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University College
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EAO Debrief: What I learned at the European Academy in Otzenhausen, Germany.

What I learned:

The experience of traveling to Germany and attending the educational seminars in sustainability at the European Academy in Otzenhausen, Germany, was a beneficial experience for me. As a first-year employee with the University, the opportunity provided me with an ideal experience to meet and associate with colleagues across diverse disciplines and form relationships which otherwise would not have been possible. The trip provided the platform to share the educational mission of the program with which I am associated, Culinary Sustainability and Hospitality (CSH)¹ and to learn about the educational mission of programs such as Construction Management, Business, Music, Literature, Social Work, and more. The opportunity to engage with colleagues across campus was beneficial in ways that will undoubtedly return dividedness in years to come.

Beyond the social, collegial aspects of the trip, which were more of an added benefit than the purpose, the EAO experience gave me a chance to learn about sustainability issues that impact the arena in which I teach. Topics such as micro-plastics and the impact on sea life; population growth and the ability to feed the plant; environmental quality issues related to a diverse set of topics such as deforestation, intensive commercial agricultural practices (concentrated feedlots, aquaculture, and genetically engineered crops) vs. less intense, organic methods of producing food. One takeaway from the seminars on food and population which still resonates with me is the question of how realistic are sustainable agricultural practices going to be in meeting the food demand for a globally growing population? Humanity, I will argue, is a victim of its success. The survival rates of humanity increases as lifespans improve from medical technology advances. Moreover, the perspective that humanity “owns” the present does not give deference to the stewardship role, I believe, human-kind plays in ensuring a sustainable, viable planet for future generations.

A pillar of the CSH program is sustainability. The commercial foodservice industry is a “hungry” consumer of natural resources. The presentations and discussions focused on food, hunger, water management, and the conservation other natural resources led me to look more closely at a common and extremely wasteful habit practiced in many commercial kitchens: speed-thawing under running tap water. It is a bad habit I actively discourage from my students. Some students join the CSH program with prior industry experience bring these type of bad habits with them. I have instituted a rubric in the performance grade for students in Quantity Food Management that evaluates their water use through the lens of sustainability. The food safety code sanctions thawing under running water as a safe method, under specific conditions, to thaw frozen food. However, many cooks default to the practice without consideration of the

¹ For the purpose of preserving legacy information, the CSH department is presently undergoing a revision to its curriculum and departmental name. Regardless of what future name is adopted for the program or what revisions may occur to individual courses, the educational mission will remain focused on preparing graduates for careers as managers and leaders in segments of the hospitality industry focused on restaurants, foodservice, and event management, and to do so with sustainability as a pillar of the curriculum.

impact such a wasteful practice has on the environment and the communities in which they live. With planning and foresight, frozen food can be slacked out (thawed) under refrigeration. It takes longer, but with planning thawing under refrigeration does not consume any more energy in the day-to-day operations. It is a simple practice. It's so simple it almost seems absurd to elaborate on it, but the practice is so commonplace, that I believe it warrants highlighting just how detrimental the practice is to the natural resources of the planet.

If I may indulged in a little daydreaming, I would like to see the CSH program operate in a facility that has systems in place to measure energy use on a hyper-local basis. For example, gas and water flow meters that monitor consumption at the stove or the faucet so instructors and students can see how their practices affect resource consumption. It's common to see water fountains that have a digital screen which provides a measure of how many water bottles have been diverted by using a refillable bottle. This measure provides usage data that can be applied to cost data and help everyone evaluate his or her impact on the environment.

Restaurants operate on slim margins. Profits are often expressed as pennies on the dollar. Saving water is a relatively easy, low involvement practice that will have a direct impact on the bottom line. I often share with my students that the owners of a privately owned restaurant will view wasteful practices by employees very personally. The restaurant industry operates on such small margins, that food waste and energy waste could mean the difference between making payroll, or covering overhead expense, or paying the owner-operator him- or herself. As an example of how waste can be viewed as personal, a friend, who owned a small restaurant several years ago, shared a story with me about hiring a cook who turned the stoves on every day when he arrived midday to prepare for dinner service. The ovens would run several hours, unused before the cook needed them. That continued to happen until the next gas bill arrived. The wasteful practice stopped, and the owner fired the cook.

How I will apply that knowledge in the classroom:

The EAO experience lead me to look for research on water usage in the restaurant industry. In particular, I was interested in water consumption data for the industry. I should point out that to generalize about all restaurants with a single figure would grossly oversimplify a complex industry where the resources consumed are directly informed by the type of cuisine, the number of customers, operational decisions about reusable vs. disposable service ware, and a myriad of other choices that would all impact water consumption. I was intrigued to find a research paper that measured water consumption by twenty-one restaurants in Hiroshima, Japan. A study by Saburo Murakawa calculated the average water consumption of each restaurant in his sample as 224,072 liters per day (Murakawa, 2004). Converted to gallons and applied to a restaurant that operates six days a week, the annual consumption calculates to over 18,400 gallons a year.

With this data to provide some context, I now have the basis to discuss the annual cost of water to a restaurant with my students. I will be introducing a new exercise in Spring 2019 where the students use an online water cost calculator from a website hosted by Cobb County government. The site provides a tool for residential customers to estimate their water bill. The website lists the rates for single-family homes, which are tiered according to consumption levels, as well as the prices for non-residential customers, irrigation, and sewage. The online calculator is specific to residential customers, but I will have them apply various consumption rates for

residential use to get a sense of the impact usage has on the monthly cost of water. While the online calculator is designed for residential customers, the exercise may be especially impactful to those students who have not been emancipated to the point of paying their utility bills. Also, I will have them manually calculate the annual cost for various non-residential customers using the non-residential customer rate posted on the Cobb County website (Government, 2018). Students will also calculate the sewer rate using the published cost and the hypothetical consumption rates they have been assigned to get a real sense of the cost of water.

Finally, to put this exercise into the context of running a restaurant, I will have a secondary assignment that ties the water cost from part one to a hypothetical profit and loss statement for a variety of foodservice business representative of different segments of the industry. I will instruct each student to calculate the impact on the bottom line as well as the relative value water and sewer costs share compared to other items on the statement. This exercise should lead to some sobering awareness of the cost of doing business, particularly as it relates to the foodservice industry. I expect it will also create some knowledge of the costs associated with supporting oneself in today's world.

Works Cited

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