National Instruments/City Council Meeting Thursday, March 7, 2013 City Hall

Late Backup

Good afternoon. I am Monique Johnson-Jones, the Director of the STEM Center at Huston-Tillotson University, the oldest institution of higher education in Austin, Texas. Thank you for the opportunity to address you on this matter.

STEM has become the catch phrase used in education and the general population over the past few years. It's hard to read anything about educational reform without seeing the word STEM more than a few times. The matter is one of such significance that President Barack Obama launched the "Educate to Innovate" campaign to improve the participation and performance of America's students in science, technology, engineering, and mathematics (STEM). The campaign includes efforts not only from the Federal Government but also from leading companies, foundations, non-profits, and science and engineering societies to work with young people across America to excel in science and math.

In addition to the utterance of the word STEM, there is another word that should be spoken right along with it – and that word is **PARTNERSHIP**. If the United States is going to improve its rank of 21st out of 30 in science literacy among students and 25th out of 30 in math literacy, then the promotion and support of partnerships between the academic institutions and non-profits who work to produce STEM degree holders and foundations and companies such as National Instruments who support them is necessary.

What do these partnerships look like in action? Well, I'll tell you:

 HT's partnership with NI allows the continuation of the Austin Pre-Freshman Engineering Program (AusPrEP) and Saturday STEM Academy. These programs, which focus on science and mathematics education, prepare middle and high school students for a future in the STEM fields by offering classes in forensic science, logic, algebraic structures, engineering, and computer science.

- 2. This partnership resulted in minority and low-income students getting opportunities to increase their chance of success in the area of STEM, with 84% of the 2012 AusPrEP population consisting of African-American and Hispanic students. Of the 140 students served, 53% of them were female! This is good news in that we must encourage our young girls to embark upon STEM careers if we hope to catch up to the rest of the world.
- 3. National Instruments support of HTs STEM programs makes it possible to hire the best instructors who deliver engaging classroom lessons to the participating students as research has shown that if educators don't capture students' interest and enthusiasm in science by grade 7, students may never find their way back to science.
- 4. Huston-Tillotson is able to offer a robotics course to the young people they serve thanks to the ingenuity and financial support of NI. Their donation of LEGO Mindstorms Education Kits (both hardware and software) presents our young students with an opportunity to engage in a science lesson that is not only educational but FUN. Part of producing the STEM degree holders that are needed is capturing a student's interest and then motivating them to the finish line.

In return for NI's generosity, HT puts its efforts into producing well-prepared STEM graduates that are qualified to join the National Instruments family. In addition, NI Interns are able to come to the campus and assist with the STEM programs on campus. HTs partnership with National Instruments is one that has grown and evolved over time. It has benefitted a number of minority and low-income students in the Austin and surrounding areas and we look forward to its continuation.

Thank you.