

Delicious Ways of Learning about World Crops

A. Ozzie Abaye¹, Kang Xia¹, Bo Zhang¹, and Gregory E. Welbaum² 330 Smyth Hall (0404), Virginia Tech, Blacksburg, VA. (1)Crop and Soil Environmental Sciences, Virginia Tech, Blacksburg, VA (2)Horticulture, Virginia Tech, Blacksburg, VA



Introduction

- Learning activities such as field trips and hands-on exercise, like cooking, combine knowledge with “doing”.
- One way to incorporate active learning in the classroom is the modification of traditional lecture format (Penner in 1984).
- In response to an increased interest in the “food-chain – production to consumption”, we added a food lab to the traditionally lecture-based World Crops and Cropping Systems course.

Objectives

- To give students a greater appreciation of world crop production, processing, and usage.
- To identify and transform the single crop across cultural boundaries.

Food Lab Procedures

- Students were assigned to groups to prepare and present food during the weekly food lab period.
- On a weekly basis, up to 6 recipes were provided and the food was prepared and presented in the lab the following week.
- We selected recipes that transform the single crop across cultural boundaries and express cultural values. For example, a dish made out of corn is known as *ugali* in Kenya and Tanzania, and *pap* or *mealie pap* in South Africa. Italians eat something almost the same as *ugali* known as *polenta*.
- At the end of the semester, students are required to make a three-course meal. The students are evaluated based on presentation, taste, and cultural connection.



Ugali



Mealie Pap and Chicken stew



Polenta

The crops we eat, wear, and drink:

- Wheat, Rice, Maize, Barley, Soybeans, Chickpea, Lentils, Potato, Cassava, Sweetpotato, Cotton, Jute.....

Abstract

Food lab was added to the traditionally lecture-based World Crops and Cropping Systems course at Virginia Tech. The overall objective of the food lab was to connect the art and science of crop production to consumption – “field to fork”. A summary of some often-heard comments from the 60+ student course evaluations included: “I learned that on a daily basis I eat a lot of crops I didn’t realize I was eating. I got to see crops I have heard of but didn’t know what they look like. I also learned how the rest of the world eats”. To the student evaluation question “Did your view change how you see food that is not “familiar” to you? If yes, in what way”? The students answered: “I tried everything and mostly enjoyed the unfamiliar foods. It was a great learning experience”; “Yes, by cooking the food ourselves and knowing how and what went into each recipe I was more willing to eat it, at least try it. Now I will try foods that before looked unappealing. Based on feedback from students, they gained appreciation of the entire food chain from production to food preparation, and the culture of food in general which dictates food choices and acceptance.

The Crops



The cooking



The cultural connection



The food

Exposed to unfamiliar food



Ethiopian Food



Samosa – Mediterranean



Dumplings



Ugali (East Africa)



Dal Bhat - India (rice and lentils)

Students View

- **What did you learn from the food Lab?**
 - I learned to respect other cultures food as well as to appreciate the tradition that comes with it. I also obviously learned how to prepare various and unique meals.
 - That the food is not all that weird as I expected it to be.
- **Did your view change how you see food that is not "familiar" to you? If yes, in what way?**
 - I came into contact with a lot of different food types, especially within the bean group.
 - Cassava, tempeh, teff, rice pudding, barley cake, real Chinese dumplings
 - Lentils, I had never heard of lentils before this lab and previously thought that they were onion-like veggies for some reason.
- **How did you decide what you like or dislike about food? By smell and/or taste/flavor?**
 - Taste and texture, texture especially (most)
 - I decided what I liked/disliked about food based on a combination of all three factors.