Student Reflections on Service-Learning in a Greenhouse Hydroponic Food Production Course

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Service-Learning

• Educational approach that includes:
  • Community service
  • Curriculum connection
  • Reflection
Our Research Question

• Does a service-learning component impact student engagement and learning in a greenhouse hydroponic food crop production course?
Course Details

• HORT 331 Hydroponic Food Crop Production
• Fall Semesters: 2014 and 2015
• N=XXX students
• Community Partner
Approach

- Students produced cucumbers, tomatoes, lettuces, and herbs

- Crops were harvested twice per week during laboratory periods

- Food was delivered to Food at First from mid-September to Thanksgiving
Approach

• Students completed two volunteer shifts at Food at First during the middle part of the semester

• Three different options
  1. Food bank distributions
  2. Meal preparation
  3. Meal serving and clean-up
Ready to Deliver a Harvest
Approach

• Students completed three guided reflections each with a different focus

• Reflection 1
  • **Focus:** Impressions of the service-learning project and purpose
  • **Submitted:** Week 1 following description of SL project and presentation on food security by the community partner
Approach

- Reflection 2
- **Focus:** Volunteer experience
- **Submitted:** Week 8-10 after volunteer experience was completed
Approach

• Reflection 3
  
  • **Focus:** The overall impact of the service-learning experience including connecting course content to the production of hydroponic greenhouse crops, donating the harvested crops, and the volunteer experience.

  • **Submitted:** at the end of the semester Week 14
Reflection 1 Themes

- Enhanced awareness of local food insecurity
- Understanding of what Food at First does
- Excitement in doing the service-learning project
Reflection 1: In Their Words
Reflection 2 Themes

• Student empowerment and satisfaction in helping others
• Empowerment of food bank clients
• Increased student empathy of those without food
Reflection 2: In Their Words
Reflection 3 Themes

- Individualized examples of what the service-learning project meant to the student
- Connection of how what they learned in class impacted food bank clients
- Interest in doing this type of project on a larger scale at ISU and for commercial producers
Reflection 3: In Their Words
Implications of Our Research

• The service-learning project stays in the curriculum!
• Modifications to course content and SL project based on student comments
• Future research to quantify change in student’s perception over timeframe of the course
Acknowledgements

- Peter Lawlor for greenhouse assistance
- FarmTek for equipment
- Smithers-Oasis for propagation substrate
- J.R. Peters for fertilizer

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