

November 2010

www.acementor.org

Volume 3, Issue 1

ACE OF Maine

Hampden ■ Bangor ■ Portland

Mentoring In Maine

JACK CARR, P.E., RS, LEED-AP, General Manager, Criterium Mooney Engineers, Portland Team Mentor

One of the best aspects of belonging to the Community Association Institute is the access to knowledgeable peers in a unique industry. Often mentoring relationships develop from the networking opportunities that present themselves. It is this form of continuing education using a trickle down method to pass information in a non-institutional way that I would like to discuss and how it might enrich your life.

Property managers and other professionals interacting with condominium boards have been using mentoring skills for years but probably do not use that term in considering the services they provide. Property managers' experience and knowledge of condo documents, state law, and standard business practices consistently keep board members on the right track.

Mentoring has been around for a long time, well before the apprentice programs of the Middle Ages or squires following knights into battle. It is a time honored tradition of one generation passing hard-earned wisdom to the next generation. Recently, I have observed that Maine and other parts of the country are using this educational delivery method in a more organized and formal way along specific professional lines. For a moment I would like to depart the world of condominiums and consider how the mentoring skills of property managers, engineers, and financial service providers might benefit the entire community.

We all can remember the teacher, friend, or relative that took a special interest in our future and provided important advice at critical crossroads in our lives. That experience probably left you a feeling of wishing to provide a similar experience to some young mind but finding the opportunity or right person to share your insight is a challenge. To meet this need, Maine organizations are forming to provide this avenue for you to give back to the community in the form of mentoring.

These organizations sometimes are formed along specific professions

ACE Mentor Program at Hampden Academy

RUEY YEHLE, Principal
COPLIN FICKETT, ACE Student

When Gary Frankel of WBRC architects and engineering firm moved to Maine he brought with him a passion for the ACE mentoring program. Fortunately for Hampden Academy his daily drive past the school resulted in a now three-year partnership that has provided numerous Hampden Academy students with hands-on experiences with a wide range of construction industry professionals.

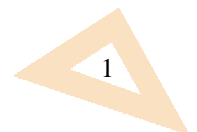


Coplin Fickett, now a senior, describes the program as helping to "solidify my decision to go into chemical engineering." A two year scholarship winner in the program, Coplin describes his experiences as interesting and geared towards students. He appreciates the project-based learning opportunities he was provided where he learned new information and skills in software such as Sketch-up and AutoCad. The tours,

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Career Directions for Students in
Architecture, Construction and Engineering



ACE Students Tour Below Deck At The Sea Dog

On October 19th, 2010 the students and mentors of ACE Hampden and Bangor were brought on a tour of the Sea Dog restaurant in Bangor, Maine. The tour was set up to give the students a first hand experience to see what goes on behind the scenes of a successful restaurant. They got to hear directly from someone who knows the operations inside and out as well as, how the design of the facility plays a factor in the business, functionality, and the overall restaurant experience.

The tour started at the entrance of the restaurant where everyone gathered to meet the general manager who began by giving a brief run through of the services and features of the building itself. The services talked about included, a breakfast through dinner food service, a full bar, hosting of various private events, a fabrication shop and brewery all of which demonstrate the flexibility of the facility. Some of the features of the restaurant include a large outdoor deck, game area, double sided bar and an event room. Such unique features help draw in customers and set



Above: ACE students and mentors gather near the entrance to the Sea Dog restaurant to await their tour of the facility.



Above: ACE students listen to Sea Dog Restaurant General Manager Larry Killam as he discusses and describes the layout and set up of the kitchen.

the restaurant apart from other's like it.

The next stage of the tour brought the students and mentors into the Kitchen of the Sea Dog where the start of the behind-the-scenes operations took place. The workings of what it takes to run a kitchen smoothly were then touched upon. One of the topics talked about was the layout of the various zones such as, food pick-up, food-prep, cooking, cooking support, dry storage, cold storage, and dish washing. The functionality of the kitchen presented is typical of most restaurants but the Seadog is able to handle a high capacity due to the large square footage and efficiency of the layout.

The tour then continued on into the basement of the building where the small fabrication shop, mechanical rooms, and the Brewery are located. The manager described the purpose of the shop for the construction of various items for its branch restaurant locations. The mechanical rooms were then shown off to illustrate the amount of space needed for

heating, cooling, water service, and electricity to the building. One of the features of the mechanical spaces was described to be the heat recovery system which has saved the owners significant money over the past couple of years. The next part of the tour brought visitors through the brewery area which is a series of interconnected rooms housing the storage of ingredients, office, and various brew equipment needed. It was characterized as a 7 barrel brewery where certain flavored brews are produced depending on the season and demand. Charts and records kept on the



Above: ACE students take a peek into one of the restaurant's dry storage rooms off the kitchen as it's function and capacity are explained.



Above: ACE students tour the Sea Dog Restaurant brewery as General Manager Larry Killam explains how the brewery works and what types of beer it produces.

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or around an educational institution. As an example, my interest is in engineering. This past year I became a founding board member of the national ACE Mentoring Program establishing the first chapter in southern Maine. ACE is an acronym for Architecture, Construction, and Engineering. This program reaches out to high school students interested in these fields and who want to learn more before making their college choices.

These mentoring opportunities can be found throughout Maine, such as, Escapade Mentors through Cape Elizabeth's school department, the Kittery School Mentors, or the Thornton Academy Mentoring Program in Saco. They can also be found in organizations in which you may already be a member, such as, the Rotary Club or Kiwanis.

As an example, in my case, late last year I called Portland High School's guidance office and was referred to their Portland Mentoring Alliance. I told them of my interest in mentoring a student expressing interest in the engineering field. Within weeks I was put in touch with an honor student who wanted to enter an engineering school but did not know how to go about it. His obstacle was that he had spent three years in a Congolese refugee camp and had no money. His only asset was his intelligence and ambition. I was impressed by this young man and asked if I could help him. His plan was to apply to a local community vo-

ational school with the hope to someday attend an engineering program at one of the state's schools. After hearing what he went through to get where he was, I told we could do better. To make a long story short, a few months later he received a full scholarship to Colby College at which he enrolled last month. In addition, he will be earning a dual degree in engineering through Dartmouth's Thayer School of Engineering during his concurrent five year program.

I am relaying this story to illustrate what any one of us can do, if we take that first step to try and guide the next generation. Not all mentees need help with college. Some need an adult's wisdom on matters of social, cultural, or personal issues and before you say 'how can I guide a teenager on anything?' consider what your work day is like. You are solving problems, defusing board member personality conflicts, investigating legal issues, and keeping board meetings from unraveling. A teenage should be a snap.

We all have little room on our calendars, family obligations, and other civic duties. What I am suggesting is for us to remember our own mentors who had their own scheduling challenges but found time to spare a word of guidance for us. When we look out at an ever more confusing and scary world in which we seem to have little control and no hope to change, perhaps all we can do is one mentee at a time.

Student Spotlight

My name is Andrya Ryan. I am fifteen years old, and a Sophomore at Hampden Academy. I became apart of the ACE program to pursue my interest in the field of engineering. I am very interested in music, and love to hang out with my friends. If you were to ask me about what area if engineering I was looking to possibly go into I would tell you acoustic. This area of engineering would support my love of music, and any knowledge I have on music could assist me in to being very successful in this field of work.

Now outside of the ACE program music is basically my entire life. I am a member of the Hampden Academy Symphonic Band, and in this band I play flute. I am also a member of the Hampden Academy Jazz Consort, and in this band I play flute and tenor saxophone. Lastly I am apart of the Hampden Academy Treble Choir. These groups are what make me enjoy my time at school. They are the things that I look forward to during the week, and without them I am not sure how I would survive school.

Apart from my love of music, I am a normal teenager. I love to spend as much time as I possibly could with my friends. Without the company of these people in my life my life would be extremely bland. My family is a huge support system for me. They are always there to support me in anything I happen to be involved in. I honestly couldn't ask for anyone better than them.



Pictured above, Andrya and her project teammate discuss the design and layout of their restaurant project..



The Chair's Corner

So here we are and we have started our third year as the Ace Mentor Program of Maine. This year should be even more exciting and challenging.

As we conducted the first year program in Hampden Academy in the 2008-2009 school years, it proved to be a learning experience for all including the Mentors. As Mentors we were discovering how to best present the curriculum to the next generation of Architects, Constructors and Engineers (ACE). The presentations by the first year student's proved successful and extremely satisfying for the Mentors, seeing how well the student's perceived the curriculum. In our second year we added Mentors, and students with the addition of Bangor High School and Deering High School. Again, we had a successful year with many great presentations and the award of many more scholarships than the first year.

This year our Board of Directors and participating Mentors recognized that we need to constantly keep the program interesting and challenging. This year's program has been re-designed to actively engage the student's in each session, by having the Mentors show examples of the sequence of design and construction first hand through lectures and field trips. In each session the student's actively work with their team's to develop their vision of the sequence they had been presented during that session, all the while having the Mentors available to help them through the process. Student's then are asked to present their program during that same class, allowing immediate feed-back from the Mentors. This year's curriculum is proving to be more exciting and engaging for the student's and mentors and should prove to be quite successful at the end of the year during final presentations.

Our next challenge is to expand this program through the state and we seem to be gaining some momentum in that regard. Many new schools have expressed interest to add this program to their schools. The challenge will be to recruit and retain new students and Mentors for the new school programs. We will be investigating the possibility to add new schools for next year, but will need the active participation of the school staff to advertise and promote the program to students and new volunteers to participate as Mentors. Without the student's there is no program. We are currently

developing new initiatives to interest more students which will allow the program to grow. We will be reporting the success of our efforts in future articles as they develop.

As a Mentor for the past three years I can say that it has been a very satisfying and rewarding experience for me. I know other volunteers would be just as satisfied to participate and I am urging new Mentors from the Architectural, Construction and Engineering community to join us in our efforts to promote new talent for the industry.

For more information about ACE Mentoring of Maine and each of its' affiliates or to contact us, please go to www.acementor.org and click on Bangor, Hampden or Portland.

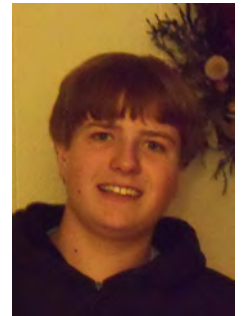


Tom Figura, Chairman
ACE Mentoring of Maine
tfigura@cianbro.com



(Student Spotlight cont'd)

My name is Tyler Batey and I am 16-years-old. I am a sophomore at Hampden Academy. My interest in the A.C.E Mentoring Program is to gain insight into the fields of architectural and mechanical engineering. I hope to get some experience in these fields and a sense of what it



will be like to work as an Engineer. I also hope to meet people that work in area firms so I can market myself when the time comes.

My other interests are snowboarding, skateboarding, golf and paint ball. I have lived in Maine my whole life. I live with my parents and my younger brother, Alex.



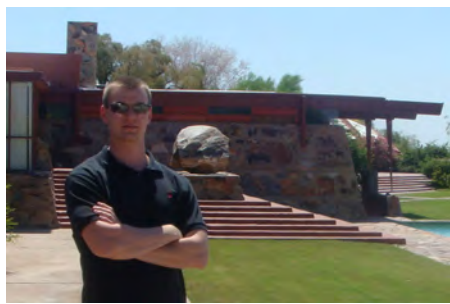
Tyler and his fellow students listen on during a recent tour of the Sea Dog Restaurant

Meet the Mentor

SHANE DUNN, Intern Architect, WBRC Architects • Engineers, ACE Mentor, Hampden Academy

My name is Shane Dunn and I grew up in Augusta, Maine. The path that led me to where I am today all began in high school, the same stage in academia in which the ACE students participate. The classes I took helped me realize my interest in architecture by revealing my academic strengths. The combination of math classes, utilizing logic and reasoning, along with art classes, demanding imagination and innovation, both reflect core aspects in architectural design.

After high school, I attended college at Syracuse University School of Architecture. This was a five year program with a heavy focus on design theory. It was a real eye opening experience into the whole architectural process and how the built environment comes to be. To understand the depth of architectural design, we learned how conceptual ideas can be translated into architecture through innovative use of building materials, massing, orientation, scale, and repetition, just to name a few. We were also taught to recognize the important balance between ascetics and functionality. Construction



knowledge was taught at a fundamental level in order to learn the core principles of building elements and how they interact with one another. This created a plat-

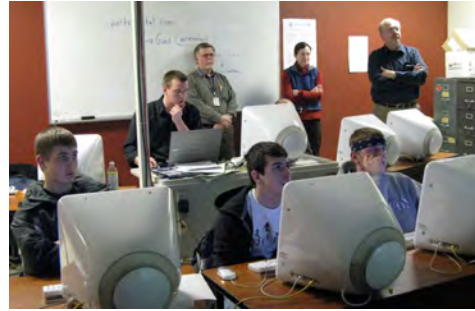
form on which to explore our ideas and designs on a more realistic and meaningful level.

On top of such classes, I was able to get a summer job working in residential construction. I worked on everything from the foundation to the finishes. This experience was priceless and I gained great appreciation for the work that takes place after the drawings leave the drafting table.

My fourth year in college, I was able to experience studying abroad in Florence, Italy. I traveled all over the country where architecture has a rich and extensive history. I toured many famous buildings designed by

architects representing multiple time periods and building styles. It was great source of inspiration and made me appreciate the architectural knowledge and accomplishments of the past.

Throughout my schooling, I came to realize the level



Pictured above, Shane instructs and discusses the use of Google Sketch-Up for use as a presentation technique with the Hampden Academy students.

of dedication and perseverance needed to stick with the intense and challenging program. During our long studio hours we were continually encouraged to re-think design solutions, look at them from other

points of view, and develop multiple iterations. We were taught to take criticism, and transform it into useful information to improve our projects. Encouragement from peers and family also played an important role in successfully completing architecture school.

I graduated in 2006 with a bachelor's degree in architecture. I was then hired by WBRC Architects and Engineers and have been there about four years now. I work mainly in the Education studio where we design a wide range of school buildings. The experience I have gained here is something not taught in school, some of which being, detailing, code analysis, client relationships, and interdisciplinary coordination. This past year, I got involved in the ACE mentoring program and thought it would be the perfect opportunity for me to give back. I have enjoyed being part of the program and hope students have taken away some career based knowledge that will enable them to make informed decisions that will affect the rest of their professional lives.

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guests, and final presentation to a panel of professionals all contributed to a great experience.

Hampden Academy administration and faculty are committed to increasing student engagement in learning. The students of Hampden Academy are not the only ones benefitting from participation in the ACE program. It is a great model of engaging students in work that is inherently interesting and relevant. We can use this program as one benchmark of excellence as we strive to make our students' educational experiences rigorous and meaningful.

(Meet the Mentor, cont'd)

Hello ACE students! My name Steve Pedersen. I joined WBRC Architects/Engineers in Bangor four years ago and am fortunate to be part of team of 70 bright and talented people here in central Maine. After graduating from UC Berkeley California, I started out over 30 years ago in the field of architecture, where I gradually gained experience in this profession, along the way becoming a specialist in school architecture. Now a Senior Architect with WBRC, I have managed a number of school projects including the new Peninsula School in Gouldsboro and a new elementary/middle school in Brewer, the largest of its kind ever built in Maine. Brewer Elementary/Middle School will become the new home for a thousand students in Brewer, all the way from pre-K through the 8th grade. Between California and Maine I took some time off to raise two young daughters in Madawaska and for a while worked as a 10th grade biology teacher at Madawaska High School. I enjoy working with kids of all ages and hope I can share some of my experience with the students at ACE.



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Architecture for me has always been about building something new. Whether designing, detailing, or helping to manage a production team of designers, engineers, and drafters, there's never a dull moment in this profession. Every job we do presents a new challenge not only to shape our clients' visions into reality, but to bring the projects in on time and on budget!

My advice to all ACE students interested in design or any construction-related field is to follow your talent in what you enjoy doing most. There are plenty of diverse opportunities in this business to grow your strengths and really get good at something that will be in demand. Architecture is about teamwork. Everybody on the team brings the expertise of a unique specialty, all of which are necessary to make buildings work. Architectural designers; structural, mechanical, electrical, and civil engineers; interior designers and landscape architects are all essential parts of that team. ACE students have a great

opportunity to explore what they like doing best and, with luck and perseverance, enter a great career path in an industry that will always be around to shape the future.

(Continued from page 2)

walls gave clues of time invested and the quality control of their product.

The tour ended back upstairs in the dining room which could be considered the main space of the restaurant due to its large open nature and customer activity. The main dining is directly adjacent to the kitchen which also has to serve the event room and deck during the warm months. The layouts of the seating areas play a key part in the functionality of the service. Everything from the circulation to the table shape and size contribute to the total experience of the customer.

Overall, the tour was a very useful experience that addressed issues for the students to consider in their own projects. Aspects of the facility that function successfully were discussed, as well as the things that could be improved upon. Some of the successful features include the open layout for ease of circulation, seating flexibility, themed décor throughout, and the efficiency of the behind-the-scene services. Some of the areas of the building design which have caused some difficulties are the layout of the entry sequence with poor proximity between the hostess/restrooms, bad acoustics caused by the exposed HVAC systems, and the oversized U-shaped bar which has been said to be difficult to work. In order avoid such issues and create a functional yet comfortable space to serve as a restaurant, the students will have to address such challenges in their own designs. The Sea Dog tour may have introduced an overwhelming amount of things for the students to consider but was well worth it not only for their newly found knowledge about restaurants but



Above: ACE students take advantage of the Sea Dogs hospitality and enjoy fresh baked cookies and cakes while discussing their observations of the restaurant and how they might apply to their projects.

for the Sea Dog deserts waiting for them at the end!

Where can I get info about the ACE Mentoring Program?

Go to our website, the addresses are:

Hampden: www.acementor.org/814

Bangor: www.acementor.org/953

Portland: www.acementor.org/902



Or, contact any of the team members via email at:

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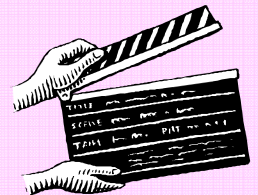
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Thank You to Our Sponsors for their Continued Support

This program relies totally upon the generous support of our sponsors. By providing financial support and other resources, our sponsors enable us to offer this program at no cost to the school or to the students who participate. In this way, the best, most talented, interested and motivated students from all levels of society can participate in the program. We hope you will take a moment to contact our sponsors and join us in extending our sincerest thanks to each for their very generous support of the ACE Program in the 2009-2010 School Year. They can be reached through their link on our website www.acementor.org/814.

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Special thanks to the **Norman Stern and Sara Stern Foundation** for their generous support.