



Shaping Tomorrow's  
Built Environment Today

## Resources & Publications



*High school student Elijah Clark (left) is joined by Mike Sammut and Jose R. Rodriguez.*

### Mentoring and Coaching a High School Student for a Day

**By Jose R. Rodriguez, P.Eng., Member**

NEW YORK—As part of DiscoverE Engineers Week, Feb. 16-22, I volunteered to invite a junior high school student named Elijah Clark to join me at a HVAC consultant engineering group. I hoped to inspire interest in this young man to enter the HVAC field for his future career.

Mike Sammut, P.E., AKF Group, volunteered to be Clark's mentor for the day, as Clark wanted to see how consulting engineers spend their days. I work for a manufacturing representative, Wallace Eannace Associates, Inc.

My duties as a role model/coach included simplifying terms to help Clark understand all concepts spoken about throughout the day.

Clark's main goal was to spend the day with the HVAC consultant and study his workload as part of encouraging him to consider becoming part of our next generation of HVAC engineers.

Our day began with an early morning meeting where Sammut explained the definition of an engineer, the engineer's role in our society as well as the various levels of engineers within the HVAC field. I explained in great detail that math, physics and computer skills provide the best training for learned engineering.

We also introduced Clark to another mechanical, electrical and plumbing services consultant as well as junior and senior engineers who shared with him stories about their jobs.

Meeting with Sammut was the most interesting part of our day because he showed us design concepts and alternative solutions for an HVAC system he had presented to a client. This project involved a classroom that needs an additional heating system design but must comply with certain code requirements.

As coach, I felt it was important for Clark to write a report about what he learned so he would remember and able to look back at this experience. He wrote: "Mr. Jose and Mr. Mike, I want to thank you both for teaching me the basics of engineering. What I liked about the engineering part was that there is a lot of math involved. The part I didn't like about it was at first I didn't understand the HVAC lesson but along the way I understood it. To tell you guys the truth, engineering could be very difficult from my perspective but it will be an option if I want to do that when I grow up."

As a mentor and coach, we did not succeed with our goals to inspire Clark to join the HVAC field. Maybe because he never thought of engineering as a career to begin with or the HVAC case study was too advanced for a junior in high school.

In the future, we propose:

- Choosing a student interested in the engineering field;
- Having this student spend more time with a junior and less with the senior engineers; and
- Having the student take a field trip first then return to the office for further discussion.

Sammut and I are still committed to try again with an older high school student. We encourage all ASHRAE members to try as well.