ACE Curriculum Exposes Students to Careers in Architecture, Construction and Engineering

The ACE Mentor program of Northeast Florida is an after-school mentoring program that has just completed its third year of operation. In the 2008-2009 school year, the program was offered at A. Philip Randolph Academies of Technology and Orange Park High School.

Students spend 2 hours after school for 15 weeks working closely with local architects, engineers and construction managers. The students learn about career opportunities in the respective fields and apply what they have learned by working on a design project they select.

The students also participated in two day long field trips. The first field trip was to the Baptist Tower D and Medical Office building construction sites.

The second field trip was focused on encouraging the students to attend college. They visited the University of North Florida’s College of Computing, Engineering and Construction, and toured the building. Personnel from both Admissions and Financial Aid spoke to the students providing great information on what to do to navigate the college application process.

Mentoring sessions are on Thursdays at the high school from January through May. New mentors are needed for the 2009-2010 school year. For more information contact Denise Ramsey at (904) 791-4592 or denise.ramsey@haskell.com.
ACE - A Student’s Perspective: Ashantae Bryant - A. Philip Randolph

I started the ACE Mentoring Program in my ninth grade year at A. Philip Randolph Academies of Technology. While participating in the program I’ve gained experience, knowledge, opportunities, and excitement. I gained all of this through our many hands on activities, projects, field trips and meetings. Not only is the ACE Mentoring Program a great learning experience, but it is very fun one as well. The program gives high school students a chance to showcase our creativity by using what we’ve learned from our mentors to piece together our own ideas and develop a phenomenal line-up of group projects, which were presented at the annual ACE Mentoring Presentation/Luncheon at UNF. As I go on in to my junior year next year, I am looking forward to seeing my mentors again, to carry on in this learning process that will prepare me for the impending future that awaits me. I will also be looking forward to participating in the program my final year to not only gain more knowledge but to take advantage of the many scholarship opportunities I will be eligible for during my senior year. ACE introduced me to a number of careers and possibilities within the many fields of Construction and Design. I spent time working and communicating with real life Architects, Engineers, Construction Managers, and Interior Designers, who took time out of their busy schedules to come and meet with students every Thursday, to share their experiences and valuable information. I will forever be grateful and use everything I have and will learn as I pursue my dream and become an Architect/Civil Engineer. Thank You ACE Mentoring Program.

$13,450 In Scholarships Awarded by Northeast Florida Affiliate

On May 15, 2009, the ACE Mentor Program of Northeast Florida awarded $12,450 in scholarships to 13 ACE students from A Philip Randolph Academies of Technology and Orange Park High. In addition, Charmaine Ervin, a former ACE scholarship recipient who is volunteering as a mentor while continuing her college career also received an additional $1000 scholarship from ACE.

One ACE student, scholarship recipient, Brandon Gonzalez, will also receive a $2500 scholarship from ACE National.

The local chapter of the Associated Builders and Contractors (ABC) provided $6,000 of the scholarship funds.

In addition to ABC, the local sponsors who made the scholarship presentations possible are:

- ABC Women’s Council
- Auld & White Constructors, LLC
- Eisman & Russo, Inc.
- Ennis Pellum & Associates, CPAs
- Elkins Constructors, Inc.
- Gate Construction Materials Group
- Haskell
- KBJ Architects Inc.
- Marietta Sand Corporation
- Taylor Engineering Inc.
- Tritt|Henderson
- Trinity Fabricators
- UNF School of Engineering

ACE Scholarship winners
This is my second year as an ACE Mentor, and I was anxious for the program to begin again. The year started sort of the way last year ended --- with a little bit of nerves, excitement and a sense of happiness mixed with sadness in knowing it comes and goes by so fast. Did I do a good enough job last year? Did the students gain the skills and knowledge needed for making career choices? Will the kids who were underclass students return? And what of the mentors I met who worked so hard and gave so much of themselves? Are they back, too? The answers are yes, yes and yes! I recognize both mentors and students from last year, and I am so happy to see new faces as well. I guess I am like a mother hen worrying about her chicks. Is this mentality what makes ACE so wonderful and even successful? The sense of camaraderie and accomplishment one sees on the student’s eager faces beginning with Parent’s Night through to the final project presentation is awesome to me.

This year brought new excitement with the addition of the Orange Park High School ACE program. The students would be in a sort of competition with another school. Here at A. Philip Randolph where I mentor, many of the students were seasoned participants, and were expecting new challenges, thirsty for new and expanded knowledge. Our team leader, Jacob Thurlow, (you rock Jacob!) extracted the brain trust our mentors bring, and threw a new wrinkle into the mix. This year, we separated the returning students so they would not become stagnated by the professional career introductions. A duel program meant new challenges for the mentors as well. The result was introducing the returning students to Google Sketch Up. I can’t tell you how impressed I was by both the mentors and the students teaching and learning this program. The students pick up the computer skills with such ease, and become proficient in record time. Just wait until presentation day! Those 3D sketches are sure to wow the jury review board. During the course of the program year, the kids continue to impress me, and the mentors work to keep them on their toes. Don’t be fooled, ACE is a technical and strenuous program. There are so many creative ideas and the students really do absorb more than we think they do sometimes. They pick right up on crucial elements, which field they like, what they expect from their groups. I am relieved the students absorb the direction of the mentors, are inclined to think outside the box, have a genuine concern for the environment and yes, even the future of the planet. The kids are really devoted because this is an after school program, a real project, and lots of hours to see it through. They also are lucky to have the support of the teacher who sponsors the program, Mr. Slappey, and the pride of the principal and staff. And I can not forget to mention the snacks. Each session starts off with a mentor bringing snacks --- and not always junk food, either. This vegetarian is encouraged to see the students eating apples and other fruit.

One of the coolest parts of the program is taking a field trip to an actual construction site. I think this is one of the student’s favorite parts, and not just to get out of class! We always try to ask technical questions to see who really was paying attention. I am happy to report they knew the answers and were able to apply critical thinking skills. We also took a field trip to a completed project at UNF. The students were treated to lunch (another favorite) and spent time with UNF admissions counselors getting great advice on applying for entry and scholarships. They even got an inside track on tips and techniques with the counselors providing phone numbers, emails and websites. And best of all, they got t-shirts from UNF engineering. At the beginning, it seems like there is a lot of time to accomplish the projects. Midway through, there is always the doubt it will come together. Many of the students spend extra time on CADD and researching materials and finishes. Towards the end, there can be real panic by the mentors and students alike. They must work with their team to solve problems and finish on time and budget. Hmmm… does this sound familiar? Is it coincidence
that it is just like a real day in the life of our professions? Yes, this is real life exposure for budding architects, engineers, designers and construction professionals. Crunch time always comes and it is time to pay the piper. I know I am not alone in thinking why in the world do we cause ourselves this stress? Of course, the reward is always worth it!

Presentation Day is probably the most enjoyable for me because it always brings such an amazing transition. But it is also a little sad to realize that our chicks are ready to fly the coop and leave us to pursue their own lives. Here come those nagging questions and doubts about how well we mentors did our jobs. Do we have cause to worry? Will the audience, the professional review jury and even the local media give us and our hardworking students the accolades they deserve? Will they realize with all the bad out there, here is a positive that the public needs to see?

All the students have come ready to fulfill their roles and present their work. Who are these kids? I hardly recognize the attire and the cool demeanor. The practice session the day before was full of folly and there just didn’t seem to be any way it would come together. But what really is so much fun is seeing the faces of the parents and siblings attending the presentation. If I wondered who these dressed to a “T” mature, professional presenters were, you can imagine the look of wonder coming from the audience when the parents see for themselves the presentation boards on the project. I watch eagerly to see a parent’s face as they see the boards. It’s that "my kid did THAT? " look of amazement I have come to anticipate. To see them light up as their child speaks to a room full of adult strangers and professionals brings a tear to my eyes. I know it must have been hard to conceive of what the students had worked so hard to accomplish until this moment. The full scope of work is just so impressive up there on the easels. This year was no exception, and the projects were better than ever. All I can say is wow, how do we top that?

After the presentations, we have a big luncheon with the students, parents, mentors and invited guests. There are so many people to thank who volunteer to make this program work, not to mention the generosity of the donors who contribute funds for the program and scholarships. I watch in genuine awe as the students applaud their team mates who garner awards and scholarships. There is real pride in their posture and the smiles are the biggest I have ever seen. To the students who are graduating, we will miss you and look forward to you going on to the next level. You are a step ahead of your competition, which is so important in college today. Will we see you back some day to mentor others? I hope so! To the underclass, well done, we are so proud of you and your efforts. Don’t you want to come back and try for a scholarship, too?

It gives me hope that our professions are the future of building American cities, and that we have a new batch of such eager participants to see what our world is all about. I am truly amazed by the talent of the mentors and the skills of the students. Who knew the ACE program would be as rewarding for me as a mentor as it appears to be for the students? This is a feeling that will stay with me for the rest of my life. I know I wish there had been a program like ACE when I was in school. I think it is a big reason we mentors all keep coming back….will we see you next year?
Many maturing young men and women struggle when they need to decide on a career path that they will follow for a considerable portion of their lifetime. Certain individuals are still undecided on the issue a good few years into their college education while others seek internships to experience first hand what a career might entail. However, the few very fortunate students who are privileged enough to participate in an informative mentoring program such as ACE attain career experience in numerous fields and dip their toes into real life situations such as making deadlines and producing legitimate presentations. For multiple students interested in engineering, this program answers the looming question ‘What do I want to do with my life?’ and goes far beyond the question providing them with insight about numerous career possibilities. With a very generous number of mentors, including architects, civil, mechanical, and electrical engineers, construction managers, and even interior designers, the Orange Park High School chapter of the ACE Mentoring Program has quick-started my own and many other students’ experience regarding engineering careers.

One of the multiple great aspects about this program was that the many generous mentors effectively combined both the lecture and hands-on methods of teaching which, in my opinion, put across the information in the best way possible. After just one semester of participation, it is still mind blowing to me how much more I know now about how our surrounding world functions, and how it was designed and put together. Then later, when we began our projects, there were times where I found it necessary to simply step back and remind myself that this was a high school project. Not only did our mentors help us compose our final products, they put us in their shoes and showed us how they think and work on a day-to-day basis. Finally, when the final presentations were to be given and judged, I felt surprised at how professional it all felt. The feeling was truly impressive after presenting our final production boards, especially as a junior in high school. This program does indeed offer education about the engineering field to an astonishing extent, but it also gives students an experience that could most definitely be useful later in life for any career they might pursue. I feel truly blessed to have been a part of the ACE experience, and I would recommend it to any high school student interested in engineering.

More Mentors Are Needed For Our Expanding Program!

People often ask what is involved in being a mentor. The answer is simple. First, you must be background screened. The process varies between Duval and Clay County. Next, you attend a few organizational meetings to plan student activities, and to learn about mentoring tools and practices provided by ACE. Finally, simply show up, participate, and share your enthusiasm for your profession! It is understood that not every mentor will make every session due to work commitments. But the students do look forward to meeting with you, and we hope that your attendance is a model for theirs.

Mentoring sessions are held once a week at school for 2 hours beginning 10 minutes after the school day ends. The mentoring “season” starts midway through the school year. The schedule for the 2009-2010 school year will be finalized during summer break. We would love to find more mentors who are also members of ACE’s national sponsors including: AIA, ABC, ASLA, IIDA and USGBC.

For more information on mentoring, contact Denise Ramsey at 904-791-4592 or denise.ramsey@haskell.com.
When I walked into orientation for the ACE Mentor program in my Junior year, I thought I was in way over my head; I didn’t know anything about construction or engineering or even interior design! But throughout those couple months of staying after school, I learned a lot. I learned the difference between a bonnet roof versus a hipped roof. I learned so much about HVAC systems I could probably do a two hour long seminar on them. I learned that if someone asks you what you want to be when you grow up, a simple answer of “engineer” isn’t good enough- there are industrial engineers, civil engineers, mechanical engineers, and so on and so on. I learned that interior designers need everything to be just so.

Aside from all of the technical things I learned in this program, I also learned so many things that will help me in the work place. I learned how to be a part of a team, how to be confident in my design, and how to speak in front of a rather large crowd of professionals. I learned that when someone says “Here’s my card –keep in touch,” they really mean it and you really should. I learned that net-working is one of the smartest things you could ever do, no matter how old you are or how well off you think you are.

Although the snacks every Thursday were pretty good, I think my very favorite part of the ACE Mentor for me was watching our project go from an idea, to a drawing, to an actual presentation. I loved seeing everything that we came up with change and evolve and fit into place. Being the interior designer of my group, I especially loved going through magazines and books and paint colors and light fixtures and making our design beautiful and welcoming.

My senior year of the program I was lucky enough to win a one thousand dollar scholarship from the ABC Women’s Council. Also, the group I was in, Off the Grid Design-Build, was the design that best answered the Request for Proposal. I’d like to thank all of the mentors who spent their extra time and effort with us crazy high schoolers. I’d also like to acknowledge the teachers at my school A. Philip Randolph that gave up their Thursday evenings and classrooms and supplies for us. The parents can’t be overlooked either, I’m sure there were times that you were pushing your student to finish his or her project. Without the mentors, teachers, and parents, none of us would have made it this far, thank you so much.

Now that I’ve graduated, I will be attending the Florida Community College at Jacksonville to Major in Interior Design. I also hope to be back next year to be a mentor in the program in my high school.

I encourage all students –and adults- to consider participating in the ACE Mentor program next year. Even if you know absolutely nothing about construction or engineering, there’s always room to learn and grow. I went from a girl not knowing what she was doing, and transformed into a young lady who knew exactly what she was going to do, and you’re no different.