

Missouri Teacher Combines Culinary Arts and Aquaponics



By Rebecca L. Nelson

- ☑ *Thursday – prepare sit-down lunch for 25 administrators and guests*
- ☑ *Friday – prepare a full lunch buffet*
- ☑ *Saturday – Cater a lunch for Skills USA group*



Does this sound like a typical assignment for high school students?

It is at the Columbia Area Career Center in Columbia, Missouri, which offers three levels of cooking classes to students of six high schools in the region. Culinary Arts Instructor, Brook Harlan, teaches students advanced techniques in the Culinary Arts II class that give them the confidence and ability to plan, prepare and serve all types of foods, including a weekly restaurant-style buffet lunch each Friday.

The Culinary Arts class has a state-of-the-art kitchen, comparable to some of the better restaurants in the country. But, unlike most restaurant kitchens, Harlan and his students don't have far to go when in need of fresh herbs. A kitchen-classroom aquaponic system provides cilantro for tortilla soup and salsa, fresh sweet and lemon basil for making pungent pesto and thyme to flavor stock. Growing along with the basil, cilantro and thyme are parsley, fennel, oregano, marjoram, sorrel, chervil, watercress, dill, garlic chives, chives, sage, lavender and mint, all of which are picked and used as needed.

“Having the fresh basil helps our budget. We can make pesto all year long and don't have to buy basil,” comments Mr. Harlan.

Of the three Culinary Arts classes at Columbia Area Career Center, two are taught by Brook Harlan, Culinary Arts I and Culinary Arts II. The classes are one and a half hours long and currently have 18 and 14 students, respectively. Rounding out Harlan's day are his responsibilities as the school's head wrestling coach. He shares, “I get to do so many diverse things in this job that I couldn't do as a restaurant chef.”

In addition to the classes Brook teaches, a baking and pastry class is offered as well. “Some of the students realize how special this is now and others realize it later when they look at how far along their culinary skills are compared to others.” Harlan explains.

Some of the students from the Culinary Arts Pro-

gram have gone on to continue their learning at the Culinary Institute of America. Others have gone directly to careers in the food industry. Many have competed in state and national culinary competitions. In 2003, student Trey Quinlan won the State Skills USA Competition for Missouri. Andy Burris won the same title in 2004. In 2005 Katie Frink won the State Skills USA Competition for Missouri in 2005 and Placed 2nd at the national level. These impressive accomplishments by Brook's students demonstrate the value of an innovative learning environment where students are inspired to pursue their interests.

The aquaponic system is a remnant of a now defunct Industrial Technology program. When Brook Harlan began teaching at the CACC 4 years ago, fresh from graduating from the Culinary Art Institute in Hyde Park, New York, they were phasing out the Industrial Tech program and implementing what would become the largest Culinary Arts program in the state. The aquaponic system found new life in the kitchen where it would become a centerpiece teaching Culinary Art students the importance of using fresh products to create great food, while imparting just a bit of science in the process.

The aquaponic unit consists of four gravel-filled

beds in which the herbs are grown and three fish tanks, home to bass and bluegill. Since the

kitchen and aquaponic system are both in the basement, artificial lighting is used to grow the herbs. Brook comments, "Sometimes I come in here early in the morning and leave late at night. Since we are in the basement, I never get to see what the weather is." Two of the grow beds are stacked with the lower one lit by high pressure sodium lights and the upper bed lit by fluorescent plant lights.

Harlan explained that the aquaponic system is nearly maintenance free once it is up and running. He checks the water level and feeds the fish daily. "The students are really intrigued by it. They want to pick the herbs when we need them." Harlan said.

Twenty-five year old Brook Harlan grew up and went to school in Columbia. He left to attend the Culinary Institute of America in New York and then returned to his home town and, what has become his passion and career of choice, teaching and coaching.

For those of you readers who are fans of *The Food Network*, you may recognize Brook as one of the finalists on the reality show, "*The*

Next Food Network Star" which aired in June. A family friend told Brook about the show on which chefs compete for their own show on *The Food Network*. A lack of time caused the idea to be



*Top: one of the gravel-filled beds with a variety of herbs growing within.
Bottom: Brook Harlan harvesting basil from the aquaponic system.*

shelved until the day before the video taped auditions were due, when, at 1:00 am, after coaching a team wrestling meet, Brook set up the video camera in his home kitchen and created a tequila-glazed shrimp canapé. He sent the videotape overnight to *The Food Network* studios in New York.

Harlan's tape impressed the judges and he was selected as one of the finalists to compete against 7 other chefs on the show. Luck wasn't with Brook during the live taping and he was eliminated. Being on the show did give him the opportunity to return to New York, experience what live Food TV was all about, visit old friends and make many new friends. If you'd like to see Brook's audition tape, complete with the use of the clapper to turn out the lights during the tequila flambé, visit: <http://www.foodtv.com>, go to "*The Next Food Network Star*" and click on the link to view last season's finalists.



Brook Harlan's plans for the Columbia Area Career Center don't stop with the current facilities. On the day we spoke, he had an upcoming meeting with an architect to help design an even bigger training kitchen, one in which he plans aquaponics to be a part of. "I'd eventually like to have a class that takes care of the aquaponics lab. I'd like to teach them more about it so they understand what makes it work." comments Harlan.

Many schools have incorporated aquaponics into the curriculum, usually in the science or agriculture departments, and each one of these schools deserves recognition for their innovative efforts. Culinary Arts and Aquaponics, though, is a combination new to me but one, thanks to Brook Harlan, that seems a perfect match.

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