

Special Report

NUESTRO FUTURO

Today, about one in four students in the U.S. public school system is Latino. But few are pursuing careers in science, technology, engineering or math (STEM). That has to change if the U.S. is going to meet its current demand for 100,000 new engineers per year. The Department of Labor estimates that nearly 50

percent of new jobs in the next decade will be STEM related. But this message has yet to be communicated effectively to the Latino community.

With that end in mind, opinion leaders from corporate America, the Federal government, academia and Latino nonprofits convened in Washington, D.C. on April 21 for a daylong

conference focused on attracting Latinos to the STEM fields and ensuring their success. *Nuestro Futuro*, the second annual Latino Education Conference, drew over 250



Rear Admiral Charles Rainey

2011 LATINO EDUCATION CONFERENCE



(l-r) Lee Shirley, Dalia Almanza-Smith, Alma Crossley and Sofia Anzaco

opinion leaders to the historic Omni Shoreham Hotel in Washington, DC to explore the issue and devise solutions.

"You're all here for a reason, because you're concerned about a very important issue for the Latino community," said LATINO Magazine Publisher Alfredo Estrada during his opening remarks. "Some of our panelists will be talking about, quite literally, rocket science. But what we're doing is not rocket science. What we're doing is communicating to the Latino community the importance of STEM."

Rear Admiral Charles A. Rainey, Vice Commander of the Space and Naval Warfare Systems Command in San Diego, opened the conference as the keynote speaker. He spoke of how important technical knowledge is to national defense and of the immediate need for STEM-educated workers to replace those who are nearing retirement. "STEM gives us that solid, core skill set that enables innovation and keeps our nation in the forefront," Rainey said. "It's not always possible to see where the next big thing will come, but we need to give our young people the skills to lead the development of and to capitalize on new technologies. Who could've seen the impact that social networking technologies have had on world events? But it's happening today and we need to be prepared for what comes next."

Rainey also talked about his command's efforts to reach out to San Diego-area students, a large number of whom are



LATINO Publisher Alfredo Estrada and Cecilia Munoz, White House Director of Intergovernmental Affairs



Speaker

"Not only are we at the table, it's our table, this is our country to shape."

Cecilia Munoz is the Director of Intergovernmental Affairs at the White House.

2011 LATINO EDUCATION CONFERENCE

it's going to take time to turn them around," Simmons said. "But there is a sense of urgency because we cannot wait and let another generation of our children begin to not have the type of quality education that we need."

After a brief networking break, *Nuestro Futuro* continued with a panel focused on creating mentors in the STEM field. Bill Valdez, Director of the Department of Energy's Office of Workforce Development for Teachers and Scientists, introduced panelists Fae Korsmo of the NSF; Rose Trujillo, Director of Civilian Hispanic and American Indian/Alaska Native Programs at the Department of Defense; and Ismael Martinez, with the EPA's Office of Civil Rights.

Valdez spoke of how Latino applicants to the Department of Energy's graduate fellowship program compete well in areas like academics, but fall behind in those that require a mentor, often for lack of a letter of recommendation. It's also difficult for Latino students who go into STEM, but end up dropping out when they realize that the majority of their STEM peers are white males. According to Trujillo, the Department of Defense also has mentoring programs, but there's still room for improvement: "We



Panelist

"What do we need to do better to inspire the Latino population to see themselves as the solution?"

Pilar Montoya is the President of the Society of Hispanic Professional Engineers (SHPE).



(l-r) Maritza Kelley, Luis Campillo and Monica Fuentes

**Panelist**

"We all know what works, but we need to collaborate."

Carlos Santiago is the President of the Hispanic College Fund (HCF).

For a webcast of the 2011 Latino Education Conference go to LatinoMagazine.com.

funding, increases in Pell Grants, the American Recovery and

Reinvestment Act, and work by Juan Sepúlveda, the Director of the White House Initiative on Educational Excellence for Hispanic Americans.

"Not only are we at the table, it's our table, this is our country to shape," Muñoz said. "We have always known that our community's future and our country's future are the same thing."

Amber Flounoy, ExxonMobil

In the afternoon, *Nuestro Futuro* continued with a panel on STEM entrepreneurs, led by Susan Santana, Assistant Vice President of Federal Relations for AT&T. The panel featured entrepreneur and National Hispanic University board member Ray Ruiz of San Jose.; Dalia Almanza-Smith, founder of Hello XPress; and Paul Narvaez, president of Think Media Group, based in New York.

"Our third panel is unique in that we're trying to establish a link between entrepreneurship and STEM," said Estrada. "To many it's intuitive, but I don't know if everyone has made the connection."

The link, Ruiz said, is that STEM provides the problem-solving skills and critical thinking that make successful entrepreneurs. For example, Almanza-Smith is working with a company called Verdant Power that has developed a way to extract energy from New York City's East River using underwater



have a big responsibility and, personally, I think we've done well. I think we can do better. We're going to reach back and try to make a difference, one child at a time."

During the *Nuestro Futuro* luncheon, following remarks by José Antonio Tijerino, president of the Hispanic Heritage Awards Foundation, the keynote speaker was Cecilia Muñoz, the Director of Intergovernmental Affairs at the White House. She spoke of Latinos' role in achieving President Obama's goal of making the U.S. first in the world in college degrees by 2020. "Latino children are absolutely essential to that," said Muñoz, the highest ranking Latina at the White House. But she noted that right now, Latinos have the lowest educational attainment of any group in the country, with only half of students graduating high school on time, with only 13 percent going on to earn a bachelor's degree and only 4 percent going on to the graduate level or beyond. "If those students are not successful, then our country cannot be successful," she said. Policies and programs implemented under the Obama Administration can help such as Race to the Top



(l-r) Susan Santana, Ray Ruiz, Paul Narvaez and Dalia Almanza-Smith

Panelist

"We're here to talk about success stories."



Alma Crossley is Director of Diversity Initiatives at GM.



Alfredo Estrada and Blanca De La Rosa, ExxonMobil

turbines. And Narvaez showed how social media has transformed the business landscape. If Latinos want to be successful in business, they should look to STEM to give them the necessary skills, the panelists concluded.

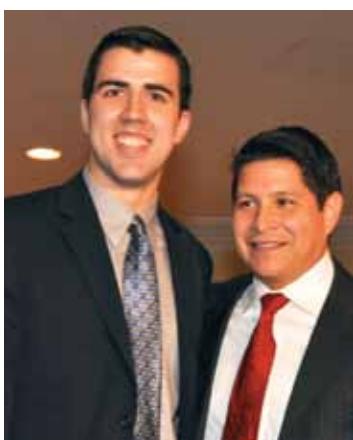
The final panel was led by Alma Crossley, GM's Director



Hilton Robinson and Jackie Martinez, Deloitte

success stories. STEM really is a foundation if you think about it," Crossley said. "It's not just engineering or science. It's all these things that can lead to other opportunities."

Santiago recalled attending an Intel science and technology fair where 40 high school students from around the country were recognized for their achievements. Not one was Latino, he said. In order to change that, Latino students need inspiration. Montoya agreed, and shared a successful initiative called *Noches de Ciencias*, which provide an opportunity for STEM college students to do fun science activities with younger students and talk to their parents about STEM opportunities. "Part of what we're wanting to do is ask the question on our end, 'What



David Lage and Tony Tijerino



(l-r) Cynthia Swann, Edgardo Pacheco-Resto, Sheila Simmons and Ruben Murillo

do we need to do better to inspire the Latino population to see themselves as the solution to the STEM problems we face in this country?" she said.

The day wrapped up with a Town Hall meeting led by Blanca De La Rosa of ExxonMobil, the founding sponsor of *Nuestro Futuro*. She said what struck her most about the day was that the resources to make Latinos successful in STEM now exist, but that nonprofits, corporate America and Latino media have to work together to provide access to those resources and support for students who decide to use them. She said it's also important to "rebrand" STEM to help dispel negative misperceptions that may exist, such as that math and science are too difficult for Latino students.



Carlos Rivas, ExxonMobil

In the discussions following each panel, participants returned to several main themes throughout the day. First, academic success for Latinos must start at an early age, and parents and teachers must work together. But little progress can be made if these efforts are not backed by sufficient financial resources. Teacher Edgardo Pacheco-Resto spoke movingly of the difficulty he has motivating students who see a disparity in the resources and opportunities afforded other schools but denied them. "We don't have anything, and when they see other schools, they have smartboards ... what is the message behind that?" he said. "Does the government believe in our school? Because if they do, why don't we have the same resources?"

Second, there's a need for mentors to guide Latino students along the STEM path. "Not well understood in the Latino community is the importance of mentorship in STEM," said Bill Valdez of the Department of Energy. "You do not get into the field without being mentored, somebody opening doors for you, somebody providing access for you." That's why it's important for current STEM workers to "pay it forward" to students trying to make their way, said Fae Korsmo of the NSF.

2011 AHORA



Captain Kenneth Barrett



Lawrence Romo

On April 27, *Nuestro Futuro* reconvened with the AHORA Student Day. This brought together over 250 students to participate in roundtable discussions and learn about exciting STEM careers in the Armed Forces, the Federal government, and corporate America. The majority of students came to the Omni Shoreham Hotel from six high schools in the Greater Washington area: Duval, Cesar Chavez Charter School (Parkside Campus), Herndon, Crossland, Parkdale, and George C. Marshall.

They were welcomed by Captain Kenneth Barrett, who after several tours of duty at sea became the Navy's Diversity Director and is currently the Deputy Director, Office of Diversity Management and Equal Opportunity of the Dept. of Defense in Washington, DC. Capt. Barrett introduced the keynote speaker, Assistant Secretary of the Navy Juan Garcia. Asst. Secretary Garcia was not just a fighter pilot but a Harvard-educated lawyer, a White House Fellow, and a Texas State Representative before being tapped by President Obama. His slide presentation showed students all the activities the Navy was undertaking in a given week, from protecting ships from Somalian pirates to delivering humanitarian supplies to Japan, making it truly "A Force for Global Good."

The first panel was moderated by Dr. Benita Bell from the NASA Goddard Space Flight Center and featured three rising stars. First was Denisse Aranda, a native of Venezuela selected as a

NASA Student Ambassador, the highest honor the agency bestows on students. The other two, Mario Rubio and Denice Calderon, were participants in the Motivating Undergraduates in Science and Technology (MUST) Project , a partnership between NASA and the Hispanic College Fund. MUST Scholars receive a scholarship and become eligible for an internship at a NASA center.

The second panel was introduced by Lawrence Romo, the Director of the Selective Service System. The Director reminded male students that they were obligated to register with the System following their 18th birthday. Failure to do so was not only against the law, but would keep them from receiving a number of Federal benefits such as scholarships. Two of the panelists were representatives of the Army (LTC Alfonso Mandujano and LTC Terrance Sanders); another was from the Navy (LT Eduardo Garza); while the third was from the Air Force (SSGT Astrid Ramirez). They stressed the importance of STEM to our nation's security, and the outstanding educational opportunities offered in today's Armed Forces.

The final panel was moderated by Dr. Velma Deleveaux, a Sr. Associate from Booz Allen Hamilton. Having engineering degrees from Harvard and Pennsylvania State University, she affirmed the importance of STEM in corporate America. The first panelist was James Luna, a Talent Manager at Deloitte who described how he communicates the company's shared values

Student Day



(l-r) Denice Calderon, Mario Rubio, Denisse Aranda and Dr. Benita Bell, NASA



of integrity, outstanding value and diversity. The second was Joaquin Nuño-Whelan, the Vehicle Chief Engineer for GM. Joaquin captured the students' imaginations when he described his role in bringing GM cars such as the popular Volt to Latino consumers.

Many thanks to all who participated, particularly the students and their teachers. Based upon the success of our first AHORA Student Day, LATINO Magazine is planning to present several more later this year and next, leading up to the 2012 Latino Education Conference. For more information and a full webcast of the panels, visit LatinoMagazine.com.

For a webcast of the 2011 AHORA Student Day go to LatinoMagazine.com.



Assistant Secretary of the Navy Juan Garcia



(l-r) LTC Terrance Sanders, LT Eduardo Garza, SSGT Astrid Ramirez and LTC Alfonso Mandujano



James Luna, Dr. Velma Deleveaux and Joaquin Nuño-Whelan

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Nicolas Medina, ExxonMobil, welcomed participants.

Third and perhaps most importantly, participants agreed that no one group can do it alone, whether corporate America, the Federal government, or Latino nonprofits. All stakeholders must work together to make a difference. "We know that the issue is so huge, the dropout rate is so high, our scores in math and science are so abysmal, that we can't just look at one organization," SHPE's Pilar Montoya said. Carlos Santiago agreed: "We all know what works, but we need to collaborate."

The 2011 Latino Education Conference and the AHORA Student Day were presented by LATINO Magazine with the generous support of our partners ExxonMobil, GM, AT&T, NEA, Dept. of Energy, the Hispanic Heritage Awards Foundation, Goodman Networks, Deloitte, the Selective Service System, the



(l-r) Bill Valdez, Fae Korsmo and Ismael Martinez



(l-r) Alfredo Estrada, Rose Trujillo and Rafaela Ornelas-Schwan

Navy, Dept. of Defense, NASA, the Hispanic College Fund, NSF and many other organizations. The webcast of the entire conference is available at Latinomagazine.com, and we encourage the feedback of LATINO readers at info.nuestrofuturo@gmail.com. *Nuestro Futuro* is an ongoing initiative and we look forward to welcoming back all participants at the 2012 Latino Education Conference.

Kathy Adams

A grid of logos for various sponsors of the 2011 Latino Education Conference. The logos include: LATINO Magazine (large gold text), ExxonMobil (red text), AT&T (blue globe logo), NASA (blue circle with red swoosh), U.S. Department of Energy (green circular logo), NSF (blue circular logo with yellow stars), Chevrolet (chevy bowtie logo), Hispanic Heritage Foundation (red text), NAVY (gray text), Deloitte (dark blue text), nea (National Education Association logo), Goodman Networks (blue G logo), Department of Defense (seal), Hispanic College Fund (blue logo with person walking), Selective Service System (seal), and 2011 Latino Education Conference (red and white banner).