

**HOW INNOVATIVE EDUCATION SYSTEMS BETTER
PREPARE STUDENTS TO ENTER THE WORKFORCE
(PART 2)**

FIELD HEARING
BEFORE THE
**COMMITTEE ON SMALL BUSINESS
AND ENTREPRENEURSHIP**
UNITED STATES SENATE
ONE HUNDRED FOURTEENTH CONGRESS
FIRST SESSION

—————
FEBRUARY 20, 2015
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Printed for the Committee on Small Business and Entrepreneurship



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**HOW INNOVATIVE EDUCATION SYSTEMS
BETTER PREPARE STUDENTS TO ENTER THE
WORKFORCE (PART 2)**

FRIDAY, FEBRUARY 20, 2015

UNITED STATES SENATE,
COMMITTEE ON SMALL BUSINESS
AND ENTREPRENEURSHIP,
Monroe, LA.

The Committee met, pursuant to notice, at 10:24 a.m., at Delta Community College, 7500 Millhaven Rd., Hon. David Vitter, Chairman of the Committee, presiding.

Present: Senator Vitter.

Also present: Representative Abraham.

**OPENING STATEMENT OF HON. DAVID VITTER, CHAIRMAN,
AND A U.S. SENATOR FROM LOUISIANA**

Chairman VITTER. Let's now go to the Senate Small Business Committee field hearing portion of the program, and that's entitled "How Innovative Education Systems Can Better Prepare Students to Enter the Workforce."

I have some opening comments with slides, and then I'm going to introduce our witnesses today.

You know, the exciting thing is there is really good economic development and jobs coming to Louisiana. In a lot of instances, the American energy boom, cheap American energy, because of great entities in this part of the State like CenturyLink and their new partnership with IBM, the Cyber Innovation Center down I-20 in Bossier. Some great jobs are coming this way.

But we need to link up those jobs with the skill sets folks need to fill them and to prosper. Right now, Louisiana's workforce is about 2.3 million working adults. Over 1 million of these have not obtained a college degree or a post-secondary credential, and another 600,000 don't have a high school diploma. And today's industries rely very heavily on skills, technology, so those folks are just going to be left in the lurch unless we connect those dots and get them that training.

Now, here in Louisiana we have taken several positive steps. Our high school students now have greater access to career courses, the Jump Start program. Ralph mentioned that a minute ago. That's positive to highlight at the high school level that good careers are available through skills training, but we need to go further and really put that on steroids.

A lot of the problem is at the federal level where Ralph and I work. Too many federal programs are really antiquated and don't allow for flexibility and for access to skills training. We talked about Pell Grants. That's for traditional four-year higher ed. That's great if you want and need traditional four-year higher ed. It's not if you want skills training and want to go into those sorts of jobs here in Louisiana or elsewhere.

So that's what we're talking about here today, where we are, particularly in Louisiana, how we get to a better place. And to help us in that dialogue we have four really great witnesses. Three are here; one is on the way. I'm going to introduce all four of them now, and then in the order I introduced them they will each give a short, five-minute presentation, and then we'll have a dialogue about all of these thoughts.

First, Dr. Barbara Hanson. She served as Chancellor of Louisiana Delta Community College since January 2013, but she has over 29 years of higher ed experience, with 17 years in community college administration, and that includes serving as Chief Academic Officer, Executive Director for Program Development, and Dean of Instruction.

Thank you in particular, Barbara, for helping host us here today.

Next will be John Jones. John is Vice President for Public and Federal Legislative Affairs for CenturyLink, and he's been a very active participant in several significant federal and state telecomm reform initiatives. Prior to joining CenturyLink, John served as Public Affairs Director and adjunct communications faculty member for the university for 12 years, and he was recently appointed by Governor Jindal to the Louisiana Workforce Investment Council.

Next will be Dana Talley, who serves as Deputy Leader for Network 2 in the Louisiana Department of Education. Ms. Talley is part of the team that works with local school districts to implement initiatives in the areas of high school programs, including Jump Start, Early Childhood, District Planning, Principal Support, and Teacher Leaders.

And finally is Dr. Nick Bruno, who is caught in some traffic and is on the way. Dr. Bruno became the eighth President of the University of Louisiana at Monroe in 2010 and has more than 35 years of work in Louisiana higher education. In 2012, President Bruno was appointed to the West Monroe-West Ouachita Chamber of Commerce Board of Directors, the Monroe Chamber of Commerce Board of Directors, and the St. Francis Medical Center Board of Directors. So he is obviously involved in many of these issues in the community.

Thanks to all of you for being part of this program. We look forward to your testimony. We look forward to follow-up on that, and we'll start with Dr. Hanson.

[The prepared statement of Chairman Vitter follows:]

CHAIRMAN VITTER OPENING STATEMENT

Good afternoon and thank you for joining me today for a town hall and the Senate Small Business Committee's field hearing to discuss the need for innovative practices in high school and higher education to fulfill Louisiana's workforce demands.

In my new role as Chairman of the Senate Committee on Small Business and Entrepreneurship, I am striving to lend small businesses a greater voice in Congress, and to shape policies that will grow our energy industry, eliminate government impediments to growth, and reduce the tax burden on small businesses.

Today, I would like to highlight the substantial economic development taking place in Louisiana and to highlight one of the biggest struggles for both small and large businesses: obtaining a skilled and ready workforce.

Officials estimate that Louisiana will receive roughly \$80 billion in new and expanding development over the next several years. Such growth will positively impact the quality of life throughout the state as residents have greater opportunities to obtain well-paying jobs and, in turn, further stimulate the economy. However, in its current state, Louisiana will be unable to meet the workforce demands of these expansions, which could put the state at risk of losing similar developments in the future.

At this time, Louisiana's workforce consists of about 2.3 million working adults. Over a million of these individuals have not obtained a college degree or post-secondary credential and an additional 600,000 have not obtained a high school diploma. As today's industries rely more heavily on technology, it is imperative that workers have the training and professional development necessary to meet industry needs.

Louisiana has taken several steps to alter the landscape of workforce development over the last few years, both on the secondary and post-secondary level. High school students now have greater access to career courses through dual enrollment programs, partnerships with outside industries and local institutes of higher education, and state programs like Supplemental Course Academy and JumpStart. Last year, the state legislature's establishment of the WISE Act, a \$40 million workforce incentive initiative, also spurred partnerships between industries and institutes of higher education as they strive to produce graduates with high-demand degrees and certificates.

Despite these positive steps, I believe more can be done to assist schools and businesses engage non-traditional students, so they can increase their level of education and training and move into higher paying, in-demand fields.

The current system of higher education in the United States stifles innovation by limiting schools' ability to quickly and aptly respond to the needs of employers and further limits the ability of students to access federal financial aid when trying to seek a degree or credential through a non-traditional method. Much of the debate in Congress surrounding higher education focuses solely on the cost of a traditional, four-year education and how we can best reduce the

student loan burden on graduates. Instead, we should be innovative in our approach, creating new pathways to benefit the non-traditional student. Ideas like allowing states to accredit specific courses created by businesses that precisely reflect their needs and allowing students to access financial aid for state-accredited programs could reduce the overall costs of higher education and enable some of the 1.63 million working adults in Louisiana without a post-secondary degree to change their circumstances.

I look forward to hearing from each our witnesses today as we learn from the innovative methods they're currently using to build Louisiana's workforce and to explore avenues where government can truly make it easier for states, schools, and businesses to serve the needs of students.

**STATEMENT OF BARBARA HANSON, CHANCELLOR, LOUISIANA
DELTA COMMUNITY COLLEGE**

Dr. HANSON. Good morning, everyone. Thank you so much for the opportunity to be here today.

This is my first time doing this, so I'm not exactly sure if I'm supposed to read my statement or read—

Chairman VITTER. What you're comfortable with.

Dr. HANSON. Excellent. I wanted to start with a quote, and that is kind of what I had in my statement. It goes like this: "This is a critical time in our economic history. Those who do demographics are projecting severe shortages in skilled workers in the next 10 years. While the skills gap will be in crisis, the lack of basic skills, technical skills and competencies is an issue for industry right now. To meet this challenge, we need to invest in worker education and training. Now is the time to take a more strategic approach to workforce education and training and create seamless, dynamic, and sufficiently funded systems for advancing the skills and credentials and productivity of our entire workforce."

What is most interesting about this quote is that it was written in 2003. It was produced in a document called the National Center on Education and the Economy.

Although we have made great strides over the last 10 years as a Nation, we still are experiencing that skills gap that is referenced in this quote that took place almost 10 years ago. Our inability as a Nation and as this great State that we live in, in Louisiana, not to address—our inability to address the needs of our workforce will cripple us, and it continues to bring us down.

What we have in the State of Louisiana is not a budget problem. It is a revenue problem, and the solution to that problem is to provide the training for people to go to work. That is what we need. Those people who go to work live in communities. They contribute to the tax base. They worship in their place of worship. They go to the grocery store. They buy homes. They raise their families. And they enjoy the economic prosperity that this great State and this great country wants for each citizen in our country.

We need to continue to provide workforce and educational training opportunities to all of our constituents so that each and every one can realize the dream that should be theirs.

Louisiana in particular I feel has made great strides over the last couple of years. You've heard mention of the Jump Start program. That is an excellent initiative. You've heard mention of the WISE program. That is also an excellent initiative. It really started, in my mind, with the Louisiana Economic Development Division, when they reached out and did their statistical analysis and projected what business and industry is going to need in the next 10 years in this State.

Jump Start was aligned to help prepare students in high schools to meet those needs. The WISE Fund was enacted whereby institutions of higher education to include all four systems could apply for money, and the money that they applied for had to be in alignment with what was the projected needs in this State, and it was incentivized for business and industries. There was an incentive of a 20 percent match that needed to come from business and industry so that we could all work together.

In my mind, the solution is our ability to collaborate, to think differently, and to take this great State and what made this Nation great, which is the middle class, to the next level and let them achieve the prosperity that they deserve, and to do it through the engine of education.

[The prepared statement of Dr. Hanson follows:]

**Dr. Barbara M. Hanson, Chancellor
Louisiana Delta Community Colleges**

This is a critical time in our economic history. Demographers are projecting severe shortages in skilled workers in the next ten years. While the skills gap will be a crisis in....., the lack of basic skills, technical skills and competencies is an issue for industry right now. To meet this challenge, we need to invest in worker education and training. Now is the time to take a more strategic approach to workforce education and training and create a seamless, dynamic and sufficiently-funded systems for advancing the skills and credentials and productivity of our entire workforce.

It is interesting to note that these words appeared in the executive summary of a document entitled *Toward a National Workforce Education and Training Policy** written in 2003. Advocacy over the last decade for the position set forth in the 2003 document has resulted in many advances, but the skills gap is still increasing. Our inability to effectively address the training needs of our workforce will ultimately cripple the economy of the great State of Louisiana as well as the economy of our nation. After all, the great State of Louisiana does not have a budget problem, it has a revenue problem.

As a system of community and technical colleges, we know that the solution to the State's revenue issues are in the training facilities and virtual classrooms of Louisiana's community and technical colleges. We must produce more skilled graduates in high-demand, high-wage programs aligned to local and State economies and put those graduates to work so that they can contribute to the tax base. It really is that simple.

Louisiana has made great strides over the last two years in creating strategic and synergist alignments. Louisiana Economic Development has identified emerging growth sectors and projected the number of educated completers needed in those targeted sectors over the next decade; the State has established a pool of money to support higher education and incentivize partnerships with business and industry, officially called the Workforce and Innovation for a Stronger Economy (WISE) fund, structured to align higher education programming with Louisiana's job market; and Louisiana's Department of Education has rolled out the Jump Start initiative to support a state-of-the-art system of career and technical education provided by high schools, community colleges, and employers themselves as an educational pathway to economic prosperity. And yet, we are still falling short.

Now is the time to think outside of the box. We cannot continue to do what we have always done and expect to achieve different results. Our State needs a market responsive higher education enterprise to ensure we are meeting the needs of citizens, communities, and industry in real time. We need to find better incentives for defining and creating strategic educational pathways from high school, to community and technical colleges and/or to universities while still allowing each to effectively fulfill their respective missions in service to our students; we need to continue to educate our citizenry that modern career education combines rigorous academics, technical preparation, and workforce experiences and, as such, is not less valuable than a four year education-it is merely different from a four year education; and we need to provide a mechanism whereby the nearly 600,000 citizens in the State of Louisiana who have neither a high school credential nor a post-secondary credential can access educational and training opportunities so that they too can enjoy economic prosperity.

While the discussions ensue, Louisiana Delta Community College will remain focused on the mission of training and educating Louisiana citizens to meet this season of unprecedented economic growth in our great State.

*National Center on Education and the Economy, *Toward a National Workforce Education and Training Policy*, June 30, 2003

Chairman VITTER. Thank you very much, Dr. Hanson, and thank you again for hosting us here at Delta Community College.

Next is John Jones with CenturyLink.

**STATEMENT OF JOHN JONES, VICE PRESIDENT OF POLICY
AND FEDERAL LEGISLATIVE AFFAIRS, CENTURYLINK**

Mr. JONES. First, Senator Vitter and Representative Abraham, thank you so much for hosting this. This is a very timely topic for our company and for this area. While we're talking today, there have already been numerous discussions like this down in Baton Rouge that we've already participated in. So, thanks so much for bringing it to north Louisiana.

For the record, I'm going to go ahead and read my statement within five minutes.

Good morning, Mr. Chairman and fellow participants. We appreciate your interest and leadership in calling today's hearing addressing innovation, education, and workforce development preparation. We believe much good work has already been done in this area. However, with the rapidly changing economic and employment environment of our State and the rest of the Nation, we believe more work remains to be done to achieve greater alignment between education and the business community. My role here today is to discuss the workforce development challenges and opportunities we face as a telecommunications provider headquartered in Louisiana as it relates to education.

CenturyLink is the third largest telecommunications company in America today. We operate one of the largest communications networks in the United States and provide high-speed Internet, data, voice, managed cloud, and IT hosting and entertainment to more than 13 million customers in all 50 states and overseas. We employ approximately 45,000 people worldwide, the majority of them with technical, service-oriented backgrounds, along with hundreds of others in supporting non-technical fields.

We are in the process of finalizing the construction of a 250,000-square-foot technology center on our campus that will open this spring. The building will provide state-of-the-art network monitoring, research and development, and IT and engineering support to our service footprint.

As most of you know, we have agreed to increase our total jobs in Monroe by 800 positions within the next several years. We are moving forward with that commitment, but we do face some challenges in filling some of those positions, one being finding and attracting more senior-level technology-trained and other professional employees to Louisiana and north Louisiana; and the second being competing with larger markets in our State and elsewhere for college graduates with the skill sets we need.

We spoke with David, Senator Vitter yesterday about this challenge at length. We have made significant inroads in exploring partnership opportunities in Northeast Louisiana with ULM, Louisiana Tech, and Delta Community College; and within the past year we have also met with the faculties of Grambling, LSU, Southeastern and Northwestern Universities.

Each meeting has been a learning experience for both parties in terms of gaining a better understanding of curriculum needs, as

well as our potential job availability for graduates. These discussions have been invaluable for identifying both resources and opportunities. Ultimately, the students will be the net winners of these discussions, and they will benefit from enhanced curriculum development that translates into actual job opportunities or possibilities in our State.

Going forward, we see our company, and also our vendors like IBM, as serving in an advisory role with the universities, and also our K-12 partners in discussing creative partnerships and curriculums that will work.

A recent example of a partnership opportunity was this week, and that's the announcement by IBM and the State of Louisiana and our company earlier this week. The IBM center in Monroe represents a transformational partnership, and I encourage you to watch this carefully as it unfolds. That will include expanded higher education programs related to computer science, as well as create new economic growth opportunities in this area. The IBM center will employ a broad range of college graduates and experienced professionals with backgrounds in computer science, engineering, mathematics, and science. And that all sounds very technical, but you also have to realize the support functions that will pop up around that entity, and also on the 88 acres that we're developing across the road that will require skilled labor.

The State of Louisiana is providing \$4.5 million in funding over 10 years to expand key higher education programs, including the computer science program at ULM, the cyber engineering program at Louisiana Tech, and the data analytics program at Grambling State. Additionally, IBM will work closely with local professors to recommend curriculum innovations focused on technology, math, and the sciences.

In conclusion, I will leave you with three thoughts.

We believe that finding additional ways to improve the communication and alignment between the business community and our colleges and universities will foster additional partnerships and curriculums aligned with good jobs. This approach will benefit small businesses as well as larger companies.

We should also focus on meaningful education reform in our elementary and secondary education schools and curriculums. We would like to see additional development of STEM programs and integration and alignment of K-12 and higher education programs.

Louisiana, and in particular the I-20 Corridor, have great potential to embrace technology as a key economic development driver. If our State is going to move forward with a high-tech economy, we must begin focusing our education goals towards math and the sciences today. This will also foster more skilled labor employment.

Lastly, let's not forget North Louisiana. The colleges and universities in this area have provided education for literally thousands of students who possibly could not have gotten those degrees because of distance and cost, and these universities are strategically located and help thousands of people get their education. We are hopeful that funding for our local colleges will be restored and meet the workforce needs of our State and overcome the negative outside perception of education our State experiences today.

Thank you, and I'll be glad to take questions.

[The prepared statement of Mr. Jones follows:]

**Senate Committee on Small Business and Entrepreneurship
Hosted by Chairman David Vitter
Field Hearing**

February 20, 2015, 10:00AM CST
Delta Community College
Monroe, Louisiana

**How Innovative Education Systems Can Better
Prepare Students to Enter the Workforce**

Testimony of

John F. Jones
Vice President of Policy
CenturyLink

Good morning Mr. Chairman and fellow participants. We appreciate your interest and leadership in **calling today's hearing addressing innovation, education and workforce development preparation**. We believe much good work has already been done in this area; however, with the rapidly changing economic and employment environment of our state and the rest of the nation, we believe more work remains to be done to achieve greater alignment between education and the business community. My role here today is to discuss the workforce development challenges and opportunities we face as a telecommunications provider headquartered in Louisiana as it relates to education.

CenturyLink is a Fortune 150, international telecommunications company with headquarters in Monroe, Louisiana. We are the third largest telecommunications company in America today. We operate one of the largest communications networks in the United States with a focus on providing high speed internet, data, voice, managed cloud and IT hosting and entertainment services to approximately 13 million customers in all 50 states and overseas. We are a major communications provider for the United States Government for both network and cybersecurity products.

We employ approximately 47,000 people globally—the majority of them with technical, service-oriented backgrounds, along with hundreds of others in supporting non-technical fields. We are in the process of finalizing the construction of a 250,000 square foot Technology Center of Excellence on our campus in Monroe that will open this spring. This building will host state of the art network monitoring, research and development and IT and Engineering support to our international service footprint.

We have agreed to increase our total jobs in Monroe by 1146 positions within the next several years. We are moving forward with that commitment, but we do face some challenges.

One being, finding and attracting more senior technology-trained and other professional employees to Louisiana; and the second being, competing with larger markets in our state and elsewhere for college graduates with the skill sets we need.

Because employee recruitment and long term retention are our goals, our preference is to hire from Louisiana universities as much as we can. We have made significant inroads in exploring partnership opportunities in northeast Louisiana with ULM, Louisiana Tech and Delta Community College. However, within the past year, we have also met with the presidents or faculties of Grambling, LSU, Southeastern and Northwestern universities.

Each meeting has been a learning experience for both parties in terms of gaining a better understanding of curriculum needs as well as our potential job availability for graduates. These discussions have been invaluable for identifying both resources and opportunities. Ultimately, the students will be the net winners of these discussions, and they will benefit from enhanced curriculum development that translates into actual job opportunities in Louisiana. Going forward, we see our company and our vendors playing an advisory role with our universities and K-12 partners in discussing creative partnerships and curriculums.

A recent example of a partnership opportunity is **this week's announcement by IBM, the State of Louisiana and CenturyLink**. The IBM center in Monroe represents a multifaceted, transformational partnership that will include expanded higher-education programs related to computer science, as well as create new economic growth opportunities in the Monroe area. The IBM center will employ a broad range of college graduates and experienced professionals with backgrounds in computer science, engineering, mathematics, and science. In addition to the 400 direct jobs that will be created at the

center, it is estimated the project will result in approximately 405 new indirect jobs, for a total of more than 805 new permanent jobs in this area.

The State of Louisiana is providing \$4.5 million in funding over 10 years to expand key higher education programs, including the computer science program at the University of Louisiana at Monroe, the cyber engineering program at Louisiana Tech, and the data analytics program at Grambling State University.

Additionally, IBM will work closely with local professors to recommend curriculum innovations focused on technology, math and software development, and equip students to meet the growing demand for business services, including advanced analytics, process innovation and application development. The partnership will also include formal internships with IBM and additional CenturyLink internships for students in the targeted universities. Additionally, IBM will work with the Louisiana Economic Development FastStart[®] program on recruiting initiatives, including campus events in Louisiana and neighboring states as well as via social media, alumni events and the development of recruiting materials.

In conclusion, I will leave you with three thoughts.

We believe that finding additional ways to improve the communication and alignment between the business community and our colleges and universities will foster additional partnerships and curriculums aligned with jobs.

We should also focus on meaningful education reform in our elementary and secondary education schools and curriculums. We would like to see additional development of STEM programs and integration and alignment of K-12 and higher-education programs and initiatives with workforce needs.

Louisiana, and in particular, the I-20 Corridor, have great potential to embrace technology as a key economic development driver. If our state is going to move forward with a high-tech economy, we must begin focusing our education goals towards math and the sciences now.

Lastly, let's not forget North Louisiana. The colleges and universities in this area have provided educations for literally thousands of students whose educations may have otherwise been put out of their reach by distance or cost if these universities had not been strategically placed. We are hopeful funding for our local colleges will be restored to meet the workforce needs of our state and overcome the negative outside perception of education our state experiences today.

Thank you. I will be glad to answer any questions you may have.

Chairman VITTER. Thank you very much, John. I appreciate it. Next is Dana Talley from the Louisiana Department of Education.

**STATEMENT OF DANA TALLEY, NETWORK 2 DEPUTY LEADER,
LOUISIANA DEPARTMENT OF EDUCATION**

Ms. TALLEY. I would like to thank Senator Vitter and Representative Abraham for the opportunity to speak to all of you about Jump Start today.

The greatest factor in both the growth of our State's economy and the ability of our high school graduates to become productive citizens will be the skills with which young people are equipped. While most jobs do not require a four-year college degree, high-growth high-wage jobs in Louisiana almost always require education after high school.

Today, Louisiana students complete either a TOPS University or Jump Start TOPS Tech graduation pathway. The two diploma pathways ensure ninth and tenth grade students focus on mastering a set of foundational academic skills in core subjects. This provides students with the opportunity to explore and discover their true interests, rather than forcing them to commit to a single graduation path too early in high school.

During the eleventh and twelfth grades, students will develop basic and advanced college and workplace skills that will prepare them for college and career success and ensure they are competitive in any workplace or academic environment.

Jump Start is Louisiana's new program to provide career courses and workplace experiences to high school students. Regional Jump Start teams comprised of school districts, higher education, the State Economic Development and Workforce Commission, and business and industry are formed to identify appropriate career and credentialing opportunities for high school students. These regional Jump Start teams develop and/or adopt pathways that outline career courses, workplace experiences, and industry-based credentials in career fields most likely to lead to high-wage jobs. The pathways developed and/or adopted by each regional Jump Start team are specific to the workforce needs in that region of the State.

Examples of Jump Start pathways this region will be offering include the following, and there are actually about 16 total, but I'm going to give you just examples of three. One is Health Sciences Patient Care Management. This can lead to an industry-based credential in Certified Nurse Aid, Emergency Medical Responder, or Emergency Medical Technician basic.

There's also Hospitality, Tourism, Culinary and Retail. This can lead to an industry-based credential in Certified Hospitality and Tourism Management Level II, Customer Service, or ServSafe.

Also, there's Agriculture Tech, which can lead to an industry-based credential in NCCER Level 1 or 2 in Carpentry, Electrical, or Welding, for example.

Louisiana's Course Choice Program, referred to as Course Access in other parts of the country, enables Louisiana families and students to select from hundreds of online and face-to-face courses not traditionally offered by high schools and middle schools. Course Ac-

cess makes sure that all students have access to the courses they need to succeed in college and career pathways.

Through Course Access, students can gain access to dual-enrollment courses offered at the State's four-year universities and career courses through private training providers and the Louisiana Community and Technical College System. Students now have access to foreign language courses, career and technical education courses culminating in industry-valued certification, Advanced Placement and TOPS-aligned college courses, ACT prep courses to increase chances of qualifying for a State scholarship, and math courses using Khan Academy. All of these can be difficult to staff and offer in rural areas but are now available to all students in all public schools around our State.

Jump Start regional teams, the Department of Education, Louisiana Economic Development, and the Louisiana Workforce Commission continue in their work to create a variety of graduation pathways, each with industry-valued credentials attainable by all Louisiana high school students on their way to on-time graduation. This includes specific pathways developed for and accessible to students who have typically struggled, as well as certain students with disabilities when determined appropriate by their IEP teams.

In order to extend these same opportunities for these students, the Jump Start programs have been scaffolded to identify multiple credentials that students may pursue based on their interests and abilities. For example, some students may be interested in and able to complete the series of courses and training needed to be a welder and achieve an NCCER industry credential. Other students may not be able to complete the welder curriculum, but can achieve a welder's helper credential. Both provide economic opportunity for students and are aligned to our State's workforce needs.

No other state's education department has partnered so closely with school districts, higher education, state agencies, and business and industry to identify appropriate career and credentialing opportunities for high school students. Jump Start regional teams develop and submit proposed graduation pathways to a multi-agency review panel which consists of members from Louisiana Department of Economic Development, Louisiana Workforce Commission, and the Louisiana Department of Education. This panel collaborates with the regional teams to ensure that course offerings in a pathway are relevant, that credentials are relevant and rigorous, and that sample schedules provide appropriate guidance to school counselors and educators.

The decision to approve proposed Jump Start pathways is driven not by state or local education bureaucrats but by business and industry, which certifies that the pathway is indeed responsive to the needs of our State's employers and economy. If the proposal does not meet the mark, the panel provides valuable feedback on how to adjust the proposal to make it meaningful and relevant.

I hope the innovative partnerships I have described show just how much is possible when we begin with the end in mind, when we prioritize the needs of our students and our State, and when we admit that we as educators cannot do it alone. Thank you for the opportunity to share this exciting work with you today.

[The prepared statement of Ms. Talley follows:]



LOUISIANA DEPARTMENT OF EDUCATION

*Testimony to be provided to the Senate Committee on Small Business and Entrepreneurship
"How Innovative Education Systems Can Better Prepare Students to Enter the Workforce"*

*Dana Talley, Louisiana Department of Education Network 2 Deputy Leader
February 20, 2015*

OVERVIEW

I would like to thank Senator Vitter for the opportunity to speak today regarding the Louisiana Department of Education's innovative work to better prepare all Louisiana students for college and careers, including those who have typically struggled, to prepare them to meet Louisiana's workforce needs, to the partnerships we have built with higher education and local business and industry to make this possible.

The greatest factor in both the growth of our state's economy and the ability of our high school graduates to become productive citizens will be the skills with which young people are equipped. While most jobs do not require a four-year college degree, high-growth high-wage jobs in Louisiana almost always require education after high school. A high school's most important role is to help students attain the knowledge and capabilities that make possible adult opportunities.

Today, Louisiana students complete either a TOPS University or Jump Start TOPS Tech graduation pathway, both of which provide rewards for schools, align with our state TOPS and TOPS Tech scholarship programs, and validate students on national benchmarks. The two diploma pathways ensure ninth and tenth grade students focus on mastering a set of foundational academic skills in core subjects. This provides students with the opportunity to explore and discover their true interests, rather than forcing them to commit to a single graduation path too early in high school. During the eleventh and twelfth grades, students will



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develop basic and advanced college and workplace skills that will prepare them for college and career success, and ensure they are competitive in any workplace or academic environment.

WORKFORCE NEEDS AND BUILDING PARTNERSHIPS

Jump Start is Louisiana's new program to provide career courses and workplace experiences to high school students.

Regional Jump Start Teams, comprised of school districts, higher education, the State Economic Development and Workforce Commission, and business and industry, are formed to identify appropriate career and credentialing opportunities for high school students. These Regional Jump Start teams develop and/or adopt pathways that outline career courses, workplace experiences, and industry-based credentials in career fields most likely to lead to high-wage jobs. The pathways developed and/or adopted by each Regional Jump Start Team are specific to the workforce needs in that region of the state. Examples of Jump Start pathways this region will be offering include the following:

- **Health Sciences Patient Care and Management**, which can lead to an Industry-Based credential in Certified Nurse Aid, Emergency Medical Responder, or Emergency Medical Technician basic, for example.
- **Hospitality, Tourism, Culinary and Retail**, which can lead to an Industry-Based Credential in Certified Hospitality and Tourism Management Level II, Customer Service or ServSafe, for example.
- **Agriculture Tech**, which can lead to an Industry-Based credential in NCEER Level 1 or 2 in Carpentry, Electrical, or Welding, for example.

Louisiana's Course Choice Program (referred to as Course Access in other parts of the country) enables Louisiana families and students to select from hundreds of online and face-to-face courses not traditionally offered by high schools and middle schools. Course Access makes sure



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that all students have access to the courses they need to succeed in college and career pathways.

Through Course Access, students can gain access to dual-enrollment courses offered at the state's four-year universities and career courses through private training providers and the Louisiana Community and Technical College System (LCTCS) campuses. Students now have access to foreign language courses, career and technical education courses culminating in industry-valued certification, Advanced Placement and TOPS aligned college courses, ACT prep courses to increase chances of qualifying for a state scholarship, and math courses using Khan Academy. All of these can be difficult to staff and offer in rural areas, but are now available to all students in all public schools around our state.

STRUGGLING OR NON-TRADITIONAL STUDENTS

Jump Start regional teams, the Department of Education, Louisiana Economic Development and the Louisiana Workforce Commission continue in their work to create a variety of graduation pathways, each with industry-valued credentials attainable by all Louisiana high school students on their way to on-time graduation. This includes specific pathways developed for and accessible to students who have typically struggled or been academically behind, as well as certain students with disabilities when determined appropriate by their IEP teams. In order to extend these same opportunities for these students, the Jump Start programs have been scaffolded to identify multiple credentials that students may pursue based on their interests and abilities. For example, some students may be interested in and able to complete the series of courses and trainings needed to be a welder and achieve an NCCER industry credential. Other students may not be able to complete the welder curriculum, but can achieve a welder's helper credential. Both provide economic opportunity for students and are aligned to our state's workforce needs.



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SPURRING INNOVATION

No other state's education department has partnered so closely with school districts, higher education, state agencies, and business and industry to identify appropriate career and credentialing opportunities for high school students. Jump Start Regional Teams develop and submit proposed graduation pathways to a multi-agency Review Panel, which consists of members from Louisiana Department of Economic Development (LED), Louisiana Workforce Commission (LWC) and Louisiana Department of Education (LDE). This Panel collaborates with the regional teams to ensure that course offerings in a pathway are relevant, that credentials are relevant and rigorous, and that sample schedules provide appropriate guidance to school counselors and educators. The decision to approve proposed Jump Start pathways is driven not by state or local education bureaucrats, but by business and industry, which certifies that the pathway is indeed responsive to the needs of our state's employers and economy. They provide a critical "reality check" in telling us whether the proposed pathways will really lead to economic opportunity for our students. If the proposal does not meet the mark, they provide valuable feedback on how to adjust the proposal to make it meaningful and relevant.

CLOSING REMARKS

I hope the innovative partnerships I have described show just how much is possible when we begin with the end in mind, when we prioritize the needs of our students and our state, and when we admit that we as educators cannot do it alone. Everything we do should be aimed at maximizing the economic opportunity of our next generation of citizens and providing them with a pathway to prosperity. In doing so we will build a stronger, more vibrant state in which to live. Thank you for the opportunity to share this exciting work with you today.

Chairman VITTER. Thank you very much, Dana.
 And now our final witness, Dr. Nick Bruno, President of ULM.
 Dr. Bruno, I explained you were hung up in traffic, and I've already provided a glowing 33-minute introduction of you.
 [Laughter.]
 So it's all teed up.

**STATEMENT OF NICK BRUNO, PRESIDENT, UNIVERSITY OF
 LOUISIANA AT MONROE**

Dr. BRUNO. Thank you, Senator and Congressman Abraham. Thank you for allowing me to participate.

I want to thank Senator Vitter for the opportunity to address the very important topic of higher education and the challenges and opportunities we face as we work toward facilitating and advancing innovation within our institution. Innovation and focus are critical in preparing our students for the workforce.

The current workforce needs in Louisiana are very diverse. We continue to have considerable necessity for a significant blue collar workforce, but that workforce requires different skills and technology from their predecessors.

The reliance on technology in all applications requires training at a higher level. These jobs, such as process technology, are intensive and comprehensive training programs that provide not only the skills to operate in a modern plant environment but also facilitate these jobs with a greater understanding of the processes.

Our community and technical colleges are doing well in the preparation of this workforce and in helping to fill the demand for trained professionals. In addition, they are preparing many of those students for the opportunity to earn a four-year degree.

Louisiana's workforce is evolving and becoming more technology based. With companies such as IBM, CSC and CenturyLink operating in Louisiana, the need for more workers with training in STEM-based degrees is growing faster than the universities' ability to produce these graduates, but we continue to work toward finding students who are well-suited and better prepared for entrance into these fields.

In addition, the need for health science professionals will continue to grow as a result of our aging Baby Boomers who are nearing retirement. This is also a very important issue related to quality of life for companies as they choose where to locate. These trends are not limited to Louisiana and are seen across the country.

Student well-being and support are important to both recruitment and retention. As state support for higher education decreases across the country, students bear a greater proportion of the costs for their college degrees, which is resulting in higher debt burden. We are confident that continued conversations about lowering interest rates for these loans will provide incentives for students to earn post-secondary credentials and reduce the economic burden they face later in life, and this burden is felt by both traditional and non-traditional students.

Non-traditional workers provide a significant source of potential students for all of higher education and to assist in building our skilled workforce. In order to tap into that pool of potential stu-

dents, institutions must alter what has been a delivery model focused upon students of traditional age.

Institutions should understand that non-traditional students bring with them many life experiences which add value to their classroom instruction. Universities will need to look more closely and adopt effective systems of granting credit for both the life and work experiences non-traditional students have gained through their careers.

Another issue is that of convenience. Non-traditional students usually work or maintain households and families. Providing classes at times convenient to these students is critical in maximizing their attendance and success. For example, online instruction provides this convenience. At ULM we have redesigned our online offerings by creating a separate division referred to as eULM.

eULM provides eight-week modules which allow students to opt in and out as they wish. It also provides a more expedient path to completion. We offer 36 online degree programs ranging from associate to doctoral level degrees. ULM has also initiated several post-baccalaureate certificates which provide individuals, generally non-traditional, the opportunity to certify in high-demand fields such as accounting, computer information systems, and financial analytics.

Finally, faculty must be made aware of the sensitivities of the non-traditional student. These sensitivities include work and family demands that are not as prevalent for most traditional college students, and we try to provide services—like the child development center; a full-time student advocate and retention coordinator to help students resolve problems with university procedures and policies; and four full-time academic advisors for online students—that help our non-traditional students advance in their coursework while maintaining full-time careers and families.

At ULM, our community partnerships are also important to the sustainability of our university. We have been very aggressive in developing collaborative agreements with local businesses, as well as educational partners like Louisiana Delta Community College. ULM's business partners include Chase, CenturyLink, Angus Chemical, area hospitals and clinics, and school systems, to name a few.

In these partnerships, we become more aware of the needs they have for the graduates we produce. To ensure our graduates are prepared, we work with our partners to adjust curricula, co-sponsor pertinent and timely symposia, and pursue research in areas which will have broad-based benefit for our students, who will hopefully become their employees.

Together with Arkansas State University, ULM has been contracted by the Delta Regional Authority to operate a leadership institute in the lower Mississippi River Delta. In fact, the Louisiana Delta community is also a partner in that grant. The program trains community leaders and develops their skills to face the global challenges of the 21st century.

We are also currently working with JPMorgan Chase to develop a post-baccalaureate program in mortgage analytics that will help their employees use data more effectively. We have also partnered with JPMorgan Chase and United Way to develop a high school fi-

nancial literacy program that has been taught to thousands of high school sophomores throughout the region.

ULM faculty have visited local high schools to deliver the training and have developed an online version of the program as well. In addition to basic financial literacy concepts, the program emphasizes the importance of education and preparation for good paying jobs. The program has exposed students to careers in business, an area that has many in-demand career opportunities in Louisiana.

ULM faculty and staff worked closely with CenturyLink to develop two innovative post-baccalaureate certificate programs to help meet CenturyLink's workforce needs in accounting and computer information systems. ULM and CenturyLink collaborated to define the curriculum that would prepare existing CenturyLink employees to move into high-demand positions. Classes are offered onsite at CenturyLink, and the Workforce Commission has provided funding to support those programs.

Our Office of Continuing Education provides courses for area dentists and dental hygienists, and numerous certification programs also are available in areas such as diabetic wound care, phlebotomy, and certified nurse assistance.

ULM has also developed degree programs focused on the use of unmanned aerial systems in the field of precision agriculture. A regional Center of Excellence was also established and has received its first external funding grant—I thank the Senator for his assistance with that—from the Delta Regional Authority. It will help train farmers in the use of unmanned aerial vehicles and the data they collect.

ULM partnered with a local farmer to pilot the application of ULM's UAS drone in precision agriculture. The ULM drone has been flown over farmland throughout the growing season, capturing images that have led to decisions regarding application of fertilizer, chemicals, and water. Through this partnership, ULM anticipates enhancing its ability to capture data through the use of drones, but more importantly, develop expertise in data management including data representation, analysis, and interpretation.

We continue to develop courses and curricula based on the use of unmanned aircraft and await the establishment of Federal Aviation Administration policies and procedures which will allow the developers of intellectual property to proceed within federal laws. Innovation is a by-product of the discovery process. Most innovation materializes as a result of pursuing another discovery. For example, Post-It Notes was invented as a result of a failed adhesive product. Regulations regarding unmanned aircraft must be formulated and issued in order to maximize the opportunities for expansion of innovation. Delays in FAA regulations for these programs prohibit universities from maximizing the benefits and opportunities these aircraft can afford.

Similar to our UAS program, ULM's innovative outdoor Construction Practices Lab simulates a construction site and allows students to gain critical hands-on experience managing the various aspects associated with construction projects. A majority of equipment and supplies for the lab have been donated by local and regional construction companies.

ULM works toward preparing our students for the workforce by giving them the connections with community and national partners, coupled with the skills needed to be competitive in both the classroom and the ever-evolving job market. Our goal is to ensure that we provide each student an education they can be proud of and that they can use to provide intellectual capital to our region and to our State.

We also, I'm happy to announce, are meeting with a group of investors today which will explore the opportunities of commercializing several of our patents in the pharmaceutical area.

As you can tell, I am very passionate about higher education, especially at ULM. Thank you again for the opportunity to provide input to this committee.

[The prepared statement of Dr. Bruno follows:]

WITNESS ORAL STATEMENT
PRESIDENT NICK J. BRUNO
Senate Small Business Committee Field Hearing
Louisiana Delta Community College
Friday, February 20, 2015

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As you can tell, I am very passionate about higher education, especially at ULM. Thank you for this opportunity to provide input to this committee.

Chairman VITTER. Thank you very much, Dr. Bruno.

And now we're going to continue the conversation, with Ralph and I alternating and making comments, asking questions.

I'll kick it off. And, John, I'll start with you as the private-sector guy there, not only from the private sector but from a company that just made exciting positive announcements with your new IBM partnership and all of your expansion and construction.

Two related questions. First of all, how would you grade the responsiveness of institutions here, particularly educational institutions, when you go to them and explain the exact skill sets you need?

Number two, what's the conversation like in your boardroom or with IBM when this issue of continuing higher ed budget cuts and other things comes up?

Mr. JONES. Sure. To the first question, the discussions we've had, not only with higher ed but also K-12, have been really kind of exciting in a way. You can see the energy level in the room rise as educators start tapping into what we're trying to do. And then we're also learning at the same time what they're able to provide.

We've made some great discoveries right in our backyard we weren't aware of, so the dialogue is very encouraging. We had Northwestern University's president and provost in just this week. We don't know that much about Northwestern. It's not that far away, but we don't know that much about their programs, and they didn't know that much about us, really. They did a little homework, but we had about a one-and-a-half-hour conversation and found about four different synergies there where we could partner in a lot of different ways.

They had two curriculums we didn't know they offered. One was a cyber-forensics curriculum. We're one of the largest cyber providers in the country for the government, and they had an engineering technology program we did not know they had.

So that's just an example, and that's been duplicated over and over again. We've met with high school principals. We met with both superintendents here. Again, the STEM education keeps coming up as a focal point.

Chairman VITTER. Great.

Mr. JONES. The discussions with IBM you wanted to know more about, the reaction to education?

Chairman VITTER. Yes. I mean, obviously, these days we're talking a lot about continuing perspective higher ed cuts, and I know that's got to be part of the discussion you have, particularly with partners like IBM, and I just wanted some flavor of that.

Mr. JONES. That's really a big issue. The Internet is our best friend and our worst enemy. We're recruiting from all over the world. Our new strategic executive VP of planning came from the Netherlands. So we're recruiting some of the top talent that's out there today. They're systems people and network people and engineers, and they have a choice of going anywhere they want. This individual had been with Samsung that we just recruited. So they are very picky about where they bring their families.

So if you're thinking about going to Seattle and you had small kids, the first thing you would do is go check on the education system, you would check on crime, you would check on everything

that's out there, and these people are no different. So they read about our city council, they read about our school boards, they read about the politics and they say, you know, I'm not really sure.

So when IBM comes, as an example, they do the exact same thing. And I'll give the Governor's Office credit, they have done a great job of recruiting them to Baton Rouge and to here. But the way we actually work that is that when we engage with a vendor, and IBM will be doing significant business with us—I'll give Glen Post credit for this—Glen Post asked them to put down significant stakes in this community. I think Dr. Bruno will testify to that, is that one of those was you will partner with the universities here in some capacity.

So we actually make a request that if they're going to service us, then they are going to also walk the walk with us as well. That's how we're actually working with our vendors who are considering coming here.

But their perception of education in this State and in this area is not good, for lack of a better term. It's not good. So we have to overcome that perception. We have to show them their opportunities. Once they get here and they see the educational opportunities we have here, they see the passion of the universities, then they get engaged. But getting them here is sometimes a challenge just based on a global perception of Louisiana and how it ranks in education.

Chairman VITTER. Ralph.

Representative ABRAHAM. First a statement, and I'll use a poor analogy, but it goes back to the ISIS question.

The good news about what we're doing here today is we're defining the problem, and once you define the problem, then you can work on the problem; unlike, unfortunately, we don't call ISIS what it is.

And what a privilege for me to be among you guys. I think we sat down and talked to everybody but Dana. But to get four of you talking together, for me it's just huge for my district.

Two questions, and I'll ask the first one to you, Dr. Nick.

There is active discussion with Senator Vitter's group in the Senate and certainly us in the House about reducing the interest on the student loans down to 1 to 2 percent instead of 6 to 8 percent, where it fluctuates now. Would that help immensely in your arena?

Dr. BRUNO. Congressman, certainly it will help those students. As tuition increases have been recurring, part of the challenge is that with state funds restricted to maintain the university's operations at a minimal level, the students are being asked to pay more and more of those operating costs. So they are forced to take loans, grants. Pell funds have been capped, which now ULM tuition exceeds Pell monies. So students are forced to borrow money, which puts them in a position of—at some point you want a student who graduates to get a good job and to be able to get a good quality of life. If they are saddled with student loans for 20 or 30 years and those rates continue to escalate, they will never have the opportunity to buy homes or to reach that quality of life they had hoped for when they pursued their degrees.

So, yes. I think—and I will commend him for that effort, I think, to minimize those interest rates. But I think the system has to be

reviewed completely as to—I think we have to do a better job counseling those students that you can only borrow so much within the field you're in. We have to do a little better in giving them financial advice, that if you're majoring in certain fields, the amount of money that you're borrowing you will never pay back.

So I think there are some factors that are involved that when a student can stay in and borrow \$75,000 or \$100,000, if they're majoring in history or math versus majoring in pharmacy, the probability of payback for them is going to be significantly different and much more adverse.

So, yes, I think if we can do that all within the concept of some additional financial counseling to help them as it relates to student loans and overall debt that they assume while they're in the university.

Representative ABRAHAM. If I might, one more?

Chairman VITTER. Sure.

Representative ABRAHAM. Dana, I just have a question.

Dr. Hanson, do you have a comment?

Dr. HANSON. Yes. I would just like to also comment. We here at Louisiana Delta Community College, we have access to student loans as well as Pell Grants. From my perspective, one of the things that I hope—and I'm in agreement with the idea of having the conversation about lowering the percentage rate. But one of the challenges that we face is dealing with the 600,000 folks in the state of Louisiana who do not have a high school credential and who do not have any kind of training whatsoever. They do not qualify to apply for those types of student loans or for Pell Grants. So any conversations that can be held relative to looking at using the Pell Grant in particular, and perhaps student loans for short-term training whereby a student can prepare themselves and that they're going to go out and get a job.

We were recently awarded the opportunity to provide Sallie Mae grants for a non-credit program, and that was a big deal. That's not something they usually do, but we had a good reputation for the program. It's our area application program. Crop dusting, basically, is what it is, and Sallie Mae, after much discussion, said yes. Our position was, look, you have someone who is coming in, and it goes to what you were saying, Nick. You have someone who is coming in who, within a very short period of time, will be eligible to go out and earn six figures, and we ask you to loan them \$50,000; whereas you might have someone who is going to spend four years and not get a pharmacy degree but get an English degree, and they may or may not be able to get immediate employment.

So that type of consideration in discussions of providing funds that support student access would be very beneficial.

Representative ABRAHAM. Dana, that leaves me the question I have for you. Everyone in this room knows that we couldn't start our car every morning if it wasn't for the technical component of this society, thank God for them. I know it's probably early to have actual data, but have you seen an attitude in your high school as far as less apt to drop out since Jump Start has been started or processed?

Ms. TALLEY. I want to start with I think it's going to take a little bit of time for us to change the mindset of parents and kids about

a career diploma, and those in education know that. We have to really start with the end in mind of what this can do for you.

What I've heard is, I've heard a lot of parents who are educators say to me if only this were available when my kid was in high school. So, yes, we don't have any data yet, but I'm having districts tell me that they think 40 to 50 percent of their kids will end up going the Jump Start route.

Again, what we're trying to do with the credentials is scaffold them so even those kids with disabilities or those kids who have struggled will have an opportunity maybe to not have a full industry-based credential but to be well on the way to the credential when they graduate high school. And if they see, if a kid is sitting in high school and sees that in the end I'm going to have this credential that's going to help me be more marketable to employers, I think that's going to be the incentive.

So I think whether or not this impacts drop-out rates is going to be how we frame it to parents and kids.

Representative ABRAHAM. Okay. Thank you.

Chairman VITTER. Dr. Hanson, we've been talking about Pell Grants. Are there particular requirements under that program right now which make it difficult in some circumstances to use a Pell Grant here at Delta?

Dr. HANSON. Over the course of the last few years—and I think every institution of higher education has experienced it—there has been a limitation relative to how Pell Grants can be used. It was imposed, and I think it was probably done as a cost-saving measure, and perhaps those who have more in-depth knowledge would be better able to respond to the actualities of it.

But right now, you have to be involved in a program, a course of study that is so many weeks in length, has so many contact hours. You have to be going at least half-time or full-time. And that's great, except a lot of what we want to be able to provide for students is short-term training where there are jobs where they can spend 8 weeks, 10 weeks, 12 weeks. They could very easily have education in that period of time and go out and get a real job making a minimum wage—not a minimum-wage job, making above minimum wage, a life-earning wage. And that is not available right now with the Pell Grants.

I know last year that Senator Landrieu had put forward a bill on the federal level called the Jobs Act bill, and I don't remember all of the particulars of it, but in general my understanding was that it would provide an opportunity to apply for Pell Grants for short-term training, thereby moving around some of those particular types of limitations that are put on the current Pell Grant.

Chairman VITTER. Right. For all of you, after Pell Grants and student loan rates—those are two obvious categories—what else on the federal level is an impediment that we need to break down to make this work better?

Dr. HANSON. In terms of student access?

Chairman VITTER. In terms of anything that impacts this sort of skills training.

Dr. HANSON. Well, I don't know if it's the federal level. I think it's the entire level. It's something that Ms. Dana just alluded to. Somewhere along the way, if I may, it's a cultural issue. There's

a stigma attached to going into career and technical education. Somewhere along the way it became a dirty word. It was something less than a four-year.

It is not less than a four-year. It is different than a four-year education, and there is a need for both. But somewhere along the way in our Nation, we decided that unless you're going to get a four-year degree, it's not good. But that's not what made our Nation great.

I heard a speaker a couple of years ago who is the president of Snap-On Tools, and he spoke very passionately about the fact of what made this country great was those folks who went out into the workforce who had skilled jobs, and they contributed to the economic well-being of this Nation, and that's where we are in Louisiana right now, and that is not to say that there is not a need for four-year education. There is.

We have professional programs that we have to have, such as our pharmacy school and our teacher training and things like that. But I don't know what the federal government can do in terms of trying to change the culture. It is different.

And I will end with telling you just one little story, if I may. It's very short.

I always think of myself, not to be prideful, but as a fairly intelligent person. But I took a mechanical aptitude test once, and the gentleman who adjudicated it asked me not to walk within 300 feet of a machine.

[Laughter.]

My mind just doesn't work that way at all, but someone's does, and that's an intelligence that I don't have but they have.

So I think we need to get back to the point where we recognize that there are many, many different intelligences, and to help people understand that there's not "better than." It's "different than," and we need all sorts of trained workforce.

Chairman VITTER. Well, first of all, I agree with you completely. I'm hoping one of the ways we change that attitude and even the playing field, at least here in Louisiana, is when in the next few years those folks with the right skills training at 21 step into a job at \$55,000, and in five years they're at \$100,000. That can start to change some attitudes quickly when people notice. So I think that's part of it, not all of it.

Any other thoughts about changes at the federal level to make this work better?

Ms. TALLEY. For us, it's the exact same thing that she said. It's about changing the mindset so that we can get kids into careers that are going to meet their abilities and the things that they're interested in. So I think she said it perfectly.

Dr. BRUNO. From a four-year perspective, of course, rulemaking as I referred to in FAA. We have a technology there that has the opportunity to really touch on all levels, as Dr. Hanson is dealing with here at Delta, but also at the university from the data collection and so forth. There are so many opportunities in this new technology.

Currently, it's slipping away from us simply because you can buy them now on the Internet. So you'll find individuals who are flying

them everywhere. They don't know what they should be doing, and we haven't focused that attention. So rulemaking is critical.

I think that we also need to look at the grant process, the grant from a research perspective. It becomes quite laborious. It engages so many people, so much time consumed, that if proposals are done they take months and months and months to be evaluated and responses done.

If we're going to advance technology, advance innovation, we have to have a more expedient manner in which research dollars, which have been reduced, research dollars have to be increased at the federal level and brought back to the universities in order to bring us to that next level. We have not had significant investments in research since the space program. So we need to revisit that and to ascertain what are the emerging areas that the country needs, not just the states but what does the country need, and allow the universities with that skill to move forward on grants to develop those innovations and technology issues.

Chairman VITTER. Great.

Go ahead.

Representative ABRAHAM. John, just a quick question for you. I know everybody in the room appreciates the economic engine for this area.

Dr. Bruno, you said that there are many STEM applicants and maybe not enough resources, and that's actually a good problem to have, in my opinion.

John, I'll fall back on my medical. When we have student loans in the medical field, sometimes \$200,000, \$300,000 when we graduate, and if we go to an underserved area, or if we sign a contract for six or eight years, that hospital, that company, whoever, agrees to help us pay back that loan.

Is there a dialogue, is there discussion in companies of your magnitude that if an applicant with a \$150,000 student loan comes to you and agrees to—let's say an engineer signs on for six or eight years, is there any discussion or thought about maybe helping loan repayment?

Mr. JONES. First of all, my brother is a physician, and he actually paid off his loan in Columbia, Louisiana.

Representative ABRAHAM. Good deal. I paid mine off.

Mr. JONES. So I understand that part of it.

We have not, to my knowledge—I'll check with our HR Department, but to my knowledge we have not had to broach that issue yet. I guess, at best, we would hope that the salary and benefits we pay would help them pay down that loan faster, because we do pay a little bit above average.

But I think those are the types of questions that are surfacing, to be honest with you. We are getting questions like that from individuals because the debt load is so much higher than when I went to school. So I'm thinking that the WISE program actually also—it's not a perfect corollary, but that also got us thinking about how we use our budget in the company to actually get the type of people that we need.

So I think it's really just a question at this point, but as we keep getting deeper into the education process I'm thinking that's something we will have to deal with going forward.

Representative ABRAHAM. Okay. Thank you.

Dr. HANSON. I had a comment about that.

Chairman VITTER. Sure.

Dr. HANSON. Just along those lines, and it may be something that could be addressed at the federal level, and certainly at the state level. Many states that I have had the opportunity to serve in have engaged in loan forgiveness programs on the state level for high-demand jobs. For example, when I was in Arizona, the nursing. If you got a nursing loan to go to school, you had to sign a promissory type situation where you would agree to stay in the state and work for a certain number of years, and a percentage of that loan would be forgiven every year. But it was to grow your own, so to speak, what was needed in the state, and that might be something that would fit well with aligning the things that we're doing with Jump Start and WISE that would affect both the community and technical colleges as well as the university for those programs where we have folks that really we need to train them for this State, but there's an incentive then to keep them in the State.

Chairman VITTER. Right, absolutely.

Dana, let me follow up. You talked about Jump Start, which obviously is a very important initiative that goes directly to these issues. I've seen it very developed really being implemented aggressively in some systems and not in others.

How do we really sort of put it on steroids and accelerate it state-wide?

Ms. TALLEY. And I've seen that as well. We have some districts in part of the State that have already been doing career ed really well for a long time, and other districts that have not really had any kids on the career diploma route prior to Jump Start.

I think what I am seeing—and I just can really speak to the 14-plus Lincoln districts that I work with, and George is here today. I am seeing a real level of energy with the folks at the district level who understand what this can mean for kids and how this can totally change whether or not they even stay in school. We know if they don't stay in school, they have really no chance.

So what we're trying to do is really now dig into the logistics of what pathways would these kids be interested in, what courses should they take, what credentials can they potentially earn, and I am actually seeing—like if you had asked me six months ago about the Northeast and where we were, I would say, well, we're kind of just slowly moving along.

I will tell you in the last two months I have seen a tremendous boost in energy and attention and movement, and I think we're well on our way. I think we are well on our way, and I see George is shaking her head. I think we're continuing to learn from other districts that are more advanced in terms of where they are here, and our folks are willing to do that. So I think we're in good shape.

Chairman VITTER. Great, great.

Ralph.

Representative ABRAHAM. When Senator Vitter and I and the rest of the Louisiana delegation talk about mega-sites, we're fortunate to have several here in Louisiana. The companies are always asking the elephant-in-the-room question about technical labor.

They are not seeing it, and sometimes that's a hindrance to bring in the Volvos, the big companies here, because there is a limited technical labor force.

I guess the question is, is there a mechanism that we can reach out to those companies individually and market what we have here in the State? We have just a wonderful group of technical people that are very skilled, but I don't think we have done well enough to market our skilled labor. Just thoughts on that?

Dr. HANSON. I've been here two years, so I still have the, I guess, opportunity to sometimes look from the outside in. What I think we have here in Louisiana that people don't always understand—and I'm not just saying this because you're all sitting in the room—is the caliber of people that live in Northeast Louisiana, their work ethic, their sense of pride and their character.

You may not like and sometimes think you don't have everything you should have, but this is phenomenal, this whole culture that we have in this part of the State. I've been other places.

So for me, again, looking from the outside in, there are so many riches in the State, and particularly Northeast Louisiana, because that's where I like to be. But I sometimes think that we may not do a good job of presenting ourselves as who we are and what we are, the cohesion that we do have and the sense of pride that we have here.

Representative ABRAHAM. Can we help you do that on the federal level? That's what we're asking. We want to help.

Dr. HANSON. Right. But I use that as a preface because I think there are a lot of other things that need to be met immediately in terms of that technical workforce that you may need from the two-year perspective. There are so many folks, particularly in Northeast Louisiana, who have not, for whatever reason—life happened, and they didn't get that high school degree, and they can't take that first step, and they can't qualify for federal loans because they didn't get the high school.

There's the piece of the culture of this area, of the people that live here, their strengths. At the same time, we have a lot of socioeconomic challenges in this area. So to get them to that next level, what we can do at the federal level from my perspective is to incentivize those short-term trainings to allow folks to bring back the ability of benefit testing that would allow someone who can demonstrate that they have the ability to benefit from education, they can get into school even without that high school equivalency, things like that.

I think we have so much, and we sometimes miss that pathway. I don't know if I answered your question or not.

Representative ABRAHAM. It helps.

Yes, John.

Mr. JONES. Representative Abraham, as some people in the room know, we are leading an effort to get the community ready for what's coming in terms of not only the employees but the 800 or so spouses that are coming with them who need jobs as well.

Representative ABRAHAM. That's right.

Mr. JONES. So we see at some point we could have a lot more people looking for jobs, skilled or otherwise.

But some of the thoughts that we've had, even in the education area—and again, we're learning as we go from the people we're trying to recruit. We're getting direct feedback as to why they didn't come or why they did come, and we've even talked about the Web sites of the schools in the parishes and the city.

My view of them a year ago is we were really talking to people in Ouachita Parish in terms of how we presented those Web sites and what the schools offered, and now we actually have people clicking on those Web sites from all over the world to check in to see if they've got these programs you're talking about. So we really need to kind of learn to re-market ourselves. It's a global society.

But little things like that, how we look at ourselves and what we have to offer, we really need to start thinking about who we are communicating with, and then adapt our messages and our marketing, whatever it may be, to those audiences. The Volvo CEO may be clicking on northeast Louisiana to find out more about us.

Representative ABRAHAM. That's right. Okay. Thank you.

Dr. BRUNO. I think Louisiana has done an amazing job selling our State from an economic development perspective. As we look around, we see the evolution of the workforce that's transpiring now with IBM, CSC and, of course, CenturyLink. But it's throughout the State, in New Orleans with GE and different areas.

If you look around the country, the areas that have sustained the least variation in economic progress have been those that have been focused around great educational systems. People talk about Austin, Texas. Austin was a well-educated area before it grew. Businesses want workforce before they invest their dollars. In chats with IBM in the last several weeks, they want to employ 400 people, of which I think 70 or 80 percent will be new graduates.

Just to give you a perspective, ULM, Louisiana Tech and Grambling produce less than 100 graduates a year in those fields. So we're already behind. So we're a little bit out of sync. We've sold a product that we've not yet made, and if we're going to grow and recruit the Volvos and more technology firms and so forth—because I think John has seen it. I think CenturyLink has seen—four years ago or five years ago, CenturyLink was pretty much the only game in town for certain positions. Now as you've added IBM and CSC and a firm in Lafayette and General Electric down in New Orleans, the demand for those graduates has gone through the roof, which has forced them to now look internationally and nationally for employees.

Education has got to be the center, and it starts at our K-12. They have got to prepare those students for community colleges. They've got to prepare them for four-year schools. They've got to prepare them for the technical colleges. And the more we can educate our population, the more it will grow on itself.

I was the first person in my family, both father's and mother's side, to get a college degree. But with them, there was no doubt, they wanted better for their children. We have to instill that. We have to change the culture. I'm not sure quite how to do it, but it begins in that K-12. It begins in K-4. We have to get them reading. We have to be able to accept students at the four-year programs that can do math, that can read and write, that have mastered the English language in writing and speaking.

The community colleges are in place. We turned down 400 freshman applications this year at ULM. Our freshman class is less than 1,400. So almost over a third were turned down because they did not meet the admissions standards. So just think, if ULM could have accepted 400 more students, what that could have done to this entire community. I'm sure Dr. Hanson would have loved to have accepted 400 more in her program.

Dr. HANSON. We did.

[Laughter.]

Dr. BRUNO. That's good, because if we have more high school degreed students who are prepared, they move on to the community colleges or four-year schools.

That workforce that we're talking about is going to evolve, but it has to start today. We have to get funds into our programs, wherever they come from—the state, local, federal—because just this week I lost three math faculty, and I can't recruit because they don't want to come to Louisiana because of budget issues. They don't want to come because of uncertainties, and pay. We're paying significantly less than competitive states.

I told someone yesterday I know of a dean in one of our Louisiana universities that just left to go to Mississippi. Now, when we begin to lose people to Mississippi—

[Laughter.]

Representative ABRAHAM. It's bad, it's bad.

Dr. BRUNO [continuing]. It should be a clarion call that we have to do something.

So I appreciate what you all are trying to do, but I'm not sure federally how we can facilitate that other than assistance for students to pursue higher ed. But from a State level, which you all certainly have some influence on, it's important that we focus on that and try to make sure that we stabilize these budgets and give us more resources to meet those demands.

Chairman VITTER. Absolutely.

Dr. Hanson.

Dr. HANSON. Just to piggyback on what you said, Nick, and you correct me if I'm wrong. We've had this conversation. I'm also a first-generation college graduate in my family. My family was in business. But in any case, we've often had the conversation about we just need that generation that has gone to college or is thinking about sending their kids to college, and then that next generation they're going to be coming in droves, whether they're going to a two-year or a four-year. It's going to be more of the orientation.

But it begins, for me, as I said before, with northeast Louisiana. Despite the riches, we have a lot of folks that have economic challenges, and they have educational attainment challenges.

So we've got to figure out a way to meet that need to create the pipeline so that they can go in through high school and they can go to the community college, they can go on to the university if that is their goal, whatever we can do to make that fluid.

Chairman VITTER. Right.

Okay, we're going to wrap up. I want to start to wrap up by thanking our great witnesses. They are obviously the heart and soul—

[Applause.]

They were the heart and soul of our discussion on this topic today. Even more importantly, they're doing great work in this vital area. So, thanks to all of you.

Dr. Hanson, thanks in particular for hosting us here at Louisiana Delta Community College. This was the perfect setting both in terms of the great facility and in terms of being at a center for this sort of training.

I also want to thank my great colleague, Ralph Abraham.

Ralph, thanks for joining us.

[Applause.]

Chairman VITTER. Appreciate it.

And thanks to all of you for coming out.

As you know, I'm in this part of the State, like in every part of the State, on a real regular basis with different forums and town halls. So please continue to come out to those; and in-between them, don't hesitate to call, email, write with comments, concerns and suggestions.

You have a handout, and on that handout there's a blue column on the left-hand side. That's all of my contact information. That includes our Monroe office. That includes our Web site, which has easy email access. So please keep that handy.

But thanks for coming out today. Thank you very much.

[Applause.]

[Whereupon, at 11:30 a.m., the hearing was adjourned.]