# **Teaching Tips/Notes**



## The Need for A Critical Pedagogy of Agriculture

#### Introduction

Many of our agricultural science students can talk about why agriculture is important. They may discuss the need to feed the world, support regional and national economies, or the cultural importance of agriculture. Some students might understand the ecological implications of agricultural, such as issues with tillage, compaction, soil microbial life, and even biodiversity. Yet, when asked how agriculture can improve impoverished communities or be used to enhance ecosystem services, many students are unsure.

Our agriculture students must understand the connections between agriculture and key social, economic, and ecological issues such as food deserts, rural poverty, health epidemics (i.e., obesity and type II diabetes), desertification, eutrophication, and climate change. Moreover, students need to be aware of how various community educational programs and alternative agricultural practices can help alleviate some of these problems. Our students should learn about and participate in agrifood-related initiatives such as community-supported agriculture, farm to cafeteria programs, gleaning (donating unsold produce), game meat donation, urban and vertical farming, and wild edible community harvesting. They need to know about food based social service programs (i.e., Food Not Bombs and Meals on Wheels), horticultural and equine therapy, food mapping, food hubs, and food justice movement activities. Using our Critical Pedagogy of Agriculture (CPAg) framework can bridge this knowledge gap and help guide College of Agriculture educators in their practice.

#### What is a Critical Pedagogy of Agriculture?

Similar to other critical pedagogies, CPAg is a way of thinking about, questioning, negotiating, and acting to transform our understanding of knowledge, institutional structures, and relationships surrounding the agriculture-society nexus. CPAg focuses on improving social and ecological issues through agriculture. The first step is to ensure that alternative agricultural paradigms and systems are covered in the college classroom. This opens dialogue about the implications of different agricultural practices (i.e., conventional farming, concentrated animal feeding operations, permaculture, and agroecology). We recognize that educators may not be able to address all of these issues and alternative practices, yet given the applied nature and range of topics within the discipline, CPAg is relevant to most agricultural courses.

#### **Procedures: How to incorporate CPAg**

This section provides a brief overview and guiding discussion questions for three key agricultural issues.

## 1. Building Community-Based Food Systems

Ensuring access to healthy food is a daunting problem. Those most in need may not know how to grow food or have access to land. Colleges of agriculture are not immune to these food justice issues as land-grant institutions were originally founded to improve and share agricultural knowledge. CPAg argues that part of the solution is for people to become active participants in their local food system. Questions to be posed:

- a. Who has the right to call themselves a farmer or gardener?
- b. What is the economic impact of backyard gardening on the agrifood industry?
- c. What role can urban and suburban gardening play in alleviating food deserts?

## 2. Addressing Social Inequality

There are a variety of connections between agriculture and inequality. Many agricultural workers in America live at or beyond the poverty line. Migrants exist in the shadows of our agricultural industrial complex, harvesting, processing, and serving the food we eat. CPAg pushes students to increase their awareness of the rights and wages of agricultural workers and to consider how the economic structure of family farming is changing. Students should consider the following guestions:

- a. What is the relationship between immigration policies and agricultural labor?
- b. How have changes in family farming impacted rural communities in the past 50 years?
- c. Should agricultural labors be paid more to encourage future farm ownership?

Students in agricultural science-based classes need to consider these questions and the social injustices in our agrifood system by becoming a part of assigned community service projects that provide experiential education.

## 3. Contested Agricultural Approaches

Agriculturalists can be divided into two broad ideological camps: conventional (i.e. tillage, synthetic inputs, and the use of genetically modified seeds) and alternative (i.e., no-till, agroecology, and permaculture). This divide is visible in colleges of agriculture when considering diverse student populations and their associated agricultural values. This divide has led to legislative battles between stakeholders and businesses and has shaped the Farm Bill and other USDA policies. Professors need to be inclusive of diverse agricultural values and alternative approaches, even if they do not agree with them. Questions:

- a. What is your experience with conventional and alternative approaches to farming?
- b. What are the costs and benefits of using synthetic agricultural chemicals?
- c. What are the social and ecological costs and benefits of annual agriculture (i.e. corn, soy, wheat, etc.) vs. perennial agriculture (i.e. orchards and tree crops)?

## **Assessment: How CPAg Changes Conversations**

Students often come to see the complexities and deeper issues of the agrifood-society nexus using these kinds of critical, problem-posing questions. The outcomes from these activities range from critical awareness of one's food sources to planning for rural community through agriculture. For example, food mapping asks students to write reflections about their experience investigating food sources. Some students develop an interest in "wild edibles" and the lack of food-worker knowledge regarding food being served in restaurants. Other students note food miles and the differences in pricing between organic and conventional produce. Another example can be found in the case study of a rural food dessert. Students were challenged to think how rural citizens can produce food locally. They struggled initially, but soon identified ways for rural community members to become active in promoting more economically sustainable food through farming, gardening, ranching, and hunting.

We recognize that these critical conversations don't always happen in agricultural classes; yet, when they do, they can help students generate answers to questions about how agriculture impacts and influence other structures and outcomes in society. CPAg helps students think through these issues and make connections to their liberal arts coursework and local communities. The CPAg framework encourages students to work for positive social and ecological change through agriculture. Authors:

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