

Lessons Learned from Flipping a Nutrition Service-Learning Course

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Background

- One goal of the Nutrition Science program is to assist students in developing their skill and self-efficacy in clearly disseminating nutrition education programming to members of the community.
- Service-learning (SL) is a methodology used to combine academic material, relevant service, and critical reflection; it can allow students to gain understanding of personal growth, academic enhancement, and civic learning.¹

Project Goals

 Redesign a flipped course where students completed online pre-SL modules before attending class.

Flipping a Course

- Online learning modules
- Interactive exercises
- Quizzes

Before Class

- Learning module
- review • Discussion
- Active learning exercises

During Class

- Application of
- knowledge • Group work
- Discussion and reflection

After Class

- Content engagement occurs during class time.
- The revised and flipped course format incorporated opportunities for students to engage with three diverse audiences: school-aged children, refugees, and senior adults.





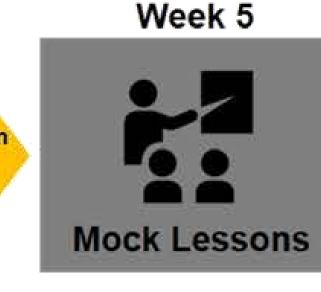


Critical Reflection





Critical Reflection







- Course was flipped during Spring, Summer, and Fall 2018 semesters to be used in the Spring 2019 course.
- Pre-service-learning (pre-SL) online modules were completed during the students' "lab" time.
- After "lab," students met in person for a 1-hour critical reflection meeting each week.
- Students completed the following pre-service-learning online modules in the first four weeks of the semester: Service-Learning & Critical Reflection, Teamwork & Teaching, Cultural Foods & Cultural Competency, and Conflict Management & Knife Skills.
- Students engaged in mock lessons with their teammates during the fifth week.
- Students worked in their groups with a different community group every three weeks in a rotating fashion (i.e., refugees, school-aged children, older adults) after completing the four introductory modules at the beginning of the semester.
- Students reflected upon their experience within each community group during weekly lectures and wrote reflection papers throughout the experience.
- We added lessons on refugees and cultural foods and competency based on adding new community partners.

Course Process

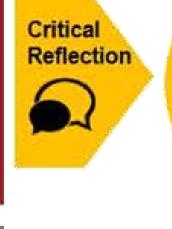




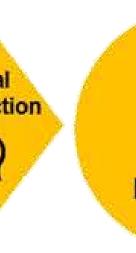














Critical

Reflection

Critical

Reflection

Week 16: Focus Groups

Critical Reflection

SL Experiences

Nutrition students focus on teaching senior adults recipes that can be easily prepared for one person. Here students work with seniors to make a Mediterranean salad and describe the new MyPlate food guide.





Nutrition students visit with a refugee family, share a

dish, request a different recipe, return the following week,

and cook the recipe from the refugee family's culture.

The picture shown is banjan, an Afghan dish of potatoes,

eggplant, and peppers.









Nutrition students teaching school-aged children at a community Boys and Girls' Club in Raleigh, making almond butter and apple smiley faces.







Lessons Learned

- Flipping the course allowed students to learn at their own pace.
- Incorporating the 360 video throughout various lessons assisted students in exploring actual classrooms and teacher/student interactions before going into the community.
- Some videos allowed students to think, but left them unable to see how conflict can lead to different outcomes.
 - Sophisticated e-learning software options caused some difficulty for students navigating online modules.



About the DE Grants Program

NC STATE UNIVERSITY

Food, Bioprocessing and Nutrition Sciences

Established in 2017, the FBNS DE Grants Program is an interdepartmental program where two faculty are selected each year to work one-on-one with an instructional designer to create new distance education courses, redesign current distance education courses, blend an existing course, or flip a course for additional online learning opportunities.

Next Steps



- Revise online modules to remove advanced technology features
- Teach course second time in Spring 2020 semester and collect data
- Analyze student critical reflection papers