

Building the Next Generation Energy Workforce

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If Houston wants to retain its status as the Energy Capital of the World, then it must insure the right skill sets from technicians, to process controllers, to engineers, to geophysicists, and so forth are readily available to meet the energy industry's needs. Now granted, Houston will be only part of the sourcing, but being a strong part is the overall objective of the GHP's Energy Collaborative Workforce Development Committee. Recognizing the lopsided demographics of the traditional energy workforce and that new alternative energy jobs require a whole new talent pool, the committee's strategic objective is to grow Houston's talent pie with a particular focus on K-16.

Monte King (Shell) and Marshall Schott (UH) have led this initiative that has grown from a handful of people a few years ago to a group now requiring an auditorium for its quarterly meetings. The membership includes industry, education, government, economic development, and professional associations with a primary goal of retaining current energy companies and attracting new companies through the development of programs to increase the size, skill, and diversity of the regional energy workforce. The Workforce Development Committee does not create projects. It brings together the various parties to leverage and enhance initiatives. Thus, its strategies are to (1) identify best practices, (2) support projects that are replicable and scalable, (3) capitalize on networking opportunities, and (4) as mentioned, focus on the developing the regional K-16 with students, teachers, and community engagement. One of those initiatives that fit all these criteria is the IPAA Education Center led by Director Doris Richardson. I asked Doris to highlight their Petroleum Academies efforts in our city and here is what she had to say.

"In response to the oil and natural gas industry being challenged by an aging workforce and changing economy, the Independent Petroleum Assn of America (IPAA) established 4 high school engineering, geosciences and global energy management academies at Westside, Lamar and Milby High Schools in Houston and another at Southwest High School in Fort Worth Texas.

It's been estimated that 50% of the total oil and natural gas workforce will retire within the next decade. As a former educator, the solution was an obvious one for me. The public school system continually seeks methods to make math and science more meaningful and relevant to our students. The very foundation of the petroleum industry is comprised of mathematicians and scientists, so creating this 4 year Advanced Academic program would provide a win/win situation for the schools as well as the energy industry.

The success of the academy program, in large part depends on providing industry training for the exceptional multidisciplinary team of teachers who volunteer to take

part in this program. We are fortunate to have a highly motivated group of AP teachers who look forward each summer to the training we provide at Rice University, Colorado School of Mines, the University of Houston and the University of Texas. Teaching is also supplemented by a dedicated group of industry professionals who volunteer as guest speakers twice per month at each academy.

Creating this "school within a school" concept might seem like an ambitious undertaking but due the ongoing support of the Petroleum Academy Advisory Board and other major sponsors, we are having a profound effect on educating the NEXT GENERATION of America's oil and natural gas industry leaders.

Companies such as, Halliburton, Shell Oil, El Paso Corporation, Marathon Oil, Petroleum Equipment Suppliers Association, Devon Energy, BP, Society of Petroleum Engineers, Sloan Consulting, Core Laboratories, Houston Producers Forum, J. Ray McDermott and the American Association of Drilling Engineers are providing our students the scientific and mathematical foundation they need to create the innovative technology concepts needed to hopefully one day, solve our nation's dependence on foreign oil.

Tall order during this time of change? Yes, but the petroleum industry is strong and resilient. IPAA, together with the Petroleum Academy Advisory Board and sponsors remain committed to providing these future innovators the building blocks necessary to make this lofty goal a reality."