percent of public college and university students are able to attend only part-time—and that one decision results in completion rates as much as 30 percent lower than those for their full-time peers.

In American higher education, the most efficient and appropriate routes for students to take—from choice of school and program to decisions about course loads and schedules—are poorly marked. Students don't have the information they need about the programs available to them—the course sequences and requirements, the odds of completion given their academic preparation, transfer requirements, or labor market pay off. Students have limited guidance and are overwhelmed by too many options. Columbia University Teachers College researcher Judith Scott-Clayton has written, "For many students at community colleges, finding a path to a degree is the equivalent of navigating a shapeless river on a dark night."

AN EMERGING CONSENSUS ON INNOVATION PRIORITIES: COMPLETION PATHWAYS

A consensus has emerged across public higher education—in community colleges in particular but also among 4-year systems—that the students least prepared for college success need much more help navigating the "shapeless river": before they enroll in college, when they first enroll, and throughout their college careers. They need more information about their options and the outcomes they should expect from different programs and far more guidance at every step of the way on how to persist, learn the right things, and complete requirements as efficiently as possible. At the same time, they need options that are more streamlined, more choices that respond to their need for flexibility in learning delivery, and pathways to completion that are more transparent and clear.

This consensus has spawned a range of creative innovations in the design and delivery of postsecondary education that are showing promise as strategies to meet students where they are and help them achieve greater success in both college and the labor market. Innovations like those you will hear about today are based on a few core principles of efficient *completion pathways* that provide faster, highly structured academic experiences for students, even as they increase the ability of individuals to make informed choices about potential programs based on their structure, delivery, content, and expected outcomes. These principles are:

- Acceleration;
- More personalized learning and advising;
- Clear pathways through college to credentials with value;
- Effective on ramps for underprepared students;
- Better assessment of learning quality and value; and
- Reforms built for large-scale impact from the outset.

Acceleration is perhaps the overarching design principle, recognizing the growing imperative to help students advance more quickly toward their goals and toward credentials. These strategies, many of which break with traditional college practices, schedules and requirements, include:

- Redesigned remedial education delivery that minimizes the need for long stand-alone sequences of developmental courses that keep too many from ever entering or succeeding in their chosen program of study;
- Degree programs broken down into shorter modules and "stackable" intermediate credentials that enable individuals to earn a credential with labor market value, advance at work, and then return to complete additional modules that roll up to a higher level credential;
- Early college and career pathways programs that span different segments of the education system and speed students' progress across them (e.g., from K–12, adult education or programs serving disconnected youth to postsecondary credits and success);
- Credit for prior learning that recognizes students' current skills and speeds up their attainment of credential and degree requirements; and
- Other competency-based programs and strategies that make it possible for students to advance at their own pace through basic skills, credit courses, and degree or certificate programs.

More personalized learning and advising: Innovative colleges are becoming more responsive to the varied needs of individual students rather than prioritizing institutional and faculty considerations. They are experimenting with flexible deliv-

ery of coursework through online or blended learning, adapting scheduling to the needs of working students, and testing competency-based approaches to earning credits and credentials. They also recognize that students need much better information and advising on their course and program options, both in-person and online, from the moment they enroll and throughout their education. To complement overextended counseling staff, a growing number are turning to online advising tools that integrate career exploration, program choice, course planning, and—for students who are having trouble meeting course or program requirements efficiently—early warning notification and referral to academic and other support services. Sophisticated new "real time" labor market information tools are being used to help institutions revamp curricula to better meet regional employer needs—and to helping students make better informed choices among potential programs of study.

Clearer pathways from program enrollment to credentials: To increase the likelihood of timely and efficient completion, institutions and systems are redesigning many programs of study to have fewer electives, a clearer sequence and progression of courses required for completion, and more transparent presentation to students of the expectations for and past outcomes of those pathways. Some articulate these shorter certificates, one to the next, in "stackable" credentials that ultimately lead to terminal credentials or degrees in a field of study. Some are rolling back the number of credits required for completing certain programs, focusing training on students' skills gaps and, as described above, providing credit for prior learning or certificates. To strengthen these pathways, a growing number of systems and colleges are using better labor market information to define learning outcomes and shape curricula. To ensure that transfer of general education and program of study credits is simplified, States and higher education systems are reviewing and aligning program requirements within and across sectors.

On-ramps to college success: For underprepared and first-generation college students, both youth and adults, these innovations will have limited value without new and more effective on-ramps that prepare students with the academic and nonacademic skills they need to succeed in college. Partnerships between K–12, adult education, and postsecondary education institutions are emerging to ready underprepared youth and adults for postsecondary success. Dual enrollment and early college programs in high schools provide high school students with a college-going culture and college credits that can reduce the cost and time commitment required to complete a college program. Career pathways programs for low-skilled adults and disconnected youth co-enroll students in adult education and postsecondary occupational coursework, providing college credit to students while they are still working on their basic academic or English language skills. Reconnection pathways for disconnected youth implemented by partnerships between colleges and national youth-serving networks such as the Corps Network, the National Youth Employment Coalition, and YouthBuildUSA show promising enrollment and persistence improvements in early research. These and other similar models show great promise in terms of college readiness, enrollment, credits, acceleration and persistence for these populations.

Better assessment of learning quality and value: Just as in K–12 reform, an early focus on gaps in college completion has led to greater attention to questions of the quality of the learning and return on investment in postsecondary education. Systems and institutions are making learning expectations clearer and experimenting with better ways to assess learning and measure learning outcomes. This can be seen in foundation-funded and other initiatives to define and assess learning quality. But it is also evident in the growing efforts to get feedback from employers on the productivity and contribution of new graduates from specific pathway programs and to use that feedback to improve curricula. In the coming years, attention to specifying the value added of higher education for further education and employment will only increase.

Building in scale from the beginning: What is striking about much of the current wave of reform is its ambition and reach. Impatient with the proliferation of small, boutique programs that are high cost and difficult to replicate at large scale, reformers in higher education are looking to create innovations that reach large numbers of students quickly by changing some of the core practices of institutions, such as the delivery of remedial instruction, the process for assessing competencies and granting postsecondary credit, student advising and orientation, and the alignment of learning expectations and career pathways across institutions and sectors.

EVIDENCE OF PROGRESS AND SCALE

A growing body of evidence points to the potential for impact of reforms informed by these principles. Here are a few examples:

• **Redesigns of developmental education** that minimize time spent in developmental courses in favor of placing students into college level courses with aligned and contextualized academic supports are demonstrating dramatic early results.

For example, The Accelerated Learning Program at the Community College of Baltimore County, designed for students who enroll in upper-level developmental writing, "mainstreams" students into introductory college-level English, but requires a companion course to help them succeed. Researchers found that 82 percent of ALP students passed English 101 within 1 year, compared with 69 percent of students who took the more traditional sequence. Other gains included higher rates of completion in the next credit English course, stronger persistence to the next year, and completion of more college-level courses. A cost-effective alternative, it has already been adopted by over 100 colleges; and Arkansas, Indiana and Michigan have launched statewide implementations.

Statway, a 1-year math course that combines remediation with a first year college statistics course, is having similar success. In second-year results across 30 campuses in eight States, over 50 percent of participating developmental math students successfully completed a college-level math course, compared to 9–16 percent of students in traditional remedial sequences.

• **Career Pathways programs,** which redesign the delivery of career-focused education, training, and employment services to be more integrated, aligned, and participant-centered, are also showing clear gains in student success.

Washington State's Integrated Basic Education and Skills Training (I–BEST), which combines basic skills and occupational training in the same courses, is a pioneer in contextualized instruction for adults. Quasi-experimental studies have found that I–BEST students complete more credits, have higher persistence rates, and are more likely to earn a certificate than their peers. Around the country, colleges and States are using lessons from I–BEST to create career pathways that accelerate and structure progress to credentials with value in the labor market.

• **Early college and dual enrollment approaches** to aligning and accelerating college readiness and success for underprepared young people yield consistently strong outcomes.

Early college high schools around the country, serving a largely low-income, first-generation population, have a 4-year graduation rate of 93 percent (compared to the national rate of 78 percent. More impressive, nearly one-quarter (23 percent) of students earn an associates degree or certificate by the time they finish high school and 94 percent earn some college credits, with the average being 36 credits earned, saving time and money on the way to a postsecondary credential.

Dual enrollment has become an important accelerator for high school students. Student participation in dual enrollment is positively related to higher GPA, more credit accumulation, and higher rates of college enrollment and persistence. One recent study found that dual enrollment students at the University of Texas-Pan American had a 49 percent 4-year graduation rate, compared with 14 percent for the total student body.

Innovations like these are yielding promising results at institutions where they are implemented.

Equally important, these and other promising efforts built on the principles of more efficient completion pathways to credentials, are diffusing nationally as institutions and State systems are eager to identify evidence-based and efficient strategies for improving institutional performance and student success.

Here are some examples of such diffusion and scale:

• Many States are undertaking full-scale redesigns of the delivery of developmental education, including Arkansas, Colorado, Connecticut, Florida, Massachusetts, North Carolina, Tennessee and Virginia. Virginia, for example, has completely overhauled delivery of developmental education at all 23 of its community colleges—a bold approach that required major changes to everything from assessment and placement to financial aid administration. Colorado's community college system is implementing a creative statewide approach to developmental education redesign that reduces remediation dramatically, pushes more students into credit courses with appropriate supports, and aligns basic skill requirements with the English and math demands of different pathways to credentials. As you will hear from the representative of Austin Peay University, Tennessee is a leader in this redesign across both its 2- and 4-year institutions.

• Jobs for the Future is a national assistance partner to Completion by Design, a structured pathways redesign initiative that involves nine community colleges across the States of Florida, North Carolina and Ohio. Based on a sweeping analysis of their student outcomes data for different population groups and programs, these colleges are implementing model pathways to completion that are built upon the foundation of the principles highlighted here, such as: more active "on-boarding" activities such as mandatory orientation; structured and streamlined programs of study; intensive advising and career counseling; developmental education redesign and acceleration into credit courses; and supports designed to keep students engaged and progressing toward a credential with labor market value. North Carolina's community college system has incorporated this approach into its overall success agenda and is rolling it out across the State's institutions.

• Kentucky's community and technical college system has created a statewide online competency-based learning program, primarily for working adults, called Learn on Demand. Learn on Demand offers both full courses and modules that last about 3–5 weeks. Students can start whenever they want, take what they need, and earn credit for every module completed. Modules build toward complete courses for accredited, affordable degrees, certificates, and diplomas. Programs are transferable and accredited and are recognized across the State's 16 2-year colleges. Learn on Demand is only one component of the State's approach to creating flexible career pathways that help students move more quickly to credentials. Kentucky is part of a seven-State initiative called Accelerating Opportunity that is adapting I–BEST career pathways model to Kentucky's regional employer base. Kentucky is also a leader in the testing of using innovative "real time" labor market information to help shape program curricula and inform students' choice of program.

These are but a few examples. You will hear more in today's hearing from both 4-year and 2-year institutions and State systems.

It should be noted that States and colleges often use Federal innovation funds to build and expand these innovations and evidence-based models: recently, the Department of Labor's TAACCCT grants, and Workforce Investment Fund grants have been helpful, as have the Department of Education's Investing in Innovation (i3) and Race to the Top competitions. While the ultimate goal is institutionalization of these new approaches in State and college practice and policy, Federal policy can play an important catalytic role in helping to spur postsecondary innovation and remove obstacles as well.

RECOMMENDATIONS FOR CONGRESS

As you consider reauthorization of the Higher Education Act, I respectfully submit the following recommendations for your consideration, with the goal of helping more low-income youth and adults obtain postsecondary credentials with value in the labor market, with particular emphasis on underprepared and non-traditional students.

I. Promote Innovations that Accelerate Student Progress to Quality Credentials and Outcomes

Provide incentives for innovation and for the expansion of evidence-based models through FIPSE, community-college innovation programs, Race to the Top, or other initiatives that provide States and institutions with the resources and flexibility needed to test, develop, and take successful strategies to scale.

Provide incentives for States and postsecondary institutions to develop *policies and approaches that help accelerate student progress into and through quality programs of study to credentials, prioritizing innovations such as*:

• More active advising and counseling—informed by up-to-date labor market information and student outcome data and designed to help students make good choices and persist in their chosen program.

• Redesigned developmental education requirements that minimize standalone course work, accelerate enrollment in appropriate college-level courses and provide adequate academic support.

• Clear and efficient evidence-based on-ramps to postsecondary education pathways, including:

  • Career Pathways systems (as defined by ED, DOL, HHS) for low-skilled adults, that include the concurrent enrollment of students in adult education and postsecondary occupational coursework.

  • Proven Early College High Schools and dual and concurrent enrollment strategies to reduce remediation needs, costs to students, and time to degree completion—particularly among low-income and underrepresented students. In-

clude incentives for work-based learning, as well as incentives for pathways through postsecondary education serving disconnected youth.

• More streamlined pathways to valued credentials: Limits on excess student credits, clear and specified transfer cores in key programs, and incentives for more rapid completion of credential requirements.

Reward colleges, or encourage States to reward colleges, that serve low-income students well, as measured by college enrollment, persistence, completion, and employment outcomes. Rewards could include funding and flexibility to innovate.

Provide *incentives for employers and institutions to partner* in the development and delivery of career pathways to credentials with value in the labor market.

Provide incentives to States or regional partnerships that include postsecondary institutions for *developing competency-based programs of study that are not based solely on the credit hour*—but that test credit for prior learning, articulation of noncredit coursework with academic credit, and provide training geared to students' skills gaps in ways that significantly accelerate credential attainment, particularly for nontraditional, low-income and underprepared students who might need additional supports.

Encourage and support technical assistance to and peer connections among leader institutions, States, and others to promote the rapid spread of promising and effective innovations, so that Federal investments in postsecondary innovation have maximum impact in the field.

II. Reduce Existing Federal Policy Barriers to Innovations that Support Student Success

Revise financial aid policies so they encourage broad access to success innovations and remove obstacles that currently exist for non-traditional and underprepared students.

Restore Ability to Benefit (ATB). Elimination of the Ability to Benefit provision in Federal student aid (eliminated in fiscal year 2012 appropriations) has devastated Career Pathways initiatives that co-enroll students in adult education and postsecondary education coursework, and added yet another barrier to success for these underprepared students. ATB allowed students without a GED or high school diploma to receive student aid once proving their "ability to benefit" through testing or successful completion of 6 credit hours. We thank members of the committee for working hard to reinstate this provision through last year's appropriation process, but it remains unresolved. HEA reauthorization or other higher education-related vehicles should reinstate this critical provision—at the very least for students in Career Pathways programs where the evidence is clear—so that this motivated but underprepared population can access Federal student aid while concurrently enrolled in a Career Pathways program and begin to accumulate credit for postsecondary coursework.

Reinstate Year-Round Pell. Another provision eliminated in fiscal year 2012 Appropriations, year-round Pell is important to helping lower-skill youth and adults move more efficiently into and through postsecondary credential programs—accelerating course-taking flexibility and pace, which will be increasingly important as institutions move toward modular coursework, stackable credentials, and programs that fit students' schedules.

Encourage Federal financial aid rules, and waivers for flexibility, that allow students to access aid for innovative accelerated pathways, including pathways that use modularized, condensed, or competency-based courses and other non-semester coursework that decrease time to completion and reduce student costs. HEA should encourage States to remove such obstacles from State aid provisions as well. Last, Federal student aid experimental sites could test out newer innovations and more flexible forms of student aid to help students access these innovations (for example, stackable credentials, modular coursework, and early college or other credit-bearing postsecondary coursework completed in high school).

Align Federal laws related to higher education and workforce preparation—HEA, ESEA, Perkins, WIA—so that requirements (e.g., eligibility, reporting requirements, performance metrics) are not an obstacle to institution and system-level student success innovations.

The Higher Education Act and K–12 legislation can be better aligned to promote and measure student success, such as enrollment, persistence, and completion of college credentials and degrees; as well as to promote better aligned expectations of skills and supports students need to succeed in college

The Higher Education Act could also align more closely with the Carl D. Perkins Career and Technical Education Act and the Workforce Investment Act to measure success more comparably, and to promote postsecondary success as a goal of all pro-

grams (particularly in high demand careers), given the need for today's workforce to obtain postsecondary credentials.

These Federal education laws can support State and institutional efforts by placing a *specific emphasis and premium on student success among underrepresented and underprepared students*.

The CHAIRMAN. Thank you very much, Mr. Kazis.

Dr. Kirwan, welcome and please proceed.

STATEMENT OF WILLIAM E. KIRWAN, Ph.D., CHANCELLOR AND CHIEF EXECUTIVE OFFICER, UNIVERSITY SYSTEM OF MARYLAND, ADELPHI, MD

Mr. KIRWAN. Thank you very much, Mr. Chairman and members of the committee.

It is an honor to be here today, and it is a special privilege to be here as a proud constituent of Senator Mikulski's.

I want to express my appreciation to the committee members for the important work you have done and continue to do on behalf of higher education. I am especially pleased that you are focusing on the issue of innovation in higher education delivery. I think we are at an important moment in higher education, brought about by three dynamics.

First, the fiscal challenges requiring higher education to do more with less if we are to meet our obligations to the Nation.

Second, advances in information technology, the creation of intelligent software, and the ubiquitous nature of the Internet, which has the potential to transform our Nation's college classrooms.

And third, developments in cognitive science, or the learning sciences. We actually know so much more today about the kind of activities that imprint knowledge on the brain. The potential to improve teaching and learning, using IT and cognitive sciences as a tool, serve more students, and bend the cost curve creates the most exciting opportunity I have experienced in my 50 years in higher education.

Let me describe what we are doing in the University System of Maryland to realize this opportunity. By way of context, the University System of Maryland consists of three research universities, three historically Black universities, five traditional so-called comprehensive universities, a specialized research institute, and the University of Maryland University College, the Nation's largest not-for-profit online university. As such, we are a microcosm of higher education in America.

University College is widely known for its innovative use of technology and the Internet, so my remarks today will focus on our other residential institutions.

Six or seven years ago, we began our efforts to redesign or reengineer our lower division educational offerings through the use of technology, online tutorials, and active learning classrooms.

One of our early successes was Chemistry 101 at the University of Maryland Eastern Shore, a historically Black institution. This course had a high failure rate: above 50 percent. With the redesign, the pass rate increased to over 70 percent, and we documented substantial reduction in costs for course delivery.

Armed with this success, we began a systematic effort to redesign our lower division gateway courses across the System; the very courses that are the primary roadblock for many students. By the

end of this year, we will have redesigned some 80 courses across the University System of Maryland, serving more than 24,000 students in any one semester. In all of these courses, we have documented improved student success and lower costs.

Our approach is to actively support and encourage our faculty to engage in teaching innovation, using technology, active learning classrooms, online tutorials, and constant feedback to students on their performance.

However—and this is the point that Senator Alexander made—we insist that innovations must be tested and piloted to ensure that learning does actually improve and that costs are actually contained. If either does not occur, we do not let the innovation proceed.

As part of our innovation agenda, we are engaged in a very important study of so-called MOOC's, Massively Open Online Courses. Most of the focus on MOOC's today is how they might bring educational opportunities to students not enrolled in traditional higher education institutions. In partnership with the nonprofit ITHAKA and Coursera, the largest MOOC producer, and with funding from the Gates Foundation, we are testing whether MOOC's can be used on residential campuses to improve educational outcomes and lower costs. We have 23 pilots operating across the System to test this hypothesis. The results of this experiment will be available this June.

I will conclude my remarks by noting that we, in higher education, have a responsibility, an obligation, really, to find lower cost means of delivering high quality higher education. We in the University System of Maryland take this responsibility very, very seriously.

As Congress begins the process of reauthorizing the Higher Education Act, I urge you to consider provisions that promote and encourage the kind of innovations I have described today.

I am also pleased to hear Senator Mikulski and Senator Alexander mention deregulation of higher education. That should be an important consideration as you proceed with the reauthorization.

As I indicated at the outset of my testimony, thanks to the power of IT, the development of intelligent software, and advances in cognitive sciences, we have an opportunity at this moment that comes along only rarely in higher education. I genuinely believe that the potential now exists to use these advances, improve learning outcomes, and reduce the costs of educational delivery.

Thank you very much.

[The prepared statement of Mr. Kirwan follows:]

PREPARED STATEMENT OF WILLIAM E. "BRIT" KIRWAN, PH.D.

SUMMARY

We are witnessing the confluence of several key developments surrounding the higher education enterprise. First, even as higher education faces acute cost pressures, the importance of college completion has moved to the forefront of our national conversation. Second, we are seeing advancements in technology—speed, adaptability, scalability—that we have barely begun to exploit. Finally, new cognitive research has dramatically increased our understanding of how people learn, process, and retain information.

The potential for the use of sophisticated technology to simultaneously improve learning outcomes and address the cost of education delivery is the most exciting

development that I have seen in my 50-year career in higher education. The University System of Maryland (USM) is leading this revolution.

We implemented course redesign projects using both the National Center for Academic Transformation model and Carnegie Mellon's Online Learning Initiative (OLI). Large, lecture-heavy, general education courses were changed to incorporate active learning, technology enhanced tutorials, fewer formal lectures, and online modules. All pilot projects showed improved learning at the same—or reduced—costs. By the end of this academic year, we will have redesigned 85 USM courses, enrolling more than 24,000 students.

We are currently involved in a comprehensive study of Massive Open Online Courses (MOOCs). In partnership with Ithaka—recipient of a $1.4 million Gates Foundation grant—the USM is engaged in a study exploring how presentation of material via a Coursera open course can be used in a traditional credit-bearing class. We are conducting 12 side-by-side comparisons and 11 case studies, with results coming next summer.

With the Academic Transformation capacity we have built, we established a new Center for Innovation and Excellence in Learning and Teaching (CIELT). The center will assess trends, analyze results, research what works, and develop "best practices" in support of academic transformation in Maryland and beyond.

I'll conclude with two final points. First, the extent to which the reauthorization of the Higher Education Act recognizes the impact of academic transformation and supports its advancement will be a key determinant as to its long-term success. I encourage you to make it a priority.

Second, even with the USM's success, we are still very early in this movement. Yes, we must keep our expectations high for the potential that exists at the intersection of new technology and cognitive science, but we must do so in a thoughtful manner. We must insure that course transformations produce the results we want—improved learning at the same or reduced cost—before they are adopted on a wholesale basis.

Chairman Harkin, Ranking Member Alexander, and members of the committee, I am Brit Kirwan, Chancellor of the University System of Maryland (USM). I am pleased to join you today to discuss the potential offered by the various elements of what has come to be called "academic transformation"—the implementation of new teaching and learning paradigms made possible by the effective and innovative use of information technology.

By way of background, the University System of Maryland comprises 12 institutions, including research institutions, comprehensives, historically black institutions, one specialized research institute, and totally on-line university. That institution—the University of Maryland University College (UMUC)—is recognized as a global leader in interactive and online education. In fact, UMUC's expertise and experience were an enormous advantage as we worked to expand that approach across the USM. And given that the UMUC model is so well understood, I will focus my comments today on our residential institutions.

We are, in many ways, a microcosm of public higher education and—as such—in an enviable position to design and test the different types of academic transformations. In fact, over the past several years, USM has emerged as a national leader in the academic transformation arena.

Before examining the implementation and impact of our efforts, I believe it is important to step back and consider the impetus for our actions as well. From my perspective, a confluence of developments surrounding the higher education enterprise both compel us to reexamine and reengineer our operations, and present us with a unique opportunity to embrace truly transformative change.

First, recent years have seen the issue of college completion move to the forefront of our national higher education conversation, with an emphasis on the STEM disciplines of science, technology, engineering, and mathematics. The reasoning behind this was inarguable: In today's innovation economy, where knowledge and skill are the coin of the realm, education beyond high school is an imperative. Our Nation simply must produce more well-educated, highly skilled citizens. To secure America's global economic leadership, President Obama has set a national goal of recapturing leadership in college completion by 2020. The Gates, Lumina and other major foundations have made college completion a top priority, and are matching that rhetoric with substantial funding. And the National Governors Association has embraced college completion as its No. 1 goal. Unfortunately, just as the importance of college completion was being elevated in the public's consciousness, a systematic dis-investment in higher education—especially public higher education—was accelerating, further complicating our challenge. Given that the rate of tuition increases

we have seen in recent years is simply unsustainable, if we in higher education are to meet our responsibilities to the Nation, we simply must find a more cost-effective way of delivering high quality instruction and education to our students.

Second, we are seeing advancements in technology that we have barely begun to exploit. The reach and speed of communications technology combined with the adaptability and flexibility of software is transformational. And for higher education, this manifests itself in both sophisticated online learning platforms and innovative classroom approaches.

Finally, the cognitive research that has occurred over the past few years has dramatically increased our understanding of how people learn, process, and retain information. We have seen real breakthroughs in understating the triggers in the brain that imprint information. The importance of active engagement, collaboration, and social interaction—which has long been suspected—has been confirmed.

And so we find ourselves at a fascinating time and place. We are deep into the "new normal" of heightened expectations and reduced resources—the proverbial "do more with less" situation. And, we are standing at the crossroads of advances in cognitive study and the exploding power of technology. The potential for the use of sophisticated technology to simultaneously improve learning outcomes and address the cost of education delivery is the most exciting development that I have seen in my 50-year career in higher education.

Now, I must stress that I do not believe that technology represents some sort of "magic bullet" to fix all the ills in undergraduate education. I am not calling for higher education to cast aside every aspect of the traditional approach and start anew. That would be an enormous mistake.

At the same time, we have to acknowledge that the thoughtful and strategic use of technology in higher education has enormous potential to improve outcomes while reducing costs.

Unfortunately, right now there is a lot of hype about the use of technology and online education. And, there are plenty of examples of where institutions have bought into the assumption that technology is the answer without evidence that this is actually the case. My sense is that while we absolutely need to actively pursue innovation in teaching and learning using these powerful new technologies, we also need to insist on evidence that learning is improved and costs are moderated before we adopt these strategies of a wide-scale basis.

It was precisely with this understanding and approach that the USM became the first university system in the Nation to take advantage of the capabilities of technology and innovative educational techniques to redesign entire courses—not just individual classes of sections.

Our initial course redesign used the National Center for Academic Transformation model, drawing on the expertise of a pioneer in the Academic Transformation movement, Carol Twigg. Dr. Twigg studied the inefficiency that often plagues the multisection, lower division, general education courses that exist on most campuses. She observed that students in these courses were essentially captive participants in a passive learning environment. Looking for a better approach, she ran a controlled experiment on 30 campuses: small liberal arts colleges, State flagship universities, and elite private institutions. Each campus had to teach sections of a course using her strategies, which were based on active learning, technology-enhanced tutorials, and fewer formal lectures. In every case—all 30 institutions—the redesigned Twigg sections scored higher on the finals and had a cost that was the same or lower than that of the traditional sections.

The USM launched 10 pilot projects using these "hybrid classes" in which direct contact with the instructor is augmented by technology-driven, collaborative, interactive learning, with immediate feedback to students. These pilot projects were implemented across several disciplines, underscoring the wide applicability of course redesign. Biology, English, Mathematics, Nursing, and other disciplines were all involved.

As one example, the University of Maryland Eastern Shore (UMES)—one of the USM's three HBIs—redesigned its "Principles of Chemistry I" course. The new approach utilized an on-demand online tutorial, additional technology-assisted instruction, and regularly posted progress reports for students. The redesign also reduced weekly classes from three to two, which freed instructors up for more one-on-one assistance. In the redesigned course, the student pass rate increased from just over half to almost 70 percent, and the consolidation of course sections cut costs substantially. As a result, all sections of the "Principles of Chemistry I" are taught using this redesigned model.

Frostburg State University's "General Psychology" course offer another worthwhile example. The psychology department collapsed the course's 18 sections into 6, reduced in-class meetings by half, added computer lab time, and trained under-

graduate learning assistants to provide tutoring. The redesigned course requires fewer faculty members (freeing full-time faculty to teach higher level courses), shows improved learning outcomes, and significantly reduces the cost-per-student.

A somewhat more technology-heavy approach to course redesign was undertaken at Carnegie Mellon University through its Open Learning Initiative (OLI). Drawing upon the expertise of its cognitive science faculty, they are developing computer-enhanced learning modules and online tutorials—with intelligent tutors built into the software. Essentially, an understanding of how people learn is directly integrated into intelligent, technology-based platforms. These platforms utilize intelligent software to promote adaptive learning, which in turn uses analytics to gauge progress. The learning outcomes produced at Carnegie Mellon were similar to the Twigg results, both in terms of improved outcomes and controlled costs.

Two of our institutions, The University of Maryland, Baltimore County (UMBC) and Towson University, were among six public universities in Maryland and New York that took part in an important study, using OLI software, funded by the academic consulting group Ithaka S+R Student in the introductory statistic courses on the six campuses were split into two groups, one taking the traditional classroom-based course, the other taking the OLI computer-assisted course. All the students took the same standardized statistics test and final exam. The fact that students in the hybrid course did just as well as those who took the conventional course was an under-reported story. It was, in fact, incredibly significant news. The hybrid approach allowed students to make more efficient use of their time, spending about 25 percent less time on the course—both classroom and online—for the same test results. In addition, as a Towson professor noted, students had come away with a "deeper understanding" of statistical concepts than seen in conventional courses. In fact, UMBC now teaches its first courses in statistics using the OLI software.

And just as impactful as the academic results, were some of the ancillary results. Most notably, while just about all the professors that went into the study did so skeptically, by the end just about all of them acknowledged a much more positive outlook for the redesigned course. We have seen this phenomenon across our academic transformation efforts. Getting the first cohort of faculty to come on board was like pulling teeth. But in short order, these men and women went from being the biggest skeptics to most enthusiastic supporters of our efforts. They essentially seeded the ground, growing a whole new group of committed faculty members. Now we have far more faculty that want to take part in course redesigns than we can accommodate.

So with funding from Lumina, the Carnegie Corporation, and others, we dramatically expanded our efforts. We have employed both the Twigg model and the OLI model.

To date, the USM has supported the redesign of 37 courses, which enrolled more than 12,000 students during spring semester 2012 alone. In addition, course redesign leaders within the USM have worked closely with other publics, private institutions, and community colleges to facilitate the redesign of an additional 31 courses across the State.

During this current academic year we are initiating the redesign of 48 additional courses, serving more than 12,000 additional students, essentially doubling our efforts. Our preliminary results indicate exactly what we had expected, and hoped: learning outcomes, pass rates, and retention are improving at the same or lower costs.

Course redesign was our first large-scale implementation of academic transformation principles, and our success in this work has led us to explore additional innovative practices and models. The USM is currently working with Ithaka S+R on a $1.4 million grant funded by the Gates Foundation. We are investigating ways that some Massive Open Online Courses (MOOCs)—provided by Coursera and the Open Learning Initiative—might be incorporated into existing university courses that are part of designed curricula at our institutions. While stand-alone MOOCs are becoming increasingly prevalent, the manner in which academic credit might be earned still remains to be studied. Our challenge is determining whether or not MOOCs, or portions of them, can be used to enhance learning in credit-bearing courses making higher education degrees more attainable.

In our project, Ithaka and USM are conducting 12 side-by-side comparisons and 11 case studies at institutions across the system. Some sections are using the Coursera MOOCs in the so-called "flipped classroom" model, other sections are being taught in the traditional way. The results of this experiment will be known this coming summer.

To further advance all our academic transformation efforts, the USM has created a new Center for Innovation and Excellence in Learning and Teaching (CIELT) that will bring together faculty and administrative leaders from across our 12 institu-

tions to determine ways to improve the learning of students. We will assess trends and design projects to compare new ways to deliver courses with our current processes. By analyzing results and carefully collecting both quantitative and qualitative data on the process challenges and resource required, we will be able to assess costs and determine ways to make the learning process more efficient and cost-effective for the students, while using the knowledge, skills and talents of our faculty to their fullest. As a result of careful documentation of successes and problems, we will be developing information about best practices in our institutions. Bringing our efforts to scale and insuring sustainability are vital and the CIELT will play a pivotal role in accomplishing this, in Maryland and beyond.

The focus on this work, combined with support from the State and leadership from the USM and our institutions, is creating a culture of innovation involving the USM, community colleges, and private and independent colleges and universities in Maryland. The work performed by the USM institutions thus far led to the State providing $13 million in enhancement funds. A major portion of that funding is going to additional investments in course redesign activities and the enhancement of academic innovation on the campuses.

As I referenced earlier, an important issue we have faced in our efforts to bring innovation into the classroom is how to get faculty engaged in these innovation efforts. We realized that this could not be a top down mandate. We also realized that these innovations are hard work and require serious efforts. After all, we are asking faculty to think about a new paradigm for instruction. Taking these factors into account, we have adopted a two-pronged approach.

First, we provide faculty with release time to devote to innovative course redesign and provide departments with incentive funds. We have set standards for what a course transformation must include: active learning, technology-enhanced support, and side-by-side comparisons so we can measure learning gains or losses and cost of delivery.

Second, we conduct workshops and assign mentors for faculty entering this activity. At this point, we have a cadre of "experts" on these new teaching and learning strategies, which we designate as Faculty Teaching Innovation Fellows. The Fellows hold workshops and provide support throughout the pilot phase for faculty starting new projects. The results of this approach are clear: from a modest beginning of a dozen or so faculty executing course redesign efforts, we now have more than 200 faculty actively engaged in our innovation agenda.

I'll conclude my remarks with two final points. First, the extent to which the reauthorization of the Higher Education Act recognizes the impact of academic transformation and supports its advancement will be a key determinant as to its long-term success. I encourage you to make it a priority.

Second, while I am excited about the work we have done and the progress we have experienced within the USM, we are still early in this movement. Every new approach has to be studied carefully and fully evaluated to make sure it has the desired effect: improved learning at the same—or reduced—cost. Yes, I believe there is genuine potential in course redesign, hybrid classrooms, flipped classrooms, MOOCs and other elements of academic transformation. I also recognize that not all innovations will be successful. We must keep our expectations high for the potential offered by innovations and technology to substantially improve learning outcomes and contain costs. But we must do so in a thoughtful manner, insuring with evidence that course transformations produce the results we want before they are adopted on wholesale basis.

Thank you very much for the opportunity to make this presentation.

The CHAIRMAN. Thank you very much, Dr. Kirwan.

Dr. Ralls, welcome. Please proceed.

STATEMENT OF R. SCOTT RALLS, PRESIDENT, NORTH CAROLINA COMMUNITY COLLEGE SYSTEM, RALEIGH, NC

Mr. RALLS. Chairman Harkin, Ranking Member Alexander, and members of the committee.

Thank you for this opportunity to be here. I want to acknowledge my home State Senators, Senator Burr and Senator Hagan, who are such great champions of our community colleges and our North Carolina community college students.

Four years ago this month, North Carolina Community College leaders met at Fayetteville Technical Community College near Fort

Bragg and declared student success to be the primary strategic focus of the North Carolina Community College System. And from that day forward, student success became our focus in strategic planning.

It was not that we did not focus on it before, it is just now it changed the culture somewhat to focus on success as much as we had focused on access. Where we know not only how many students make it through our registration lines, but more importantly, how many cross our graduation stages.

For 9 months in 2010, State community college leaders crisscrossed North Carolina, traveling nearly 14,000 miles, attending listening sessions at all 58 of our colleges. And from those, we documented 200 college-based success innovations, 75 barriers; and in turn, developed a comprehensive set of 15 statewide strategies to move the dial on student success in our State. All of those are documented in detail at our planning Web site SuccessNC.org where they are tracked as well. I would like to focus my time on some overall lessons from our 4-year experience.

First, we see that rather than just providing general access to college courses, we see greater value for students in early connections to structured program pathways that accelerate them toward meaningful goals. That has meant redesigning our dual enrollment programs with our public school partners so that high school students enroll free of tuition in program pathways, not just random courses, ensuring they take the right courses to degree completion, whether it be a technical degree or a bachelor's degree.

Similarly, we restructured GED programs so those students simultaneously receive developmental education to become college-ready, while also picking up valuable technical skills for employment.

Second, we learned the value of identifying and mitigating what we call momentum loss points, points where students become bogged down and too often are pulled off course in the goals toward completion.

At community colleges, this typically happens in the first semester in the first year, often in what has been referred to as developmental education, sometimes referred to as remediation courses; often the Bermuda Triangle for community college students where too many go in but not enough come out.

In North Carolina, we redesigned this entire process, first turning to our math and English faculty experts from across the State to delineate and unpack the competencies required for college readiness, and then restructure them into more modular courses, saving student time and State resources. We have also replaced faulty predictive placement exams with a statewide diagnostic test that is based on those actual competencies. And then combined with other multiple measures, we believe that will lead to more accurate student placement.

And importantly, we also work closely with our public schools to align their career and college testing, the new high school endorsements with our developmental education reforms. For years in our State, like in many States, we tested students all through high school and then they came to us, and we retested them using different measures, and we put two-thirds back into high school class-

es, and that just was not very smart. This lack of calibration of our educational measuring sticks cost a lot of State and student resources. So alignment has been a major focus for us.

A third lesson we believe is particularly important is to structure programs with meaningful educational on and off ramps. There are multiple credentials that are of value to today's college student, degrees, but also industry certifications, certificates, badges, et cetera. And realizing that today, two-thirds of our college students are nontraditional, which means they frequently exit and then reenter our higher education systems. And many of the best programs, I think, are designed with great steps to ensure the students have meaningful credentials when they leave, but a good onramp when they return.

This was the general theory behind one of our largest faculty-led curriculum designs in our 50-year history. We called it Code Green, borrowed from a phrase from Thomas Friedman that restructured 80 technical programs across 5 different academic disciplines: transportation, energy, manufacturing, environment, and construction.

Students in these redesigned programs were better able, through a process of stackable certification to build on baselines of academic workplace technical competency. They gained valuable third-party credentials along the way, and to become multi-skilled, shift back and forth in terms of multiple competencies, which our employers value.

We have seen the value of a lot of these different types of innovations, particularly the collective engagement of faculty and leaders from across our State, looking at areas like measures, performance funding, how we shift innovations across different institutions. That has been sparked greatly by our supporters at the Bill and Melinda Gates Foundation.

In conclusion, I would just like to say two things real quickly. One, I am very proud to be a part of America's community colleges which now serve almost half of the undergraduate students in the country.

But I think our community colleges are also leaders in student success in rethinking these efforts. And I would submit as evidence our recent blueprint for the future, "Reclaiming the American Dream," which talks about redesigning educational experiences, inventing institutional roles, resetting incentives to focus on student success.

I believe your work in reauthorizing the Higher Education Act can play a major role in moving the success agenda forward. You can redesign financial aid in ways that encourage acceleration that allow for use of summer and other important times to move students forward. That is particularly important for nontraditional students.

You can help us reinvent institutional roles by looking at the measures at the Federal level which really do not fit nontraditional students. And you can look at ways of breaking down silos between education and workforce programs like the AMERICA Works Act and other types of opportunities to bridge together these silos.

All of those, I think, will make a difference both in North Carolina and across the United States. And I appreciate your leadership in taking this on.

Thank you.

[The prepared statement of Mr. Ralls follows:]

PREPARED STATEMENT OF R. SCOTT RALLS

SUMMARY

With 58 community colleges serving almost one of every eight adults in our State, the North Carolina Community College System is one of the largest and most accessible systems of higher education in the country. Because our statewide, comprehensive student success efforts have been developed and implemented by the 58 colleges across our State, our efforts have sometimes been referred to as "innovation at scale".

Four years ago this month, our community college leaders met and declared student success to be the primary strategic focus for our System. It was not that student success had not always been a primary goal, but from that day forward it became the deliberate focus of our strategic planning, what we refer to as SuccessNC, and what is today a 4-year effort that is producing a culture shift among North Carolina community colleges.

We recognized the economic importance of ensuring more students attain their goals, which meant not just increasing the percentage of students who complete, but increasing the number of North Carolinians who achieve meaningful success points for employment and further education.

LESSONS LEARNED

- Rather than just providing general access to college courses, we see greater value for students in beginning early in structured program pathways that accelerate them toward meaningful goals.
- With research and analysis, we have learned the value of identifying and mitigating momentum "loss" points, points where students become bogged down and too often are pulled off course in their goals toward completion.
    - Too many students were entering developmental education without exiting, leading to a complete redesign, including the reengineering of curriculum and a fresh look at placement tests.
    - Working closely with our public school partners, we have aligned their career and college readiness testing efforts and new high school diploma endorsements with our developmental education reforms.
- Structure programs with meaningful educational on- and off-ramps, where the best designed programs take great steps to ensure students have something meaningful when they leave, and also that they can quickly articulate when they reenter or transition.

INITIATIVES UNDERWAY

- A redesign of math courses to better prepare students with the competencies needed for tomorrow's work places.
- A jointly restructured articulation agreement, aligning clearer, more efficient pathways to successful student degree attainment through seamless transfer opportunities between all North Carolina community colleges and public universities.
- New measurement and analytical tools to intricately gauge student success.
- The courage, on the local level, to prototype and test new ideas, sometimes across multiple institutions.

With your help in reauthorizing the Higher Education Act while removing barriers that inhibit pathways to success, in authorizing more meaningful student attainment measures, and in looking for stronger linkages between educational and workforce programs, our community colleges can push our success metrics even higher.

Chairman Harkin, Ranking Member Alexander and members of the committee, my name is Scott Ralls, and I am president of the North Carolina Community College System. With 58 community colleges serving almost one of every eight adults in our State, we are one of the largest and most accessible systems of higher education in the country. Because our statewide, comprehensive student success efforts

have been developed and implemented by the 58 colleges across our State, our efforts have sometimes been referred to as "innovation at scale".

Four years ago this month, North Carolina community college leaders met at Fayetteville Technical Community College near Fort Bragg and declared student success to be the primary strategic focus of the North Carolina Community College System. It was not that student success had not always been a primary goal, but from that day forward it became the deliberate focus of our strategic planning, what we refer to as SuccessNC, and what is today a 4-year effort that I believe is producing a culture shift among North Carolina community colleges.

At that initial meeting, we discussed the economic importance of ensuring more students attain their goals, which meant not just increasing the percentage of students who complete, but increasing the number of North Carolinians who achieve meaningful success points for employment and further education. Our leaders noted that our goals to significantly increase the numbers of credential completers could not be accomplished with any sacrifices to access or rigor, and it also meant a shift in focus beyond access, where we not only take note of how many students make it through our registration lines, but more importantly, how many students cross our graduation stages.

We decided that to discover the innovations and barriers to student success, it was best to listen to the experts—our faculty and staff at the front lines—and so for 9 months our State Board members and System leaders traveled nearly 14,000 miles, attending listening sessions at all 58 of our colleges. From those sessions, we documented more than 200 college-based innovations and 75 barriers, and armed with that knowledge, as well as benchmarking from outside our State, we developed a comprehensive set of 15 statewide strategies to move the dial on student success and program completion, encompassed within a loss-momentum framework we adopted from our great supporters, the Bill and Melinda Gates Foundation. This framework and these strategies, as well as our college-based innovations, are documented in detail at our strategic planning Web site, SuccessNC.org

As we are now deep into the implementation and execution of these statewide strategies, I cannot today tell you their ultimate impact, nor will I be able to for at least a few more years, but I can tell you we see some positive initial signs. There is no doubt that the deliberate focus on student success efforts is today very different from what it was just 4 short years ago. Bearing that in mind, I will quickly share some of what I believe are our initial lessons learned.

First, rather than just providing general access to college courses, we see greater value for students in beginning early in structured program pathways that accelerate them toward meaningful goals. That has meant redesigning dual enrollment programs with our public school partners so that high school students enroll free-of-tuition in program pathways, not random courses, ensuring they take the right courses leading to degree completion, be it a technical degree or a bachelor's degree. Similarly, we restructured GED programs so that those students simultaneously receive the developmental education to become college-ready, while also picking up valuable technical skills for employment.

Second, with research and analysis enriched by our long-time partners, Jobs for the Future and the Community College Research Center at Columbia University, we have learned the value of identifying and mitigating momentum "loss" points, points where students become bogged down and too often are pulled off course in their goals toward completion. In community colleges, this typically happens early in their first semester or first academic year, particularly in developmental education programs, often the "Bermuda Triangle" for community college students where they remediate in high-school level work while enrolled in college to become prepared for college courses.

Like the Bermuda Triangle, we found too many students entering developmental education without exiting, which is why we have completely redesigned our efforts in North Carolina. First, by turning to expert math and English faculty across our State to reengineer our curriculum based on specific, well-defined competencies that both shorten overall course lengths while also enabling the modularization of courses, allowing students to quickly get the instruction they need. Also, rather than relying on high-stakes placement tests that we found were not very predictive of ultimate student success, we have contracted with the College Board to design a statewide test for us that is diagnostic of individual student math and English needs, based on the competencies our faculty identified, which with additional measures will better help us pinpoint student remedial requirements.

We have also worked closely with our public school partners to align their career- and college-readiness testing efforts and new high school diploma endorsements with our developmental education reforms. For years, high schools in our State, as in most States, tested students for readiness using one educational standard, then

students would graduate and come to us where we would test them using other educational standards, and in turn we would start approximately two-thirds of recent graduates back in high-school level developmental education courses. This lack of calibration of our educational measuring sticks has created tremendous wastes for both students and State resources over time, so alignment has been a major focus of our developmental education reforms.

As a third lesson, we believe it is particularly important to structure programs with meaningful educational on- and off-ramps. There are multiple credentials of value for today's college student—degrees, industry certifications, certificates, badges, etc.,—and realizing that two-thirds of todays' college students are non-traditional also means they frequently exit and later re-enter our higher education systems. I believe many of the best designed programs take great steps to ensure students have something meaningful when they leave, and also that they can quickly articulate when they reenter or transition.

This was the general theory behind one of the largest faculty-led curriculum redesigns in our system's history, completed last year, what we call "Code Green," borrowed from a terminology coined by Thomas Friedman. This effort restructured 80 technical programs across five different academic disciplines—transportation, energy, manufacturing, environment and construction—to better enable the concept of stackable certification.

Based on a competency framework championed by the National Association of Manufacturers' Manufacturing Institute, students in our redesigned programs are better able to attain meaningful industry certifications as well as traditional academic credentials, built on top of a foundational core of academic, workplace, and technical competencies. Embedded in these programs are skills emphases on energy efficiency and conservation, which we believe will be increasingly important for the technical jobs of the future. Very importantly, our technician programs were designed through the leadership and input of industry and hundreds of faculty from across our State, faculty who ultimately changed the programs they were accustomed to teaching for the purpose of providing greater academic efficiency and enhanced employment certification advantages for students. Along the way, many gained new industry-recognized certifications as well so as to be better enable them to educate students to these important credentials.

This year, we have two big redesign "lifts," if you will. First, community college faculty from across the State are redesigning all of our math courses to better prepare our students with the math competencies needed for tomorrow's work places. Second, together with curriculum faculty teams from the great 16-campus University of North Carolina System, our faculty and academic leaders have jointly restructured a proposed new articulation agreement with the University of North Carolina System, which we anticipate to be signed by both our boards in February, again aligning clearer, more efficient pathways to successful student degree attainment through seamless transfer opportunities between all community colleges and public universities in our State.

Finally, we have seen in our State that beyond any specific program structures, perhaps the real secret sauce to student success is in the collective effort of talented faculty, staff and college leaders to deliberately focus and calibrate their local attempts to move the dial on program completion. This requires collective awareness to previously overlooked student success challenges and opportunities, and through multiple outlets today in North Carolina, college presidents, trustees, and faculty and staff leadership teams together learn about ideas for improving student success goals. It also requires new measurement and analytical tools to intricately gauge student success, and through the assistance of a great corporate partner in our State, SAS Institute, we are developing some of the best advanced analytic resources in our sector. And it also requires having the local courage to prototype and test new ideas, sometimes across multiple institutions, which I believe is one of the major benefits of our being one of three participating States in the Completion by Design initiative funded by the Bill and Melinda Gates Foundation.

In conclusion, I would like to say that I am extremely proud to be part of America's community colleges, a crucial piece of America's education fabric beyond just our growing scale and size. Our over 1,200 colleges that educate nearly half of American undergraduate students, I believe, are also leaders in rethinking student success and degree completion in the United States. And I would submit as evidence, *Reclaiming the American Dream*, a report of the recommendations by the American Association of Community Colleges' 21st Century Commission on the Future of Community Colleges. Boldly calling for a new vision for community colleges that extends our traditional "access" mission to an "access plus success" mission, this blueprint for our future challenges us to focus on three R's—redesigning stu-

dents' educational experiences, reinventing institutional roles, and resetting the system to create incentives for student and institutional success.

Your work in reauthorizing the Higher Education Act can play a major role in moving the national success agenda forward. You can help us remove barriers that sometimes inhibit the redesign of educational experiences by providing opportunities for accelerating Pell grant opportunities for student completion, such as providing funding during the summer and also increasing flexibility for Pell grants for institutions offering innovative program structures such as modularized developmental education. Our experiences also teach us the value of cost-benefiting regulatory requirements that become what we referred to as "ankle biters" at the institutional level, distracting from the mission of student success without adding additional accountability. New gainful employment requirements are an example at the national level of what could be an ankle biter distraction from the ultimate goal.

You can also help reinvent institutional roles by authorizing more meaningful measures for determining student goal attainment. Current Federal IPEDS (Integrated Postsecondary Education Data System) measures are increasingly irrelevant for the growing non-traditional college population and, for example, were applicable to only one-third of the student population at our North Carolina community colleges last year. They treat as non-completers students who successfully transfer to 4-year colleges, or who complete industry certifications and find employment, before attaining a traditional academic degree. In addition, many students, particularly working students, simply need more than 150 percent of the "normal time" to complete their programs. Reinventing institutional roles will depend greatly on the appropriateness of the metrics we use to define student success.

Finally, you can reset the system to create incentives for student and institutional success. Breaking down traditional silos, we have learned, can pay dividends in this regard. I would encourage you to continue to look for linkages between what have traditionally been workforce and educational programs. Examples include cross-departmental efforts between Labor and Education in the community college TAACCCT (Trade Adjustment Assistance Community College and Career Training) Grant Program and efforts to incentivize industry-recognized credentials as Senator Hagen has proposed through the AMERICA Works Act. We urge extension of the TAACCCT.

Thank you for this opportunity to appear before you today to discuss some of the lessons learned during our 4-year journey into improving student success. I also want to thank Senators Burr and Hagan who have both been tremendous champions of community colleges and student success in our State. Collectively, with each of your help in reauthorizing the Higher Education Act while removing barriers that inhibit pathways to success, in authorizing more meaningful student attainment measures, and in looking for stronger linkages between educational and workforce programs, I am confident we can push post-secondary student success to a much higher level. Thank you for your leadership and your support of our students.

The CHAIRMAN. Thank you very much, Dr. Ralls.

And Mr. Hall, again, welcome. Please proceed.

STATEMENT OF TIMOTHY L. HALL, PRESIDENT, AUSTIN PEAY STATE UNIVERSITY, CLARKSVILLE, TN

Mr. HALL. Chairman Harkin, Ranking Member Alexander, and members of the committee.

I have the privilege of serving as president of Austin Peay State University in Clarksville, TN; not Texas, but Tennessee where Austin Peay is. Tennessee's fastest growing public university and one which serves many students at risk for not completing college.

More than 50 percent of our students receive the Pell grant and roughly 40 percent are adults. Both categories of students have traditionally experienced retention and graduation rates significantly lower than other students.

At Austin Peay, we are working overtime to defeat demography on behalf of our students. We know that we cannot replace their motivation or their efforts, but we have discovered there are things we can do to support their success.

My goal today is to summarize two of the innovations that have helped more of our students persist and graduate. I should tell you that I am happy to serve a campus full of faculty and staff who are discontented. In Thomas Edison's terms, he said, "Discontent is the first necessity of progress. Show me a truly satisfied man, and I will show you a failure." So we are happy to be discontent with current results at Austin Peay looking for ways to help more of our students succeed.

The first innovation I want to talk with you about is in the area of developmental education. One of our most pressing challenges is how to help students who arrive at college not ready for college work. More than 50 percent of our students fall into this category.

Traditionally, such students have been required to take noncredit courses designed to get them up to speed for college level work as a prerequisite to taking required credit-bearing courses. Students not ready for college math, for example, would be required to take one or more noncredit math courses to catch them up and then whatever college level math courses they needed to graduate.

The success rate for that prerequisite model was abysmal. Only about 10 percent of our students made it through the noncredit courses and then successfully completed the college level course. Those results were paralleled by success rates around the country.

Beginning in 2007, Austin Peay replaced the traditional model with a co-curricular approach. Now, students with academic deficiencies move straight into college credit bearing courses, with additional required workshops to help them succeed. We use talented student peer mentors to lead these workshops. In mathematics, for example, these workshops include individual diagnostics to pinpoint problem areas for each student and computer exercises to help address their particular problems.

The results of the new model have been astonishing. Now, better than 70 percent of our students who arrive unprepared for college mathematics, for example, are able to successfully complete the introductory mathematics course for their discipline and to do so within a single semester.

Results for students with other deficiencies have been comparable. And instead of paying for two or more courses and receiving credit for only one, students pay only for the single credit-bearing course with a modest $75 additional fee to cover the cost of the supplemental workshops.

These successes have caused the National Center for Academic Transformation to include Austin Peay's co-curricular model as one of six recommended models for redesigning developmental courses. Similarly, Complete College America has featured Austin Peay's co-curricular design among its recommended strategies for meeting the needs of students who arrive at college unprepared for college level work.

At Austin Peay, we have also harnessed the power of technology to guide students on the path to a successful degree. Our revolutionary program, Degree Compass, created by Dr. Tristan Denley and now licensed to Desire to Learn is a personalized, Web-based, course-recommendation tool that uses predictive analytics to guide students' course selection in a way that not only enhances their

rate of academic success, but also the timely completion of their degree.

Spotlighted by publications such as "*The New York Times*" and the "*Wall Street Journal*," and recognized by President Obama, and by Bill Gates, Degree Compass is making a difference in success rates for students, not only at Austin Peay, but at other universities and community colleges that have made it available to their students.

Across multiple institutions, we are seeing the average credit hours earned by students increase in correlation to the extent that they take courses recommended by Degree Compass. Furthermore, the achievement gap that tends to exist between low-income or minority students and other students is being dramatically narrowed where students build schedules using the courses recommended by Degree Compass.

The results of the innovations I have described at Austin Peay have been dramatic. State funding for higher education in Tennessee is now based almost 100 percent on intuitional performance, especially as measured by the retention and graduation of our students. I am pleased to tell you that for the first 2 years of this new funding model, Austin Peay State University has led the State in increased performance and funding. We have also seen our 6-year graduation rate increase by 25 percent over the past 6 years.

In closing, I thank you for the opportunity to address the important subject of innovation in higher education. Now more than ever, we know that innovation in service of student success is necessary to achieve the degree completion results America needs over the next decade. The results we have seen at Austin Peay demonstrate that innovation to support student success is within our grasp.

Thank you.

[The prepared statement of Mr. Hall follows:]

PREPARED STATEMENT OF TIMOTHY L. HALL

SUMMARY

Tim Hall is president of an institution with more than 10,000 students, many of whom are low-income and adult students. He will discuss two innovations that have helped his institution see graduation rate improvements of roughly 25 percent over the past 6 years. The first innovation is in the area of developmental education. Like many institutions, Austin Peay serves many students who are not prepared to do college-level work when they matriculate. Traditionally, such students have been required to take non-credit courses designed to catch them up before they were permitted to enroll in required, credit-bearing courses. Unfortunately, the success rate of this approach was abysmal. Austin Peay has developed an alternate strategy which puts students straight into credit-bearing courses and provides them required workshops to support their success. The results have been a remarkable improvement: from a 10 percent overall success rate under the old model to a success rate of more than 70 percent under the new model.

President Hall will also discuss a revolutionary program called Degree Compass developed by Dr. Tristan Denley at Austin Peay. Degree Compass uses predictive analytics to accurately predict the success of students in particular courses and thus give students and faculty important information to plan their progress toward degree. Use of this program at multiple institutions has been closely correlated with significant increases in earned credit hours and narrowing of the achievement gap between low-income or minority students and other students.

Chairman Harkin, Ranking Member Alexander, and members of the committee, my name is Tim Hall. I am the president of Austin Peay State University in Clarksville, TN, Tennessee's fastest growing public university and one which serves many students at risk for not completing college. More than 50 percent of our students receive the Pell grant, and roughly 40 percent are adults. As you know, both categories of students have traditionally experienced retention and graduation rates significantly lower than other students. At Austin Peay, we are working overtime to defeat demography on behalf of our students. We know that we can't replace their motivation and efforts, but we've discovered that there are things we can do to support their success. My goal today is to summarize two of the innovations that have helped more of our students persist and graduate.

The first is in the area of developmental education. Like many institutions of higher learning, one of our most pressing challenges is how to help students who arrive at college not ready for college work. More than 50 percent of our students fall into this category. Traditionally, such students have been required to take—and required to pay for—noncredit courses designed to get them up to speed for college-level work as a prerequisite to taking required credit-bearing courses. Students not ready for college math, for example, would be required to take one or more noncredit math courses to catch them up, and then whatever college-level math course they needed to graduate. The success rate for that prerequisite model was abysmal. Only about 10 percent of our students made it through the noncredit courses and then successfully completed the college-level course. Those results paralleled success rates around the country.

Looking back, we can see why the prerequisite model was not likely to produce the results we needed. It was expensive, for us and for our students. It was demoralizing for our students—many of them the first in their families to attend college—to arrive on campus and be told they weren't ready to take on real college courses. And it was risky, because it tended to extend the time it took our students to move forward toward graduation; and, as we now know, time is the enemy, especially for our low-income and adult students.[1] The longer it takes for them to graduate, the more likely it is that life will intervene and throw them off track.

Beginning in 2007, Austin Peay replaced the traditional developmental studies model with a co-curricular model. Now, students with deficiencies in mathematics, writing, or reading move straight into credit-bearing college courses, with additional required workshops to help them succeed. We use talented students to lead these workshops. In mathematics, for example, the workshops include individual diagnostics to pinpoint problem areas for each individual student and computer exercises to help address these problems. The results of the new model have been astonishing. Now, better than 70 percent of our students who arrive unprepared for college mathematics, for example, are able to successfully complete the introductory mathematics course for their discipline, *and do so within a single semester*. Results for students with deficiencies in reading or writing ability have been comparable. And instead of paying for two or more courses and receiving credit for only one, students pay for a single course, with a modest $75 additional fee to cover the cost of the supplemental workshops. These successes have caused the National Center for Academic Transformation (NCAT) to include Austin Peay's developmental course model as one of the six recommended models for redesigning developmental courses.[2] Similarly, Complete College America has featured Austin Peay's co-curricular redesign of developmental studies as one of the recommended strategies for meeting the needs of students who arrive at college unprepared for college-level work.[3]

At Austin Peay we have also harnessed the power of technology to guide students on the path to a successful degree. Our revolutionary program, Degree compass, created by Dr. Tristan Denley and now licensed to Desire2Learn,[4] is a personalized, web-based course recommendation tool that uses predictive analytics to guide students' course selection in a way that not only enhances their rate of academic success but also the timely completion of their degree. Degree Compass compares each student's academic record with every other student's record to make remarkably accurate predictions about a student's likelihood of success in a particular course or a particular major. It then makes real-time recommendations available to both our students and their faculty advisors. Spotlighted by the publications such as the *New*

---

[1] See *http://www.completecollege.org/docs/Time__Is__the__Enemy.pdf*.

[2] For NCAT's report on Austin Peay's redesign, see *http://www.thencat.org/States/TN/Abstracts/APSU%20Algebra__Abstract.htm*.

[3] See *http://www.completecollege.org/docs/CCA%20Co-Req%20Model%20__%20Transform%20Remediation%20for%20Chicago%20final%281%29.pdf*.

[4] See *http://www.desire2learn.com/products/degree-compass/*.

York Times, the *Wall Street Journal*, *USA Today*, and *The Chronicle of Higher Education*, and recognized by President Obama [5] and Bill Gates,[6] Degree Compass is making a difference in the success rates for students not only at Austin Peay State University, but at other universities and community colleges that have made it available to their students. Across multiple institutions, we are seeing the average credit hours earned by students increase in correlation to the extent they take courses recommended by Degree Compass. Furthermore, the achievement gap that tends to exist between low-income or minority students and other students is being dramatically narrowed where students build schedules using the courses recommended by Degree Compass.

The result of the innovations I've described at Austin Peay have been dramatic. You may know that State funding for higher education in Tennessee is now based 100 percent on institutional performance, especially as measured by the retention and graduation of our students. I am pleased to tell you that for the first 2 years of this new funding model, Austin Peay State University has led the State in increased performance and funding. We have also seen our 6-year graduation rate increase by 25 percent over the past 6 years.

In closing, I thank you for the opportunity to address the important subject of innovation in higher education. Now, more than ever, we know that innovation in service of student success is necessary to achieve the degree-completion results America needs over the next decade. The results we have seen at Austin Peay State University demonstrate that innovation to support student success is within our grasp. Thank you.

The CHAIRMAN. Thank you very much, Mr. Hall.

Now, Dr. LeBlanc, welcome. Please proceed.

STATEMENT OF PAUL J. LEBLANC, PRESIDENT, SOUTHERN NEW HAMPSHIRE UNIVERSITY, MANCHESTER, NH

Mr. LEBLANC. Thank you, Senators, for the opportunity to appear before you.

As you know, Southern New Hampshire University made a little bit of education history back in April when the Department of Education approved our modestly named College for America degree program under the direct assessment of student learning provisions under title IV. So for the first time ever, Federal financial aid dollars will be paid for actual documented learning rather than seat time.

CFA, as we call it for short, is the first of a new breed of competency-based education programs that are untethered to the credit hour. If you think about it, the credit hour still functions like the Higgs-Boson particle of higher education. It serves a series of function for which it was never designed. It was designed more than 100 years ago to figure out how to pay pensions to faculty members. But if you think about it, it now defines and unitizes how we think about knowledge. It defines degree programs. It defines faculty workload. It defines how we allocate our resources, our physical resources. It permeates higher education in a way that was never part of the plan. It is also the basis for giving out $150 billion of Federal financial aid, the powerful oxygen that keeps our industry alive in many ways.

It is very good at telling us how long they have sat, but it is not very good at telling us what they have learned. The average employer who looks at a transcript and sees a "B" in Intro to Sociology does not know much more than somebody is better than somebody

[5] See *http://www.whitehouse.gov/the-press-office/2013/08/22/fact-sheet-president-s-plan-make-college-more-affordable-better-bargain-*.

[6] See *http://www.c-spanvideo.org/program/GatesonP*.

else with a B-minus or a C-plus. They can infer some things from the course title, but that is about it.

Programs like College for America make learning fixed and allow time to be negotiable, and this is a fundamental flipping of the credit-hour construct.

We focus on outcomes and not inputs, and that allows for new delivery models when well designed can lower cost, improve quality, and graduate more Americans with better skills. In our case, College for America costs $1,250 every 6 months. Our first graduate went from zero credits to an associate's degree in under 100 days. We have another 20 who have done it in under 9 months. Not because, well they are in some ways extraordinary, but because they are working adults who knew a lot. A person who has worked for 20 years in a family business as a bookkeeper probably knows college math. Why would we think that making them sit through 15 weeks of a term would improve their learning?

On the other hand, why would we penalize somebody who needs a year and a half to learn how to write well? The thing that is negotiable for us is the time. What is not negotiable for us is the learning and the claims we make for our students.

We work closely with large scale employers such as ConAgra Foods, Anthem Blue Cross/Blue Shield, Partners Health, Cumberland Gulf, the city of Memphis, and more. Our competencies are closely aligned with their needs and we use cutting edge labor research tools to develop our programs.

But they will tell you there is a crisis of confidence among employers who find themselves as graduates of 4-year degree programs who do not write very well. We now ask the question to CEO's and HR directors and say,

> "Raise your hand if you have somebody working for you who struggles with basic math to navigate a budget, to work on a spreadsheet."

More than half the hands in the room go up.

> "Raise your hands if you have somebody working for you that does not write very well who you hesitate to put in front of a group of customers or clients."

More than half the hands go up.

Our approach to education is through competency because that is how they think about their needs. To declare the claims we make for the learning is to stand behind them in a way that, I think, is not typical.

CBE programs, Competency Based Education programs, have the potential to drive a paradigm shift in higher education, but we need to know a lot more in order to inform the kind of policy-making in which you are engaged.

This is a new movement in some ways with more questions than answers. So I applaud the committee for its focus on innovation and for seeking ways to develop new, more sustainable business models for higher education.

I think a word needs to be said about what kinds of innovation you seek to support. A lot of what we see in higher education is sustaining innovation, genuine improvements in quality, genuine

improvements in persistence in graduation rates, but not game changers.

If the game you are trying to change has to do with sustainability and access and cost. For that sort of innovative change, you need to look at business models and new ways to think about our delivery, and this is where we harness both the technology, which has been described, but also the unbundling of higher education which is underway and makes all sorts of new models possible.

The Federal Government can support CBE programs in the following ways. You can support experimental sites that allow for nontime-based models of aid disbursement that align with nontime-based models of educational delivery.

While direct assessment allows for an alternative to time, all of the supporting, existing regulatory guidelines remain tethered to the credit hour. You had the foresight to pass legislation allowing experimentation, but we now need to use it and to ensure that the underlying regulations do not squelch the innovation the legislation sought to encourage.

I would suggest that you need to support new accreditation pathways that develop principles of good practices and CBE's; either as an option within existing regional accreditors or through a new body.

Support development of agreed-upon definitions of competency. If competencies that are placed are being alternative to the credit hour as the currency of higher education, we need a much better exchange rate than the one that has to be doubled the credit hour and produce so much inefficiency and waste.

The Government should create safe spaces for institutional innovation and learn from other experiments and ways that can eventually inform policy, foster the development of more CBE programs that provide high quality, low prices, and lift the quality of the traditional time-based programs that will dominate higher education for the foreseeable future.

In return, you should demand more from us as an industry. We should provide greater transparency and data than we have been willing to share. You should hold us accountable for the outcomes we produce, on how we know the degree to which we prepare students for the world of work, for the degree that we provide access and support for students in need.

Thank you.

[The prepared statement of Mr. LeBlanc follows:]

PREPARED STATEMENT OF PAUL J. LEBLANC

SUMMARY

Southern New Hampshire University (SNHU) made higher education history in April 2013 when the Department of Education approved of SNHU's College for America (CfA) degree program under "direct assessment of student learning" provisions under title IV. For the first time ever, Federal financial aid dollars will be paid for learning rather than time. CfA is the first of a new breed of competency-based education (CBE) programs that are untethered to the credit hour. The credit hour permeates higher education and while it is good for telling us how long students sat, it is not very good at telling us what they learned. Programs like CfA make learning fixed and non-negotiable and allow time to be flexible.

Focusing on outcomes and not inputs allows for new delivery models that, when well designed, can lower cost, improve quality, and graduate more Americans with better skills. CfA cost only $1,250 every 6 months and our first graduate went from

zero credits to an Associates Degree in under 100 days. Many others have completed their degrees in under 9 months. We work closely with large scale employers such as ConAgra Foods, Anthem Blue Cross/Blue Shield, Partners Health, Cumberland Gulf, the city of Memphis, and more. Our competencies are closely aligned with their needs and we use cutting edge labor market research tools to develop our programs.

CBE programs may drive a paradigm shift in higher education, but we need to know a lot more in order to inform policy. This is a new movement with more questions than answers. The Federal Government can support CBE in the following ways:

- Supporting experimental sites that allow for non-time-based models of aid disbursement that align with non-time-based models of educational delivery. While direct assessment allows for an alternative to time, all of the supporting regulatory guidelines remain tethered to the credit hour.
- Support new accreditation pathways that develop principles of good practice in CBE, either through the existing regional accreditors or through a new body.
- Support development of agreed upon definitions of competencies. If competencies are to replace the credit hour as the currency of higher education, we need a much better exchange rate than the one that has bedeviled the credit hour and produced so much inefficiency and waste.

The government should create "safe" spaces for institutional innovation and learn from those experiments in ways that can eventually inform policy, foster the development of more CBE programs that provide high quality/low prices, and lift the quality of traditional time-based programs that will dominant higher education for the foreseeable future.

I appreciate the opportunity to offer testimony to the Committee on Health, Education, Labor, and Pensions (HELP) and to share the innovation work that Southern NH University (SNHU) is doing on behalf of students. SNHU is a private non-profit university of over 30,000 students with a traditional campus in Manchester, NH, a large online presence (now the third or fourth largest non-profit provider of online degrees in the country), and a new ground-breaking competency-based education (CBE) degree program. This last, dubbed College for America, was in April 2013 the first CBE degree program to be approved under the "direct assessment" provisions of the Higher Education Act, allowing the disbursement of Federal financial aid for actual learning outcomes rather than the accumulation of time-based credit hours.

SNHU is widely known for its innovative work in providing to students multiple degree pathways that improve quality and lower cost. These include:

- A competency-based 3-year bachelors program created 15 years ago (with FIPSE support) that cuts the cost of a degree by 25 percent;
- The SNHU Advantage Program, with a flat $10,000 per year cost for the first 2 years program that saves 35 percent of the cost of our regular degree program;
- Our growing online programs (which offer a 4-year degree for under $40,000);
- And now College for America (CfA), which provides fully self-paced competency-based Associates Degree for as little as $1,250.

For that work, SNHU was listed at #12 in *Fast Company* magazine's "The World's 50 Most Innovative Companies List" in 2012, the only university to be included. The university was recently awarded a $1.8 foundation grant to convene 20 other institutions working on developing their own competency-based degree programs in an effort to move along the development of new CBE models and develop principles of best practice.

WHY COLLEGE FOR AMERICA (CFA)?

We began work on CfA 2 years ago as a response to a perfect storm in higher education: a crisis of cost and access; a crisis of confidence in the quality of today's college graduates; and the need to educate many more Americans. Our observation was that traditional higher education was built around inputs that made everyone feel good, but that often drove up the cost of education with questionable value added. So much of traditional higher education is based on prescription or inputs, items that have long been valued and presumed to be tied to quality. These include:

- How many books in the library;
- How many PhD's on the faculty;
- The average SAT scores and high school GPA's of the entering classes;
- The pedigrees of the faculty and what they have published; and
- The grandeur of its buildings, and more.

The assumption was that if all these items were well addressed, students necessarily received a good education. The actual outcomes of that education were often ill-defined outside of high stakes fields like Nursing, Engineering, and Accounting (where third party validation often shaped outcomes and then validated student mastery). Traditional higher education has generally been hazy on defining and assessing the learning outcomes of its degree programs, and for a very long time society trusted a degree to be a reliable signal of largely assumed outcomes: the ability to communicate, solve problems, to do quantitative reasoning, and to have a certain level of professional maturity. This is no longer the case.

A much discussed 2011 book, *Academically Adrift*, questioned how much actual value-added learning was taking place on American campuses and touched a national nerve. From inside the higher education industry, it echoed an increasing complaint from employers that new college graduates were arriving in the workplace with gaps in basic skills, whether the ability to communicate well or do basic math or work in teams. It expands on oft repeated worries about rampant grade inflation and the "cheapening" of the degree. Polls reveal findings like "less than 10 percent of employers thought colleges did an "excellent" job of preparing students for work." (*http://chronicle.com/article/Employers-Say-College/130013/*) and in a more recent poll only a third of employers gave higher education fair marks for preparing students with basic workplace skills (*http://chronicle.com/article/The-Employment-Mismatch/137625/#id=overview*). Critics worry that at the very same time we see skyrocketing costs and increased student debt, we may be getting less for our national and personal investments.

While outcomes-based education is in part a response to the need to provide better evidence of the claims we make for student learning, it has also provided a way of thinking about alternative paths to earning college credits and a degree. The Council of Adult and Experiential Learning (CAEL) has long championed Prior Learning Assessments, a portfolio approach allowing adult learners to earn credit for what they have learned outside the classroom. Excelsior University, Charter Oaks State University, and Western Governor's University have long allowed students accelerated options for demonstrating their completion of outcomes. And with our earlier mentioned approval for direct assessment, Southern New Hampshire University made history. For the first time, Federal financial aid dollars now pay for completed competencies *instead* of three-credit courses. Put another way, education attainment can now be untethered to time and this has profound implications.

The Carnegie Unit, or three-credit-hour course, has been the Higgs-boson particle of higher education. While originally meant to provide a basis for awarding pensions to retired faculty members, it has come to insinuate itself into every facet of higher education. It is how we unitize knowledge, at least as students come to know it and faculty come to share it. It is how we apportion workload. It is the building block of curricula and programs. It shapes resource and room allocation. And it is the basis for awarding tens of billions of dollars of Federal financial aid, the monetary fuel that sustains the industry. The problem is that the Carnegie Unit has allowed us to be very good at reporting how long students sit at their desks, but not very good about demonstrating what they actually learned. The typical transcript is a black box and while seeing that Sally Smith had a "B" in Sociology is helpful for knowing that she outperformed someone with a "B-" or "C+," it sheds no light on what Sally actually knows and can do from taking that class. CBE reverses the time/learning relationship and makes very clear what students know and can do and cares far less about the time it took to get them there. The very first graduate of SNHU's College for America (CfA) program went from enrollment to an Associate's Degree in just 3 months. The physics of education have changed.

We have targeted CfA at the lowest 10 percent of wage earners in large companies, adults who have zero to few college credits and who need a degree to improve their skills, retain a grip on their employment, seek better employment, and move up the job ladder within their organizations. We work with large scale employers like ConAgra Foods, McDonalds, Panera Bread, Partners Health, the city of Memphis, Anthem Blue Cross/Blue Shield, and others. Many of these employees are making minimum wage, often not making family sustaining wages. For many, the cost of college, even community college, is prohibitive at a time when approximately 70 percent of new jobs will require a 2-year degree or its equivalent. From the employer side, our partners describe challenges in finding workers with basic foundational skills of communication and quantitative problem-solving, soft skills like the ability to work in teams, and job specific skills such as the use of basic office technologies. They routinely report hiring *4-year college graduates* who lack these skills.

We set out to create CfA with these goals in mind:

• Assure quality: be clear in the claims we make for our learning and stand behind them with rock-solid assessment;
• Remove cost as a barrier to education; and
• Help the most marginalized learners get a degree.

By flipping the credit hour construct so that *learning is well-defined and fixed while time is flexible*, we were able to fundamentally re-imagine the degree program. If someone works as a bookkeeper in a small company and has strong math skills, why not let him or her immediately demonstrate mastery of the math competencies and move on? No need to make that person sit through classes for 15 weeks. However, if someone really struggles with writing and needs 18 months to demonstrate mastery, why would we think 15 weeks of First Year Writing would get the job done? Or that giving that person a C− in writing is acceptable to employers?

Instead of courses or credit hours, our degree program has 120 competencies in nine families, 120 "can-do" statements that are demonstrable and measurable. Each competency is defined by a rubric that is later used for assessing mastery—there is no mystery to student, faculty member, or employer. The skill areas are:

- Foundational Skills
  - Communication
  - Skills
  - Critical and Creative Thinking
  - Quantitative Skills
  - Digital Fluency and Information Literacy
- Personal and Social Skills
  - Personal Effectiveness
  - Ethics and Social Responsibility
  - Teamwork and Collaboration
- Content Knowledge
  - Elective
  - (Business Essentials)

We use cutting edge labor market tools and the best research we can find to construct the actual competencies. We work closely with our employee partners to map competencies and ensure that they are the right ones for the right jobs.

We designed the program to be online, self-paced, and offered in ways that work for students whose lives are consumed by family and work *and then* an education. We leverage the social capital in these students' lives, working to identify mentors and people who can help them learn, and use a powerful peer-to-peer platform to encourage them to help each other. We use open-education resources (OCR) to drive out costs wherever we can. When students graduate, they receive a competency transcript (and can request a traditional one as well) that precisely outlines the 120 competencies they have mastered. Evidence of that mastery resides in a web-based portfolio that can be used by the student to share with employers.

In short, we took many of the "givens" in higher education delivery and reversed them:

Time Fixed, Learning Undefined	Time Variable, Learning Defined
Faculty Centered	Student Centered
Expert Teaching Model	Mentor Model
High Cost/Price	Drive costs out of model
Transcript Black Box	Proof of Learning
"Big Chunk" Courses	Granular Competencies
Learners come to institution	Learning comes to students

We think the movement to competency-based education has profound implications for improving higher education, though it will be painful for many institutions. CBE requires a level of clarity and definition in learning outcomes that many IHEs resist. It requires building learning around individual students and where there strengths and weaknesses lie, not making students conform to rigid institutional structures. It requires actual demonstrated mastery, so students can no longer slide by with mediocre grades and receive a degree at the end. The danger here is that CBE may also for a while decrease college completion rates as we no longer make compromises on the quality of degrees.

How is it going? It is too early to tell as we only launched last January. We do know the following:

• The program does allow accelerated learning: our first graduate went from zero credits to an Associates Degree in under 100 days and we have another 20 who have completed in under 9 months.

• We can drive considerable cost out of the equation and make the program affordable. At $2,500 per year and with access to Pell grants for our neediest of students and employer reimbursement for many, we have largely removed cost as a barrier to an education.
• Access to technology remains an issue for some. Not technology per se, but up-to-date adequate computing. We are piloting the use of Chromebooks, the $200 computers, and those are working well.
• Psychologically, students love that the inverse of mastery is not "failure," but "not yet." Our model does not punish students with failure, just as it does not reward mediocrity.
• Employers love our focus on competencies.
• Not having traditional instructional faculty is not proving to be a problem. We use academics to construct the learning and to do the assessments, but not in any traditional instructional role. Students, working with the aid of a dedicated SNHU coach (or advisor), access rich learning content, their own resources, and each other, and it is proving very effective thus far.

While technology provides the foundation for what we do (including a rich CRM for advising purposes and data analytics, a new learning platform that we created, and basic online connectivity), the program has reaffirmed for us the core importance of human factors. The advisor relationship, critical for often unconfident adults who have long been out of the classroom, is critical, as is the peer-to-peer learning network we help them create. Employers can have a tremendous motivating role to play as well.

HOW CAN THE GOVERNMENT SUPPORT MORE INNOVATION?

A large number of institutions are working on their own CBE programs and will innovate in ways different than we have and that's an important first principle here: put the focus on outcomes and demand transparency and you can worry a lot less about how you get people there. In fact, you should encourage as many new pathways as possible. Let competencies replace credit hours, that outmoded artifact, and you will spur creativity and innovation in an industry that sorely needs it. But I would not yet dispense with the credit-hour. We still need to know a lot more about how CBE programs best work and we are only at the start of this new movement. We do not even yet have an agreed upon taxonomy of programs, a nomenclature, nor principles of best practice. This should be a time for experimentation and I would urge you to continue to create and support safe spaces for innovation (as you have done with the creation of direct assessment and the "experimental sites" authority).

The big problem facing CBE programs right now is that while direct assessment provides a doorway for bold new models, the supporting regulatory guidelines for financial aid disbursement were never changed to support direct assessment and are still very much tied to time-based notions. So we have a fundamental misalignment in which Congress made possible alternatives to time, but the Department of Education still has regulations that pull proposed models back into the time framework. Some examples:

• Financial aid regulations require that an institution define that a program has met the regulatory minimum for both clock or credit hour and weeks of instructional time. A week of instructional time is based on a period of 7 consecutive days in which there is at least 1 day of instructional time. Competency-based education is self-paced and not based on "seat time."
• Current guidelines do not allow us to try to pay for performance models in which we only pay for competencies earned. Aid is now paid up front, though students have no idea of how fast they will proceed through the program. There is no incentive for students to stay in school because aid is disbursed up front. There is also no incentive for students to move through the program at a faster pace because aid is only disbursed per term not based on completion of credits.

Regulatory concepts like *satisfactory academic progress* and *learning activity* make little sense in CBE models that focus learning, not time.

Thankfully, Congress created the opportunity for innovative safe spaces that could be used to test out changes to direct assessment (and other) rules: experimental sites authority that allows for innovation around financial aid disbursement. The experimental sites initiative allows institutions to "test" certain regulatory and statutory changes and gather data before implementing a change to regulations or to HEA. Given the committee's intent to reauthorize HEA, we were pleased to see the Department of Education announce its intent to use experimental sites to help inform your policy process. We were also pleased to see the introduction of a competency-based demonstration project in the House. We need as many safe spaces as

we can to test out these emerging approaches. We hope to see experimentation around financial aid in the CBE context.

What kinds of things?

- The ability to base aid on developing a Cost of Attendance (COA) that would allow the institution to use professional judgment for all components so that the institution could either limit aid to just the cost of tuition or could adjust if the student had a legitimate need.
- Allow institutions to pay aid after the term has ended and student has completed coursework. Perhaps in a shared-risk model.
- Allow ambitious students to progress through the program at a faster pace and receive aid based on completion, not on registration. Allow institution to disburse aid based on the completion of competencies and not require students to pause and wait for the start of the next term to receive an additional disbursement. Their living expense would be paid based on their pace in the program.
- Open up the definitions of instructional activity to allow for activities that might not be tied to a class or an instructor. For example, working with adaptive learning software.
- Eliminate the notion of weeks of instructional time to pay aid. Students might have to show that they are doing "something" every 7 days (and the competency-based model as CFA envisioned is more fluid with stops and starts). The current regulations don't allow for flexibility in instruction and the payment of aid.
- Allow FA Administrators to limit loans funds based on programs. Competency-based education is low cost. Not only do we want to reduce the amount of student debt, there is also a cost to the institution to administer aid. Non-need-based aid adds additional costs to both the student and the institution. Allowing us to limit aid could potentially lower default rates. We know this is controversial, but we might at least play with models.
- Base payment of aid on a flat rate tuition charge rather than a competency or credit-hour standard. We do set a flat tuition rate, but aid is paid based on how many competencies are taken, not on the tuition. We would want to directly tie the payment of aid to tuition and skip the competency requirement.
- Add additional resources to financial literacy training. Just as students currently have to "participate" in Constitution Day in order to be able to get aid, students should have to participate in financial literacy programs during their course of study in order to be able to borrow loan funds and accumulate debt.
- Develop programs that allow K–12 students to take competency-based programs so that they earn a degree or portion of a degree while in high school. The President raised the possibility of Pell grants for high school dual enrollment and we think there is no reason that motivated high school students can't use CBE programs to graduate high school with 1, and even 2, years of college.
- Worry less about what kinds of learning count (Prior Learning Assessments, for example) and more about the actual outputs: what students know. The Federal Government spends billions of dollars every year on failure. It's time to pay for success, however students cross that finish line.

While we worked closely with Department of Education officials in the approval of CfA and sensed a positive and collaborative spirit, the current regulations meant that we were forced to shoehorn our program into guidelines that remain time-based, even though our program is about actual learning, not time.

The added advantage of experimental sites is that they provide a controlled environment in which we can learn. For example, we still lack agreement on what counts as a competency and how to unitize them. By analogy, if competencies are replacing the credit hour as currency, we still do not have a system of exchange rates. The last thing we want to do in CBE is replicate the wasteful and inefficient system of transfer credits that costs billions of dollars of tuition money every year. Just as we need a taxonomy and nomenclature for the CBE movement, we need national standards on the definition of competencies established by the academic community. We also need to think through how we want competencies to cohere into programs. In short, there are a lot of questions and experimental sites can help answer them.

One of the things that can help is the creation of robust accreditation pathways, either as an alternative within the regionals or through a newly created accreditation body focused on CBE. Current accreditation standards, like current financial aid regulations, were built for credit-hour-based institutions. We need to rethink what defines quality in CBE programs, what questions we should ask of any proposed program, and demand more transparency and data than we currently do with traditional programs.

For all the excitement about MOOCs and technology, the real game changer in higher education may be the advent of this new generation of competency-based education programs. There is now the opportunity to reinvent our business models and make dramatic improvements around cost and access and quality. These programs will start with marginalized learners like the ones we serve with CfA—all disruptive innovation gets traction with those who have few other choices—but CBE will come to offer powerful new alternatives for every student market and will allow us to rethink education for the next century. In addition, by bringing more focus to outcomes, CBE programs also stand to greatly improve the performance of the traditional credit-hour-based programs that will make up much of higher education for some time to come.

The CHAIRMAN. Thank you very much, Dr. LeBlanc. Thank you all very much for your stimulating comments and for your excellent written testimonies.

We will begin a round of 5-minute questions.

First, both Dr. Kirwan and Mr. Kazis mentioned something about being careful with regulations and deregulation. I would just tell you that at the request of Senator Alexander, we included in our LHHS Appropriations bill through the Appropriations Committee I chair for a national study on regulations and reporting requirements in higher education. I am not certain we are going to get the Appropriations bill through or not but nonetheless——

Senator MIKULSKI. Oh, yes we are.

[Laughter.]

The CHAIRMAN. Our distinguished chairwoman is going to drive that bill through. If we do not get it, it is not because of her; it is because of—well, I will not get into that.

[Laughter.]

You could help us by giving us in written form what it is that you believe is stifling innovation on the Federal end in higher education. What rules and regulations are stifling this kind of innovation? If you have something off the top of your head right now, I would be glad to entertain that.

Mr. KIRWAN. Mr. Chairman, I would like to provide you with a more reasoned and complete list of items, but I will mention one—and I think my colleague who just spoke referenced one—and that is competency-based credit.

The current financial aid rules do not allow institutions to engage, extensibly, in competency-based credits. When you think about how the world has changed, the availability of educational materials and resources—you think just amongst themselves, with all of these courses available that people can access for free and learn materials. Why not have a system that would allow them to demonstrate they have that knowledge as part of their higher education experience and get credit for that learning.

In some ways, it is already part of the higher education system. I think most of our institutions accept AP credits; that is competency-based credit. We allow some students to take credit by examination; that is competency-based credit.

So this is not a foreign idea to higher education, we just need to recognize it and support the kind of change that would allow institutions to become more active in this approach.

The CHAIRMAN. Mr. Kazis, do you have something on this?

Mr. KAZIS. Yes, I will mention just a few things that, this may seem small bore but I think they are indicative and we can go to a larger list as well.

One that was already mentioned was reinstating year-round Pell. If your goal is to accelerate and a lot of the innovative programs use the summer, there is an issue there. How to do that well is complicated but reinstating year-round Pell is important.

To restore the ability to benefit provisions that were eliminated in the fiscal year 2012 Appropriations. Those have really hurt a lot of the most innovative career pathways programs for underprepared adults by basically cutting off their eligibility to be in very effective career pathways programs into postsecondary credentials.

Those are two.

The CHAIRMAN. In keeping with the amount of time we have, I have one question left. Dr. Ralls, in Iowa we have seen community colleges reach down to high schools with 2 Plus 2 programs. My experience in higher education was that you go to high school, you graduate, then you go to college, and there is a big dividing line there.

I am wondering if there is not more of a role for our colleges to play, especially now that we are moving toward career and college-based structures in our elementary and secondary education. We could certainly align with colleges what they need and what a specific career needs, by having more colleges reaching down to high schools and connecting with high schools in a way that I have seen community colleges do, but I have not seen our private colleges or our public 4-year universities do much of that.

Is that something that we should be looking at? I just said you, Dr. Ralls, but I am looking at the others too.

Mr. RALLS. I would say yes and I would also say community colleges play a unique role in that regard because I think we are the seam in seamless education. We reach down to the high schools, but we also are that pathway to 4-year colleges, so we often bridge that.

One of the ways that has been seen in North Carolina is through the early college high schools. We have approximately one-third of all the early college high schools in the United States on our campuses in North Carolina. We have seen remarkable results.

We have seen that if you have high structure, high support, but importantly, high expectations that leads to high success. About 50 percent last year of our early college high school students graduated with high school and their 2-year associate's degree at the same time, much faster than we ever thought and it is because, I think, of those combinations in reaching and pulling that together is what is making that work.

The CHAIRMAN. Is there a role for private universities and public 4-year universities to do similar kinds of things?

Mr. HALL. Senator, at Austin Peay, we actually have a partnership with our local school system where we have a high school on our campus. It is called The Middle College at Austin Peay where students take high school courses and then in their junior year, they take one college course a semester from our curriculum and in their senior year, they take two college courses a semester.

Those students who are on our campus for 2 years tend to wind up with at least 18 hours of college credit when they graduate from high school.

The CHAIRMAN. Very good. I will explore it later in my second round, but I want you to think about that idea, especially in a big system like the University of Maryland System.

Senator Alexander.

Senator ALEXANDER. Thanks.

Dr. Kirwan, to pursue what Senator Harkin said. I would just like to make a request. With the chairman's permission, Senator Burr and I, Senators Mikulski and Bennet, have formed a little working group to focus on deregulation of higher education. We have asked you and Chancellor Zeppos at Vanderbilt, working with the American Council on Education to help us do that.

I want to make a suggestion that is based on something we did a few years ago called the America Competes Act. A few of us asked the National Academies to give us the 10 specific proposals in priority order that we could do to help make our Nation more competitive. They got together a very distinguished group, and they gave us 20, but they were very specific, and they were in priority order, and we have enacted two-thirds of them.

Mr. KIRWAN. Right.

Senator ALEXANDER. So what I would suggest to you is we do not have the capacity here to know exactly what to do about deregulation of higher education, but to the extent you and your colleagues could give to us specific proposals, just as you were doing in priority order, you would be surprised how many of them are likely to make their way into law.

So this is serious. It has taken us a few years to get to this point, but we have enough horsepower on the subject within the Senate, and the time is right that with that kind of response from colleges and universities, we will get results. I just wanted to mention that. Thank you.

Mr. KIRWAN. It is an assignment I welcome.

Senator ALEXANDER. And we are also interested, in fact, that we have reauthorized the Higher Education Act eight times.

Mr. KIRWAN. Right.

Senator ALEXANDER. And every time we do it in a well-meaning way, we end up with new laws and a whole bunch of new regulations.

We need to find ways to say, "OK, let's weed the garden, before we do some more." And that is not an ideological difference of opinion we have here, but we need to say, "What are the objectives? Now, let's get rid of this stuff and write it in plain English and limit the amount of time you are spending on all that."

So we are dead serious about this and it is a bipartisan approach, and we would like to get results on it.

Mr. KIRWAN. Good. Thank you very much.

Senator ALEXANDER. Mr. Hall, I would like to ask you. How do you decide? I am extremely impressed with what you have done at Austin Peay and I think you are doing a tremendous job.

How do you decide who is college ready? Do you just let anybody in? How do you know who to let in?

Mr. HALL. Senator, we use ACT score and sub-scores along with high school transcripts.

Senator ALEXANDER. Are they prepared for college? I mean obviously, you are taking a lower definition because beforehand, you

would have said, "You shun them off to noncredit courses." Now you say, "Come on, in." Right?

Mr. HALL. Yes, what we figured out is that we can help them to succeed in college-level credit even if they have some deficiencies in particular areas.

When I say they are not ready for college work, I am talking about one specific area, possibly more than one where they are not ready in very specific topics.

Senator ALEXANDER. So generally, they are ready but they might be deficient in math.

Mr. HALL. That is right.

Senator ALEXANDER. But it is a lower standard than 5 years ago or 10 years ago. Right?

Mr. HALL. No, Senator. It is higher.

Senator ALEXANDER. Oh, is it?

Mr. HALL. What we expect them to be able to do is higher today than it was 5 years ago.

Senator ALEXANDER. OK. But what they know when they come in is lower.

Mr. HALL. Except as you know in Tennessee—Tennessee has been involved in revamping its high school curriculum. So that students are now arriving more prepared than they ever have been in the past.

Senator ALEXANDER. Right.

Mr. HALL. But there is a sense in which I think that what we have been doing here to reformulate developmental education is more geared to what has been happening in the past, and Tennessee is now doing a better job of getting students ready for college level work as they leave from high school.

Senator ALEXANDER. Right. Dr. LeBlanc, or Mr. Hall, or any of you, how do we create a culture where there is more replication of these good ideas without making the mistake of telling you what to do and interfering with your autonomy to make your own decisions? How do we do that? Any advice about that?

Mr. LEBLANC. I would steer you to the distinction between sustaining and disruptive innovation. If it is sustaining innovation, I think we know how to do that. I think higher education has a pretty good track record of sharing through all of the sort of traditional ways of conferences, et cetera.

If you are talking about disruptive innovation, you do not clearly have an ecosystem that allows that to happen very easily. It is everything from——

Senator ALEXANDER. I really mean, what do we do as legislators? What should we do or not do to create an environment in which things like you are doing are more likely to succeed on other campuses?

Mr. LEBLANC. Right. I think you need to make more space in terms of the regulatory law that sort of gets some squelches, the kind of possibilities that you made available wisely and with foresight around experimental sites.

You said in legislation, "We are going to allow innovation, experimentation." And you did not align the underlying regulatory law that still tethers you back to the credit hour. Navigating that is tremendously difficult because that has not changed, there has

been no sense for providers to build new systems. So if you try to find the necessary student information system out there, it does not exist today.

The Department of Education, when we worked with them, worked very hard to make this happen but it was a torturous process trying to make regulatory, time-based regulations serve legislation that said, "No, we will welcome alternatives."

I think you need to make space in that experiment. You have done it in a sense already. You have said, "We will allow experimental sites." That has not happened around this area.

Senator ALEXANDER. Thank you. Yes.

Mr. KIRWAN. If I might. Senator, you ask a very good question, what can you do? One thing that occurs to me is to provide some incentives to institutions to engage in innovation. I think it is a difficult time to talk about new money, so maybe it is redirected money at FIPSE or within the education division of the NSF.

But there is, I believe so strongly, a moment of opportunity here where the technology has reached the point that it really can improve learning. It can lower the cost, but there needs to—there is a startup cost for this and some form of program of grants to provide the incentives for institutions to engage more deeply in these activities, I think, could be very, very helpful because there are examples out there of success that others can build upon.

Mr. KAZIS. Just to piggyback on that. In my State of Massachusetts a few years ago, they competed for a Department of Labor Tack Grant, which was to transform workforce programs within the community colleges. That is one of a lot of Tack Grants, but there is no real mechanism for those Tack Grant recipients to learn from each other within the State that involves all the colleges in the State, and to learn across other Tack grantees.

So there is a way in which you just should not assume that that learning happens easily and it may be that in the legislation, carving out some technical assistance, peer learning opportunities that get driven down to the field, so that the field has the capacity to say, "This is working. Let's move it over here. Let's scale it up."

Senator ALEXANDER. Dr. LeBlanc.

Mr. LEBLANC. Senator Alexander, if I may, your concern is about how do you replicate and expand the number of schools doing innovative work of the kinds that you have been hearing about today, to give you one example.

We are part of a consortium of 30 institutions right now who are working on competency-based models, direct assessment of models. The issues they face drill down to accreditation which, if you think about it, as a member process tends to strengthen the incumbent models and especially if those incumbents are threatened by the new models.

So we need a different pathway, whether it is through the regionals or an alternative. Not taking a position on that. But these schools will tell you that it is that sort of regulatory impediment that pulls you back into the traditional kind of models that are getting in the way. These are the University of Wisconsin System, these are large players that are out there trying to do this work right now.

The CHAIRMAN. We need to move on. In order, I have Senator Murphy, Senator Baldwin, Senator Franken, and Senator Whitehouse.

Senator MURPHY.

STATEMENT OF SENATOR MURPHY

Senator MURPHY. Thank you very much, Mr. Chairman.

I think this is maybe the most, or one of the most important hearings that we have done all year because we, today, have a generation of young families that are just absolutely drowning in college debt, and I am frankly representative of that cohort, paying for past college and desperately saving for future college.

I guess part of my frustration today is that in hearing about all of the amazing work you are doing in terms of innovation, I may have not heard enough about how this innovation is going to directly lead to college costing less for students because ultimately quality is, obviously, paramount here. But we cannot survive as a nation if we continue to spiral upwards over $1 trillion in student debt.

So I wanted to explore that for a second, but before I do, just to add on to Senator Alexander's line of questioning on innovation.

I am so pleased that you are undertaking an effort to try to look at deregulation and I hope that if there is room, I can help. We have this three-legged stool of regulation, but it is pretty hard to get all of the stools aligned behind a program like competency-based learning when you have to get the accreditors, the title IV administrators, and the States to think outside of the box, and I think that is going to be one of the keys to unlocking some of the big steps forward.

Dr. Kirwan, let me ask you a question about affordability because you outlined some really impressive work that you have been doing to redesign curriculum. And you talked about the fact that one of the things you are looking at is the cost to the system of delivering that course.

Mr. KIRWAN. Right.

Senator MURPHY. But what has that meant in terms of the cost to the student? Because Connecticut is amongst the States that is making some big leaps forward in terms of innovation, but public school tuition has gone up by 20 percent in the last 5 years. So we have not delivered a more affordable product to our students, even though we are an innovative State.

What is going on in Maryland?

Mr. KIRWAN. We have a good story to tell in that regard.

Since 2008, tuition in the State of Maryland to today has gone up a cumulative 8 percent. So we have been able to use these innovations and, quite frankly, support from our State to hold down the growth in tuition over this period of time, in part because of our innovations in the classroom and outside the classroom.

We have really made dramatic progress in tuition. We have gone from being the 7th highest tuition State in the Nation to the 28th highest tuition State in the Nation. We have gotten a lot of help from other States, mind you, because tuition has ramped up. But our innovations have led directly to a moderation in the cost of tuition.

Think about that: 8 percent cumulatively since 2008.

Senator MURPHY. Yes. I think you had talked about a lot of ways to stimulate innovation. We have also talked about accountability. I think part of accountability should be affordability.

Mr. KIRWAN. Absolutely.

Senator MURPHY. As we look to different accountability measures, maybe through the dispensation of title IV money, affordability should be on the table. As it is, a million different questions on that one.

I wanted to talk to you, Dr. LeBlanc, before my time has expired about your programming because I think you are right to suggest that we need to be doing more to really challenge some model breaking here. You answered a question as to why more schools are not doing what you are doing, but let me ask a specific question about competency-based learning because I believe that it is the future, and it is frustrating to know there are only a couple of schools that have gotten the authorization to do it.

One of the criticisms of competency-based learning is that it could fall victim to the same criticism you had of how existing learning is done. That if the competency is essentially set by each individual school, it does not necessarily tell employers what degree you got if the competency is different, and there is maybe a temptation to have a race to the bottom in terms of lower competency, shorter degree times, less cost.

If we move in the direction of competency-based learning, which I would love to do as a Nation, because I think it is one of the ways to deliver a much more affordable product with better results and metrics.

How do we make sure that we have some ability for employers to know what they are getting?

Mr. LEBLANC. As I said, we are very early in this movement and there is not an agreed upon understanding of what constitutes a well-designed competency rigor level.

So for my criticisms of the credit hour, if you remove the time piece of that, as ill-defined as the credit hour is as a unit of learning, we also know it when we see it. Most of us who have worked in academia can look at a course and say, "This feels like a 3 credit hour course." We do not have that equivalent ability right now in competency-based education.

The work that is going on around the consortium I mentioned, and others, is really an attempt to try to get some common, agreed-upon definitions. And these are our experimental sites, that could inform eventual policymaking, to use the work of people who are doing this today in the trenches to say, "What are you learning and how are you coming to agreed upon?"

The one thing I would say about those 30 institutions, they are bound and determined not to replicate the irrationality of our current transfer credit system, which counts—according to people like Jane Wellman—an enormous amount of waste in the higher education system right now.

So it is a work in progress and we are very early on, and that is why we need that space, the safe space to sort of figure that out. That is the critical piece.

Senator MURPHY. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Murphy.
Senator Baldwin.

STATEMENT OF SENATOR BALDWIN

Senator BALDWIN. Thank you, Mr. Chairman. And I do want to thank you and our Ranking Member for holding this hearing. It has been very, very helpful.

In my travels around the State of Wisconsin, I have visited with a lot of universities and technical colleges, and been heartened to see how much innovation is specifically happening to support non-traditional students. And by that I mean, older students and returning adult students, those who might be seeking a specific occupational certificate or something like that.

This population does have unique particular needs and I have met some really inspiring figures who are juggling full-time work, raising families, and still returning to school. It is an amazing commitment they are making to work toward a certificate or a degree that will give them the tools they need to get a higher quality job.

I am interested in hearing from the panel about their thoughts on how current innovations in higher education are meeting the needs of this particular group of students.

And before I turn it over for all of you to comment, I did hear you, Dr. LeBlanc, talk about the innovation at the University of Wisconsin System. They are preparing next month to launch a new program called the UW Flex and it is especially focused on returning students that I am describing, but also based entirely on competencies. The foundation of this program is a movement to competency-based programming. Though I recognize that this focus is still in its infancy, but it has a real great potential to serve non-traditional students.

Perhaps we will start with you, Dr. LeBlanc, but I would love to hear about innovations focused on this particular group of students.

Mr. LEBLANC. So it will happen there first and I think sometimes what clouds our policy discussions is that we do not fully recognize the very different student markets that we serve.

When Senator Murphy talks about student loans and people's worries about their 9-, 10-, and 12-year-olds going off to college someday, that is a particularly expensive model of higher education and it is the one that seems least sustainable right now because it's about education, obviously, but more fully, it is about a coming of age experience and that is a very expensive thing to offer and technology does not help very much. So I think in the future, we will see an unbundling of the coming of age from the academic experience, and then we will start to interesting models when that happens.

We have had a 3-year degree program for 15 years with the help of FIPSE and that shaves 25 percent off the cost of education. Increasingly, sending your kid off to a campus for 4 years is a pretty expensive way to come of age.

But the largest percentage of students in America today is non-traditional, post-traditional students; the adults who you described so aptly, Senator Baldwin, who is going back and juggling family and work, and education.

We found for all of our use of technology online, really strong data analytics, we do 24–7 monitoring of every student, every class in ways that we just cannot replicate in a traditional delivery model. My experience has been a reaffirmation of fundamental human factors, and probably the most important relationship with those adult learners is our advisors who have a caseload, and who are dedicated to their particular students.

For those learners, it is not about intellectual capability. It is about the fact that they have not written a paper in 12 years. They may have had mixed academic success. And now what they need more than anything is psycho-emotional support than academic support. Some of that is academic support, some of that is making sure that they are in the right prerequisite course, and some of that is steering them into tutorial services when they are writing that first paper.

But I can tell you by listening in on calls that 90 percent of the time it is about believing you can do it.

Senator BALDWIN. Thank you.

Mr. Kazis.

Mr. KAZIS. The issue you raised is critically important and Wisconsin is actually—your technical college systems are doing a lot of creative work, but a couple of issues relating to the needs of this population. As you said, they need to move very quickly to credentials that matter in the labor market. So, one question is, how do you get the employers really invested in the programs? How do you use up-to-date labor market information to basically create programs that are streamlined, targeted to the needs of the employers in the community?

This is something that Dr. Ralls was talking about in North Carolina, this career pathway strategy is something that many States are engaging in. But critical is where the employers—how do you make sure that they are getting what they need out of these programs so that people who do not have a lot of time are not taking courses and taking programs that do not lead them anywhere.

Mr. KIRWAN. Very quickly, we have within the University System of Maryland an institution whose total focus is on the working adult. The University of Maryland University College is totally online. They live and breathe innovation, and they target the working adult.

For example, they are now developing course materials that are online course materials so students do not have to buy textbooks. They developed degree programs in consultation with industry leaders so that students who graduate from University College know they have their credentials to move right into the workplace. They have a partnership with every community college in the State. They can guarantee a student that if you complete your degree at the community college, you can complete your degree at University College without any increased tuition.

They are very focused on serving the population you are talking about.

Senator BALDWIN. Dr. Ralls.

Mr. RALLS. Community college nontraditional students now count for two-thirds of all college students in the United States. So we have to figure out how to maximize their short amount of time.

That is technology, one-third of all our courses are offered online. Fastest growth area, hybrid areas, that is how we structure programs, stackable certification models where students do not have to repeat general education but they can build on that with different competencies.

And then how we articulate, for instance, with universities. Make sure our articulation agreements are so tight they do not repeat English and math, and that is something that we are working toward.

Something that you can do as well is understanding that nontraditional students do not look to take summer vacations. So issues around Pell grants and other things that are built on the traditional do not fit them. How we maximize their time is very, very important to help them get the credentials they want, which is primarily to get into the workplace.

Mr. HALL. Senator, in advocating the pathway toward a degree is one of the biggest challenges for our students, and there are several things cutting against their success.

One of them is there are some students who kind of wander around a little bit and they take more courses than they need to because they are not going straightforward to a degree. In Tennessee, our students take about 20 percent more courses than they need to take for a degree. And the longer they take along the pathway, especially for nontraditional students, low-income students, the more likely it is that life throws them off-path, sends them away, it gets them off track.

That is why the program we are using, Degree Compass, developed by Dr. Tristan Denley is so important. We have seen, we calculated across universities the difference in achievement for low-income students, minority students and other students. And we are seeing the gap that normally exists without that program.

When we start using that program and students take the recommendations of this very sophisticated program, we are seeing that gap narrowing almost to nothing, and I think it is because when students are getting solid advice from their faculty members and supported by this program, they are able to stick to a path and get toward a degree more quickly, and that is crucial for low-income and adult students.

Senator BALDWIN. Thank you.

The CHAIRMAN. Thank you, Senator Baldwin.

And now, Senator Franken.

STATEMENT OF SENATOR FRANKEN

Senator FRANKEN. Thank you, Mr. Chairman, for calling this tremendously important hearing.

Most of you, if not all of you in your testimony, and just now in response to Senator Baldwin, speak to the problem that affects so many businesses in Minnesota and around the country, which is the skills gap. We have so many businesses that have jobs that they cannot fill because they cannot find the employees with the skills.

Mr. Kazis, you discuss helping students advance more quickly and efficiently in what you call, "structured career pathways tied to high demand industry sectors." And you call for, "Providing in-

centives for employers and institutions to partner in the development and delivery of career pathways for students."

Dr. Ralls, you focused especially on community and technical colleges. You talk about how important it is for educational institutions to structure programs with meaningful educational offerings so students can leave school with something really meaningful for them in their careers. And you talk about redesigning courses so that students have the competencies needed for tomorrow's workplaces. The point here is to provide stronger linkages between educational and workforce programs.

Dr. LeBlanc, in your testimony you talk about the competency-based programs you have, and how important it is to work closely with businesses to help educate students in the skills they need to fill jobs at those businesses. I could not agree more with all of you.

I have legislation, the Community College to Career Act Fund which would incentivize partnerships between employers and 2-year community and technical colleges to rapidly train workers and students for those skilled jobs. That sounds like exactly what you are talking about.

What kind of help can we give on the Federal level to promote that, to incentivize that, these partnerships between business and especially the 2-year community and technical colleges?

Mr. RALLS. Senator, if I may, the employer engagement is absolutely key here. At each of our colleges, we have employer advisory committees for each program.

There is also, I think, a new opportunity here and that is the growth of a new type of competencies, industry-defined competencies, industry credentials, the type of work that the National Association of Manufacturers and the Manufacturing Institute is doing. That gives us targets that are set by industry, and then what we can do is build those into our traditional academic programs. That is the stackable certification. What you can do around that is help us figure out how to measure those. If I could tell you a quick story.

When we were doing our listening tour—we went to Tri-County Community College in the mountains. A welding instructor came to me and said, "I know you are looking at all our completion rates." And he said, "If you looked at mine, we have a less than 10 percent completion rate and I need to give you another bit of evidence." And he put pay stubs for all those, his students on the table, and he pointed out they are all getting welding certification from industries through our process, but they are not completers.

Sometimes we have to figure out how to count those students who are getting those valuable credentials in our overall fabric of what we mean by college completion.

Senator FRANKEN. But if you get people working while they are studying, boy, that speaks to college affordability, does it not?

Mr. KIRWAN. Absolutely.

Mr. KAZIS. Just to reiterate what Scott was saying. This issue of metrics and performance metrics and knowing, actually, that building into accountability systems, not just completion but what happens after, how are they doing in the labor market? I think those issues are tricky, the data is not that good yet, but I think working on that and bringing and figuring out how to bring that into ac-

countability discussions will be at the State level, it is already beginning to happen, but at the Federal level, I think, is also important.

Senator FRANKEN. Anyone else?

Mr. LEBLANC. I think the part you cannot address very well is that part of the problem, in my view, is that the incumbent systems within higher education do not allow for the kind of rapid responsiveness typical curriculum committee process—university governance processes go very, very slowly. And a lot of experts would say that the lifespan of a job today is about 3 to 3½ years before jobs are either fundamentally redefined or moved forward. So there is a black area that plagues higher education.

My colleagues in North Carolina, for example, have sort of addressed that very, very energetically but we have to rethink how we sort of work within our own systems to be responsive to the kind of calls that you are putting forward.

Senator FRANKEN. Well, I have seen a lot of successful partnerships in Minnesota between businesses and community and technical colleges. That is something that, I think, does a number of things.

I mean, it speaks to a number of things. College affordability, if you can train up people in credentials, stacking credentials and get them to work, and then they are working and then continue their education while they are working, you have, very often business paying, and gladly paying for their employees to get further education, and that speaks very much to college affordability.

Also, this just helps the businesses, businesses in Minnesota. But there is an estimated 3½ million jobs that are available right now if people just had the skills. And this speaks also to our competitiveness globally if we can have those workers working and have our businesses have those workers working. It puts us on a much more competitive playing field, especially when manufacturing is now moving back to the United States, moving to Europe, and moving elsewhere back from places where there used to be very, very low salaries and where manufacturing used to be much, much less capital-intensive.

I am sorry to have gone over, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Senator Whitehouse.

STATEMENT OF SENATOR WHITEHOUSE

Senator WHITEHOUSE. I, for one, found it very instructive.

Gentleman, I come to this question without a great deal of expertise. I spent considerable time as a prosecutor but in a variety of areas of Government, I have bumped into the education oversight establishment. As time has gone by, I have become increasingly concerned that the gateway to education reform is actually education oversight reform both at the higher education level and at the elementary and secondary education level.

I am concerned about how much value education oversight actually adds these days given the changes that are happening in our population and in our technology. I would like your thoughts, and we do not have a lot of time, and I know I am opening up a huge set of issues.

Senator FRANKEN. But you are being fascinating, too.

Senator WHITEHOUSE. What I would like to do is ask you, if you would for the record, to take a moment when this is done and write down and send to me what your thoughts on the ways in which Government's education oversight should be changed to better allow for the type of innovation that is needed to become more current and less obsolete.

To avoid some of the hazards that we have seen, for instance, gigantic hedge funds coming in and kind of shooting under the regulatory system by buying a nearly defunct college's license and then turning it into a massive diploma mill that has cranked out what appear to be an awful lot of worthless diplomas, and that is a very significant tragedy in this context because people do not get a second youth to go back and redo an education that was a phony one.

We talked a lot about education reform. I am just becoming increasingly concerned that we cannot get to that until we get our education oversight mechanism reformed. And I am increasingly concerned that both at the local and State and Federal level, education oversight is increasingly adding little value and creates very significant burdens.

So if you have responses to that immediately, I would be delighted to hear them. If not, I would ask you to try to think about it a little bit and send your own thoughts, or if you think there have been particularly good work done on this that you could refer me to, I would love to have the referrals to those articles or commentaries.

Dr. Kirwan.

Mr. KIRWAN. Yes, Senator. When you say education oversight, are you thinking at least in part about the accreditation process in the United States?

Senator WHITEHOUSE. Yes.

Mr. KIRWAN. And I share your sense that it does need to be reformed. I think we need it because there needs to be some validation about the quality of the institutions and the degree.

Senator WHITEHOUSE. Yes, I do not think that the solution is to eliminate it.

Mr. KIRWAN. Exactly, but it does need to be——

Senator WHITEHOUSE. But it is kind of like driving a Model T in some respects.

Mr. KIRWAN. Well, I think we have a system that was created in a different era and it does not recognize the new realities about how students go to college, the way they can gain education. So I absolutely agree with you that there needs to be reform in the accreditation process.

Let me mention one example of an oversight, a metric, that is hopelessly out of date. We always look at graduation rates by measuring the time it takes an entering freshman student at an institution to complete the degree. We look at a 6-year period of time.

My understanding is that 60 percent of the students at any institution across the country at any given one time did not enter that institution as a freshman. So we are measuring by the IPEDS data for graduation rates a very small fraction of the students in higher education. And yet, you are using that metric to make big decisions about the quality of an institution.

That would be one example of an oversight metric that is hopelessly out of date with the realities of today.

Senator WHITEHOUSE. Yes, particularly if you consider a woman with a couple of children who has been in a minimum wage job and has worked terrifically hard to improve her abilities, who has taken community college courses, has suffered all of the burdens on her that that additional commitment of time and effort entails with kids, and a job to maintain through all of that. I mean, it is a pretty heroic act. And she gets maybe two-thirds of the way through, and then the job comes that she had hoped for, and she is in a medical office processing billing and is being paid two or three times as much, so she is done. She does not need to continue her education, and she walked away from that experience at the community college saying, "This was a real success for me." And there is no way that our system, I think, picks up her story and her story is an important one.

Thank you very much. I yield the time.

The CHAIRMAN. Thank you. Senator Warren, if you are ready.

Senator WARREN. I am almost here. Thank you, Senator Harkin. Thank you, Mr. Chairman, for putting together this hearing. With student debt more than $1.2 trillion and college tuition out of reach for so many families, colleges have to find ways to serve students better at lower cost. And student success is obviously a serious part of the student debt problem.

We have good reason to suspect that students who are struggling to repay and are defaulting on their loans are those who made it to college, borrowed money for a year or two of college, and then were not able to complete, dropped out. They got the debt, but not the degree. And so I am interested in the new practices that you are talking about here, and how they may help those students.

Dr. Kirwan, what I would like to start with is what kind of research or evidence were your universities able to collect on your course redesigns before you put them into practice, and I am going to ask Dr. LeBlanc about the College for America.

Mr. KIRWAN. Yes. You asked me specifically about the course redesign.

Senator WARREN. Yes.

Mr. KIRWAN. What we do is when a redesign proposal comes in, we require that it be piloted and it be measured against the traditional way of teaching that course.

Senator WARREN. And how do you measure that?

Mr. KIRWAN. The measurement is usually by having the students take the same final examination. We have a traditionally taught course and a piloted redesign course that are side by side, and then the students take the same final examination. And that is a typical metric to see if learning actually improves.

Senator WARREN. Do you test this multiple times before you use a new one or you just try it?

Mr. KIRWAN. Well, it has to be validated through this pilot and yes, the pilot runs one time. And if there is demonstration that learning has improved and costs have not increased, hopefully lowered, then we implement the redesign on a broad scale basis.

Senator WARREN. Then can I ask, do you continue to test after that?

Mr. KIRWAN. Do we? Well, we test all of our courses.

Senator WARREN. No, no. I know you test them all.

Mr. KIRWAN. Right.

Senator WARREN. But I mean doing the comparative testing about the different approaches, or does this become a complete substitute?

Mr. KIRWAN. This becomes a complete substitute. We think we have evidence that this works and so we then implement it as the way that course is taught across the board.

Senator WARREN. And Dr. LeBlanc?

Mr. LEBLANC. The question is how do we test?

Senator WARREN. I was curious about how you tested for the changes, tested in advance, because that is one of the questions. How we determine in advance before we make these shifts that we believe have some outcome. Or, if we cannot do it in advance, how we test it afterwards rather than just think we have a good idea.

Mr. LEBLANC. Yes, no, absolutely. We do a lot of pilot testing before we devise. Ours sort of went forward in the launch of College for America, but because it was a fundamentally different model, there was not a sort of control group against which we could weigh this piece. Right?

Doing this kind of breakthrough work you have to have safe space and tolerance for mistake making, which I think is absent in our regulatory environment. Our financial aid people live in fear that we will get some regulatory piece of this wrong and as a result, there is less desire and willingness to push definitions, and boundaries, and exploring other ways of thinking about this. Let me give you one example.

We would have preferred that this model do a pay for performance financial aid model. You spend a lot of money on failure and what we were saying is pay for competencies and pay for them along the way, but do not pay for failure. We cannot do that. Your current regulations force us to give financial aid at the time of registration.

We would like to exercise more professional judgment on determining the total cost of attendance. Our total cost of attendance was driven up in our conversations with the Department because of all the regulations, not because they were doing anything untoward.

That is where I think there is fundamental ways of rethinking and giving some space to try this, and you are not going to have the data until you try it.

Senator WARREN. I think that is a very valuable point, and one of the things I hope we will pursue is how the regulations can be adjusted, not just to permit more innovation, but more accountability around that innovation in ways that work for the universities.

Can I just ask one more quick question before we run out of time here, because I would love to talk about all of this for a very long time? But I wanted to ask you a question, Dr. LeBlanc.

I understand that over the last 10 years, Southern New Hampshire University has been engaged in another very innovative project with the online university presence. As I understand it, because you have not been shy about this business model that you

have done, that the presence has produced about, according to Bloomberg, in 2011, a 41 percent profit margin. That is, if I understand this correctly, the revenues from the students online exceeded the costs of providing it according to Bloomberg, at least, by about 41 percent. And then in 2013, they estimate, it is about a 22 percent profit from this. And, you know, those are pretty impressive numbers. Those are numbers that would make Goldman Sachs envious.

The question I have about this is that practices like online education that drastically lower the costs of providing educational services by standardizing the curricula and making it accessible because you use adjunct faculty, make it accessible more cheaply. The question is, are the savings being passed along to the students?

If you are getting a 41 percent profit margin, it sounds like the lower costs of an online education are not being passed on. Can you explain that?

Mr. LEBLANC. Let me first correct the record because there is no reason you would have looked at my campus blog where we took pains to correct John's inaccuracies in describing it.

The margins for the online portion only of our institution run in the 20 percentile range. So that part is accurate, the second, but not the 40; that would be an exorbitant——

Senator WARREN. But that 22 percent is pretty impressive.

Mr. LEBLANC. The way we think about that is there is something fundamentally different about being a not-for-profit because we take those surpluses and plow them right back into the institution. And we plow them back into the fact that we have not, in online, had a tuition increase in 3 years. We have increased financial aid, in the cross subsidy to our traditional age students, in that much more expensive model. We have been able to increase persistence rates by adding many, many more advisors and academics.

The places where we put the money, fair question—how are we using that surplus and your fundamental question, which is, does it go back into helping students? I would say, yes in myriad ways.

Senator WARREN. Although, I do have to say and I'll quit, because I know I am over time, but the question about cross subsidization that, in effect, you are following two business models simultaneously, the students you educate on campus and the students you educate online.

Mr. LEBLANC. Yes.

Senator WARREN. And that you make a 22 percent profit on the online students, so that you can build better facilities, do other things for the on-campus.

Mr. LEBLANC. And do things, a lot of things with the online students. If you take a look at the investments we have made in academics and advising, if you take a look at the impact that has had on graduation.

Senator WARREN. Although, I have to push back, that should be accounted and reduce the 22 percent. I presume the 22 percent is net of all the costs, meaning the investments that have been made in the online students.

Mr. LEBLANC. No, the investments trail——

Senator WARREN. Otherwise, you are not getting a cross subsidization.

Mr. LEBLANC. They are put to work in the very next year as we continue to make improvements in the program. Fundamentally, we are comfortable with the notion that Harvard Business School helps underwrite the Divinity School. Right?

We take a look at the totality of our student body and say,

> "If our online program produces surpluses and we can plow that back into various areas of the university, including online, including the traditional campus. We are comfortable with that notion."

And the reality is, some who come into our undergraduate online program earns a bachelor's degree for under $40,000.

The CHAIRMAN. Wow.

Senator WARREN. Go ahead, Mr. Chairman.

The CHAIRMAN. I really appreciate you bringing this up because what has been bothering me all along in listening about competency-based learning online is that it seems like we are almost separating things out here.

The poorer kids, and the kids that are struggling and cannot afford to go and get the kind of socialization that you would get by being in a campus-based program, they pay money for online courses. You make a profit off of them; they are 20-some percent. And then that profit is put into the traditional-based campuses so that the students that are more affluent, who are able to go to a campus and be on a campus, are aided and abetted by the profits made from the lower income students who cannot have that experience.

Mr. LEBLANC. I am sorry, Senator. I think you are——

The CHAIRMAN. That kind of bothers me.

Mr. LEBLANC [continuing]. You are conflating the models. Let me just, for the sake of accurate information, 90 percent of the kids on the traditional campus are getting financial aid. I would have to look at Pell grant eligibility, but it is probably almost 40 percent of our students on the undergraduate campus that are Pell grant eligible. So we serve working class kids, first generation kids who need a tremendous amount of financial aid to be there.

They are not the same student body, so the students in our online program are overwhelmingly adults who are 40 years old. They do not seek to live on a campus. They have all the coming of age they can handle. They are juggling family and work; two different student populations.

The CHAIRMAN. OK.

Mr. LEBLANC. So our community, if I can give them a very affordable education, we are well priced below the for-profit sector, for example, where sometimes people like to compare us. We are well priced below many of our online competitors in the not-for-profit sector. I am pretty comfortable with where we are in terms of price.

If a surplus gets generated there because of our efficiencies and everything else we do in that area, helps underwrite other poor kids in other parts of the institution, I can live with that. We look at the totality of our mission and that is the beauty of being in a for-profit. We are not paying dividends. There are no shareholders.

The CHAIRMAN. Is there any evidence that that is what is happening?

Mr. LEBLANC. Yes, it stands in the data. I would be happy to followup and share that with you. I can give you profiles of the student bodies and I can give you economic profiles as well.

Senator WARREN. Can I just add to this, then, because your analogy is an interesting analogy here.

If we think of an online education as the equivalent of the Harvard Business School and therefore they are to subsidize the Divinity, that is a little different understanding of what online education accomplishes and gives us, I think, a little different perspective on how we may want to think about online education.

If it is being used to reduce the costs for students who otherwise do not have access and everything is driven toward how to get that cost down so that they can get an education at the lowest possible cost, that is not the model you are describing. You described, and I think the words you used, were cross-subsidization.

This raises some other far more profound issues about online education and, in general, about when we innovate, where the accountability is in innovation, what goals it is trying to accomplish, and whether it is achieving those goals.

Mr. LEBLANC. So the goal you would put before me is: Can you make an affordable education available to adults who cannot get to a campus? My answer is emphatically yes. And if your question is: Should you not be passing more of that $20 million back in, in some fashion? I would say we put it in lots of investments and it includes our College for America program.

So part of that $20 million this year sits in reserve and now funds the $3 to $4 million loss we will have as we try to work through College for America, get it up to operating size, et cetera. Those are the ways we use the money and that is an incredibly low-cost model that targets the bottom 10 percent of wage earners and then organizations with whom we work.

I think that is a very good use of the money. I have people graduating from that program now who make $22,000 and not making family sustaining wages. That program does not happen if I do not have the resources over here. We are not coming to the Federal Government for that R and D money. We are actually providing it ourselves, and I think that is a reasonable proposition.

Senator WARREN. When you say you are providing it yourselves, your online students are providing it.

And the question is who are those people who are cross-subsidizing the other parts of the educational undertaking? I just think that is an appropriate question for us to inquire into.

Mr. LEBLANC. Fair enough.

Senator WARREN. Thank you, Mr. Chairman.

The CHAIRMAN. Very, very interesting. Do you have any followups at all, Senator Franken?

Senator FRANKEN. I do. I am going to leave this area and I think it is a very interesting area to talk about. But I want to talk about nontraditional students. Students who are entering school as adults, et cetera. I want to talk about more traditional students for a second, people who come to college after high school.

Mr. Kazis, as your testimony suggests, dual enrollment in early college high school programs are a win-win for students. They prepare students for college by providing them with what you call a

college going culture. These are students who can go to a junior college and take a course. They speed up college completion by allowing students to earn college credit while still in high school, and therefore they are great for reigning in the costs of college when you get up to 2 years of college credit. Those are 2 years you do not have to pay for if you get them in high school.

In Minnesota, I visited a number of programs. One was at Irondale High School that gives students the opportunity to earn a 2-year associate's degree while they are in high school. The partnership the school has with Anoka-Ramsey Community College and it partners students who may not necessarily come in with all the preparation necessary to succeed in postsecondary programs, and helps them get on a course to completion.

I have a bill that supports students in getting different kinds of accreditation and getting in accelerated learning programs, which is called the Accelerated Learning Act. I am putting a plug in for my piece of legislation. But it helps expand access to AP, IB, to dual enrollment, and early college programs.

Can you, Mr. Kazis, talk a little bit more about the evidence we have on the role accelerated learning models can and do play in preparing students for college, increasing completion rates, and reducing college costs.

Mr. KAZIS. Yes, we thank you and we appreciate your effort in this and your interest and leadership.

There has been for the past 10 years, this model of early colleges and kind of dual enrollment strategies has been developing partly, initially with foundation funding, but now more broadly. And the results from early colleges from over 200 around the country, really sophisticated research, has found that 23 percent of the—these are students who are underprepared. They are a couple of years back when they started high school. They are generally low income, first generation college—they will be first generation college-going students. And in recent research, 23 percent of these students get enough credits for an associate's degree. By the time they finish high school, 94 percent get some credits, averaging about 36 credits by the time they leave high school to either a 2-year program or a 4-year program.

So the potential for saving time and money for students who are low income is great, and I think it fits in—as you were talking about with AP, IB, dual enrollment, and early college—and are all a piece of building that momentum to college, and it should have cost implications over time for students and families.

Senator FRANKEN. Is it not true that the record of students, for example, that take an AP course and get a 3 or above, the likelihood that they will go to college and that they will complete college has been proven to be much greater.

Mr. KAZIS. Yes, and the same with dual enrollment——

Senator FRANKEN. Yes.

Mr. KAZIS [continuing]. Programs in general that the college entry persistence—those are much greater than their peers who would not be in a dual enrollment program, and it makes sense.

Mr. KIRWAN. I am a huge fan of early college and I am very pleased that you are introducing this bill. I think many of us have observed that for a lot of high school students, the senior year is

sort of a wasted experience. They have met all their requirements. So they have, to a certain extent, time on their hands.

Bringing in college courses through partnership with community colleges or 4-year institutions to the high school can be a huge boost in accelerating college participation and decreasing times to degree. So I think this is a very good step for us to be taking.

Senator FRANKEN. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Warren, we have a vote coming up here in just a minute.

Senator WARREN. We have a vote, so I will be really quick. I just want to focus for a minute.

There has been a lot of talk about how deregulation could encourage more innovation, and give you more opportunities to meet the needs of our young people and our people who are trying to get a college education and pay for that college education. But if I could, I would just like you to think, and we can do more of this as questions for the record because I know we need to go, is to focus slightly differently.

What could the Department of Education differently? It is one thing to talk about deregulation here, but we also have oversight over the Department of Education. And so, if there are things you could mention about that and if you have something, I would like to start with you, Mr. Kazis, since you are from the home of the World Series Champion Boston Red Sox. I just wanted to work that in very subtly.

Mr. KAZIS. Many of the kinds of innovations we have been talking about today, the Department of Education can, through its competitive grant programs, its rules and regulations, help shape and can help encourage. I would be happy to put together some documentation on this from our perspective.

[The information referred to may be found in additional material.]

Senator WARREN. That would be terrific. Why don't I do that? Why don't I just ask that as a question for the record because I think both of those are important? What is it that we could do as we are working through our current bill, but also what could the Department of Education do now to make things a little better?

Mr. KAZIS. And your point about innovation and accountability is a theme through the whole panel, but it is the one thing we have to grapple with and the Department has ability there too.

Senator WARREN. Yes. Thank you.

The CHAIRMAN. In my opening statement, I mentioned that innovation for innovation's sake does not impress me.

Mr. KAZIS. Absolutely.

The CHAIRMAN. Michael Crow, the president of Arizona State University, cited statistics that I think about frequently. If you are a high-income, low performing "C" student, you have an 80 percent chance of graduating from a 4-year college. If you are a low-income, high performing "A" and "B" student, you have a 17 percent chance of graduating from college.

What I want to know is how is innovation going to change that or is innovation simply enhancing that kind of disparity? How is innovation going to help low-income, high performing students get

to that 80 percent mark? They can do it. They obviously are knowledgeable. They are bright. But the system is rigged against them.

Mr. KAZIS. Right. It absolutely is.

The CHAIRMAN. It is just rigged against them. So I want to know in all your thinking about innovation, how you change that because if you do not, what good is innovation? We are just simply plowing that same ground. We are simply keeping the same system going and we are probably making it a little bit better for both, but we keep that separation. How does innovation change that? So I will say that for the record, too, and if you have some thoughts on that, I would be more than happy to have that input.

The CHAIRMAN. Doctor.

Mr. KIRWAN. Well, innovation, given all the development with technology and cognitive science gives us a real chance to have higher quality education at a lower cost, and lower cost will address the group that you are talking about.

I am glad you mentioned the under-representation of low-income students because I think that is one of the greatest long-term problems facing our country. Given the importance of higher education in terms of lifetime earnings and quality of life, if we do not make it possible for more low-income students to go to college, we will no longer have the American Dream in our Nation.

The CHAIRMAN. Again, I agree. What does innovation do?

Mr. KIRWAN. It is going to help us reduce the cost and make it more affordable.

The CHAIRMAN. I have to see that.

Mr. KIRWAN. OK.

The CHAIRMAN. I have to see how that works. Again, what do we do to enhance that? What do we do to encourage innovation that addresses that disparity and helps low-income, high performing students access college and graduate from college?

To me, again, that has been the whole Federal involvement in education from the land grant colleges on: how do we reach people, who do not have a lot, to get them an affordable and quality education? That is the purpose of title I, of the Elementary and Secondary Education Act.

I will not say we have failed miserably at it; no. We have done a lot of good in our country in educating low-income students. I think we can be rightfully proud of that. Who was it who said earlier that if you are satisfied, you are not making progress?

Mr. KIRWAN. Exactly.

The CHAIRMAN. Thomas Edison, if you are satisfied, you are not—well, we cannot just say, "Well, it is OK. We have done reasonably good at that." I just do not think that is going to suit us well for the future. And we have to be dissatisfied with some of the situations that are out there, and get innovation and competency-based learning to address those.

I have a lot of questions about competency-based learning I wanted to get into. How do you get transfer credits and all that, which we have to figure out. If you are in a competency-based program, and then you go someplace else, how do those transfer? I did not even get into that, but I wanted to.

Mr. LEBLANC. Welcome to conversations, Senator.

The CHAIRMAN. But I welcome your input further on that and how we figure that one out, too.

Well, I thought this was very stimulating. Listening to the questions, the answers, the involvement, I thought, was very stimulating.

Again, I will keep the record open for 10 days for further questions from other Senators who may not have been able to be here this morning because of other committee meetings.

I invite all of you as we progress on this later this year and into next year to continue to give us your thoughts and suggestions to our staff. And I hope that we can use our staff to reach out to you as we move along with further questions, that type of thing, so we get a good Higher Education reauthorization bill through.

There is a vote, but does anybody have one last thing they wanted to say for the record before we leave?

Thank you all very much.

The committee will stand adjourned.

[Additional material follows.]

ADDITIONAL MATERIAL

RESPONSE TO QUESTIONS OF SENATOR WARREN BY RICHARD KAZIS, WILLIAM E. KIRWAN, PH.D., AND TIMOTHY L. HALL

RICHARD KAZIS

Question 1. Much of the testimony we heard at this hearing focused on promoting innovations that are happening at the college level. It seems that the Department of Education could be working to develop new policies and procedures that would serve students better, too. Some of the witnesses testified the Department could loosen regulations to allow colleges to innovate. But what about the services that the Federal Government provides directly to students, like information, financial aid applications, and student loans?

Answer 1. Thank you for the opportunity to respond to this thoughtful question. The Senator is indeed correct that our panel focused primarily on strategies to increase innovative program design and delivery at the college level. At the same time, as the Senator notes, the Department of Education provides a set of direct services to students—consumer information, financial aid information, and student loans—where innovation would be welcome as well.

We know that there are many organizations weighing on how the Department of Education can improve its services to students, particularly related to financial aid, thereby improving both access and success. (The Gates Foundation-funded RADD project has surfaced many concrete proposals—and the organizations working on those initial papers and now the second round of reports have a range of provocative and research-based responses to this question.

We see a few priorities that we think the Department can advance through its services, mostly related to better information and use of competitive grants to promote innovation. These include:

- The Department can help ensure that schools, college counselors, colleges, and partners with schools have the financial aid information they need to help students and encourage students to look at and apply for aid as early as possible.
- The Department can also continue to use vehicles like College Access Challenge Grants, its FAFSA pilot, and other outreach efforts to promote student awareness, understanding, and uptake of the most appropriate student aid for their situation.
- The Department can use existing grant vehicles, such as College Access Challenge Grants, high school reform grants, i3, school improvement grants and other innovation grants to promote the inclusion of intermediary organizations and guidance counselors in partnerships, so that they are prepared to use current labor market information, postsecondary outcomes data, and other data to inform student decisions about their "best bet" postsecondary pathways.

Question 2. What can the Department of Education do to make it easier for students to go to college, pay for it, and get a degree?

Answer 2. Again, we appreciate the direction of this question—to identify where the Department of Education already has authority and capacity to advance the access and success agendas in higher education. Here are a few ideas from Jobs for the Future's vantage point:

- In the October 31 hearing, there were several mentions of the Department's experimental site authority. One area for exploration is an experimental site that tests more flexible models of financial aid better suited for non-semester and competency-based courses. The Department could offer an experimental site allowing students to receive aid for short-term stackable credentials and to receive the aid as they complete each course or credential, rather than having to sign up for all aid at the beginning of the semester. Current inflexibilities have created great difficulties for colleges and students in programs where progressing to the next credential or course is contingent upon successful completion of a prior course. These courses often don't fit neatly into a semester-long schedule, and thus don't fit neatly with the way Federal aid is currently made available. State systems and schools have had to go to great lengths to create "workarounds" so that students can receive aid for these accelerated, non-semester-based pathways that are often competency-based.
- We have been made aware of an obstacle that colleges in a number of States are running into in serving Veterans. (This may be more of an issue for the Veterans Administration than the Department of Education. The issue is this. The VA has decided that developmental math delivered by computer in what is known as the "emporium model" is independent study and therefore not eligible for aid, rather than a course that would be eligible. In some States, this model, with instructors

circulating around a lab during a scheduled class time, is the primary strategy for accelerating math remediation. To call this independent study is misguided—and an obstacle to many veterans progress.

• The elimination of the Ability to Benefit provision for potential students who lack a high school diploma or its equivalent has been a huge blow to financing of and access to evidence-based, successful career pathways programs that serve this population. The Department can work with Congress to restore Ability to Benefit, at a minimum for career pathways programs that meet certain design criteria and have a track record of success.

• Given the strong research evidence of the effectiveness of early college high school models to help underprepared young people accelerate to college readiness and college credits while still in high school, the Department can explore running an experimental site to allow high schools students enrolled in early college programs or other dual enrollment programs leading to postsecondary credential pathways to access Pell grants for the credit-bearing postsecondary courses they take in high school. The Department should encourage those courses to be part of a postsecondary pathway to a credential so that students are accelerating time to completion and saving money.

• The Department can continue to use technical assistance funds (e.g., School Improvement Grants, Race to the Top, High School Graduation Initiative) to allow States and local school districts to learn from each other about promising and effective innovations in K–12 through postsecondary success pathways and their key components.

• The Department can continue to include postsecondary outcomes in K–12 and postsecondary grant and waiver criteria so that students and families gain better information on how well programs are preparing students for college and helping with the transition to college, and where improvements are needed.

• The Department can continue its work to better align expectations, definitions, and outcomes in guidance and regulations across K–12, Career and Technical Education, and Adult and Postsecondary Education to ensure a focus on secondary and postsecondary success, with a particular focus on credentials and degrees with value in the labor market, where appropriate.

WILLIAM E. KIRWAN

Thank you for the opportunity to testify before you and the other members of the Senate Health, Education, Labor, and Pensions Committee regarding higher education. I hope that you and your colleagues found the information helpful.

I am responding to your followup questions stated below.

Question. Much of the testimony we heard at this hearing focused on promoting innovations that are happening at the college level. It seems that the Department of Education could be working to develop new policies and procedures that would serve students better, too. Some of the witnesses testified the Department could loosen regulations to allow colleges to innovate. But what about the services that the Federal Government provides directly to students, like information, financial aid applications, and student loans?

What can the Department of Education do to make it easier for students to go to college, pay for it, and get a degree?

Answer. With respect to student loans, we would recommend Simplifying the Free Application for Federal Student Aid (FAFSA) by no longer requiring students to answer the IRS-related questions. While the FAFSA has gotten increasingly shorter and easier over the years, and the IRS Data Retrieval process has been put into place, the FAFSA still requires students to provide the answers to the IRS-related questions and the match double checks them. This is redundant and burdensome for students.

We would recommend making Pell grants available to students year-round. Nontraditional students, who are now the majority of students in higher education, know no boundaries on the school year. They take classes whenever they can and that often means year-round. Faster college completion is a national goal and administration of the Pell grants must catch-up with the times. Many studies have shown that students do better when they can progress uninterrupted through their program coursework. Also related to the Pell grants we would recommend that students who are in certificate programs or programs that lead to acquiring a license should have access to Pell grants. Certificate or Licensing Programs often better serve the workforce needs and are more manageable than embarking on a Bachelor's degree. Without these credentials, many students will not be able to get, keep or advance in a job. These programs are no less valuable to society or to students than the traditional 4-year programs. The market place has changed; the workforce

is changing and the regulations governing the Pell grant need to change with them. It is counterproductive to deny earnest students pursuing credentials that will help them advance themselves this type of financial aid. Allowing Pell grants for students in Certificate Programs would also help students enrolled in post-baccalaureate certificates. Currently Pell grants are not available at all once a student has obtained a first baccalaureate degree.

Institutions should be allowed to package and disburse student loans with much greater flexibility. For many students whom are professionals with families, some loan requirements just do not apply. These schools should, for example, be able to eliminate or reduce loan allocations for living expenses, which are often not applicable to their students. This one change could reduce fraud, reduce the amount of refunds, and decrease student loan debt by decreasing "over borrowing." Currently, this is prohibited by law. 20 U.S.C. §1087bb.

We also feel that students should be able to draw financial aid for hybrid, or blended programs, containing both direct assessment and traditional classes, so students do not need to limit themselves to one type of course of study. While the Department of Education has recently made direct assessment programs eligible for Federal financial aid, hybrid models containing both direct assessment and regular classes are still not eligible for Federal aid. Our institutions would like to offer students the opportunity to receive Federal financial aid for programs that allow them to complete their degrees using a variety of methods, as this would help meet Federal and State degree achievement goals and be much more cost-effective for students. As it stands now, they cannot. Federal financial aid should be made available to students who demonstrate college-level competencies no matter when it was learned. The Federal financial aid rules would also need to be modified in order to align with this new model of measuring academic achievement. Financial aid would need to be awarded when a student passes the learning assessment and not necessarily just at the end of the semester or term or course. These changes are critical if prior learning programs are going to fulfill their promise of credentialing learning in subjects students have already mastered to allow them to accelerate their graduation by months and sometimes years, decreasing both the time and money involved in getting a degree. Without this change, prior learning programs are needlessly hampered.

We also support increasing the annual and aggregate maximum borrowing amount under the Federal direct Stafford program and at the same time, adding an annual and aggregate maximum under the Federal direct Graduate PLUS program. If graduate/professional students could borrow more under the Stafford and a cap issued for the Graduate PLUS, students would make better financial decisions in choosing a program. These changes would also require graduate/professional schools to look at the indirect cost included in the cost of attendance.

An interesting concept would be to reframe the financial aid system so that students start with loans that are progressively forgiven or converted into grants as students make progress toward degree completion. The current system is actually a disincentive to completion, but a loan to grant model would promote the kind of completion behavior the Department of Education is striving for.

Our institutions have found the Federal Work Study Program to be highly effective and feel that this program should be enhanced. These opportunities could be used, more directly, to provide professional development experiences for students and assist them with career prospecting—supporting internships, research, practical application and community service. Having a more targeted and more focused Federal Work Study program could be an essential part of helping students market themselves to employers post-graduation.

Changes need to be made in the Integrated Postsecondary Education Data System (IPEDS). Cohorts should be tracked on a calendar year to include various start dates throughout the year, transfer students and part-time students should be tracked as separate cohorts, and part-time students should be tracked at 200 percent of "normal time", i.e., 8-year graduation rates for bachelor's degrees and 4 years for associate's degrees. Because the IPEDS only track students going to college for the first time, who go full-time, entered in the fall of the year and graduate from the same institution where they started, it cannot track non-traditional students. Because non-traditional students now outnumber traditional students, the IPEDS can tell us next to nothing about the vast majority of students in higher education today.

I want to thank you for the opportunity to provide additional information to your questions, and hope that this information is helpful as you and your colleagues move through the process of reauthorizing the Federal Higher Education Act.

TIMOTHY L. HALL

Question. Much of the testimony we heard at this hearing focused on promoting innovations that are happening at the college level. It seems that the Department of Education could be working to develop new policies and procedures that would serve students better, too. Some of the witnesses testified the Department could loosen regulations to allow colleges to innovate. But what about the services that the Federal Government provides directly to students, like information, financial aid applications, and student loans?

What can the Department of Education do to make it easier for students to go to college, pay for it, and get a degree?

Answer. The Federal Government plays an important role in providing information to students about institutional quality. Unfortunately, it's current metrics—including retention and graduation rates for first-time, full-time students—frequently confuse selectivity with institutional quality. Current metrics have the perverse effect of devaluing the contributions of institutions that serve low-income, adult, and minority student populations. Furthermore, by focusing on first-time, full-time students, current metrics make invisible and undervalue institutional service to transfer and part-time students.

The Federal Government continues to play a crucial role in providing access to higher education through financial support. The goals of college completion would be better furthered, though, by allowing use of the Pell grant during summer terms. Summer school enrollment at Austin Peay State University, where more than half the students are Pell eligible, has declined since student ability to use the Pell grant during the summer ended.

Obtaining admission to and financial support for college is the most complicated series of transactions most people will ever navigate. The Federal Government, through the Department of Education, should make simplification of this process a priority. Linking FAFSA with Federal income-tax data was a major step forward and a model for other similar strategies.

Current attention to default rates for Federal student loans is appropriate, but must be calibrated so as not to penalize institutions serving low-income students. In my own State of Tennessee, the loan default rate among public institutions almost perfectly tracks the number of low-income students served by particular institutions. This correlation suggests that default rates have little to do with institutional performance and everything to do with student demographics. A failure to account for this reality will have the perverse effect of frustrating access to higher education by the students most in need of that education.

[Whereupon, at 12:08 p.m., the hearing was adjourned.]

○