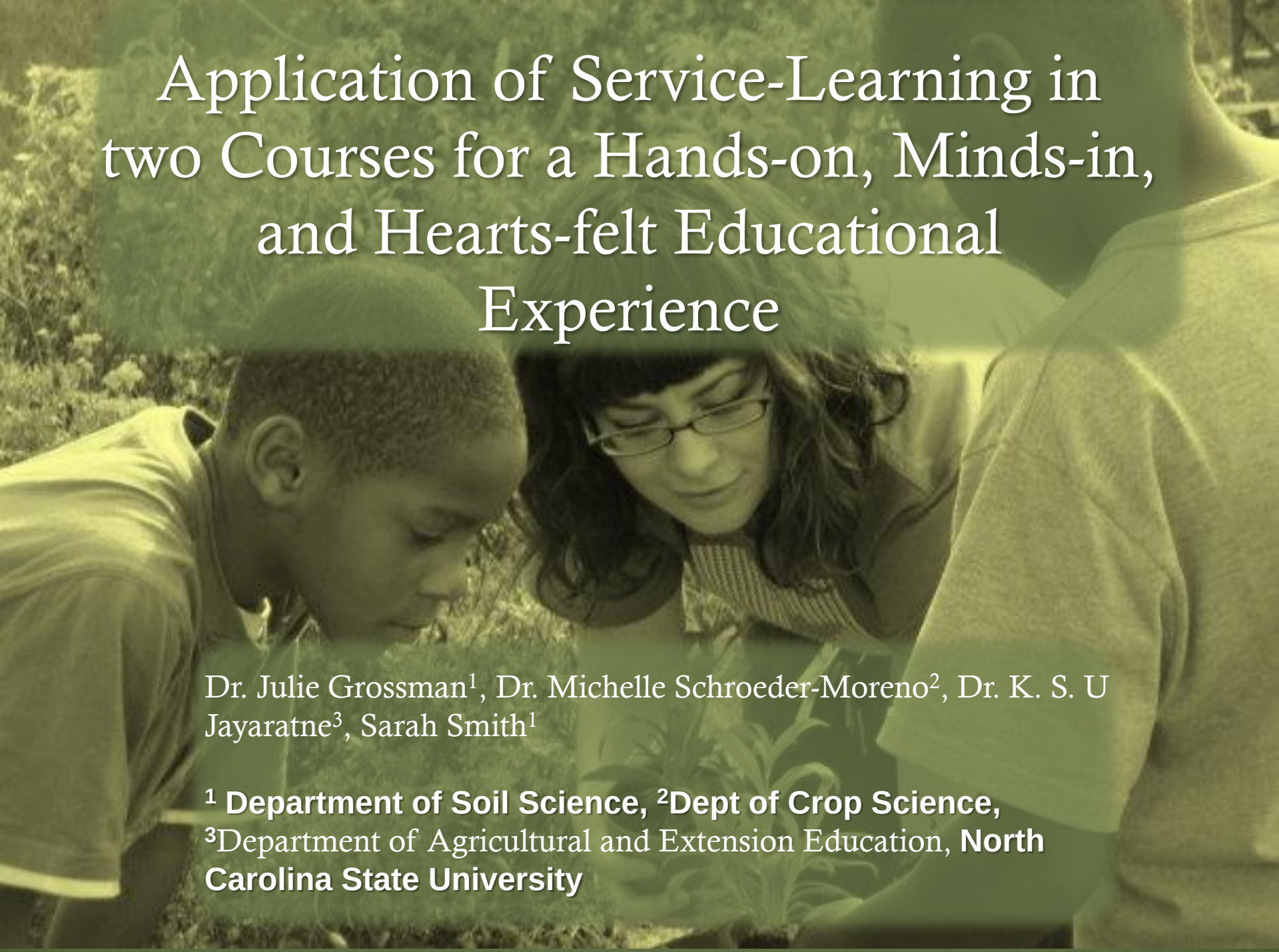
Application of Service-Learning in two Courses for a Hands-on, Minds-in, and Hearts-felt Educational Experience



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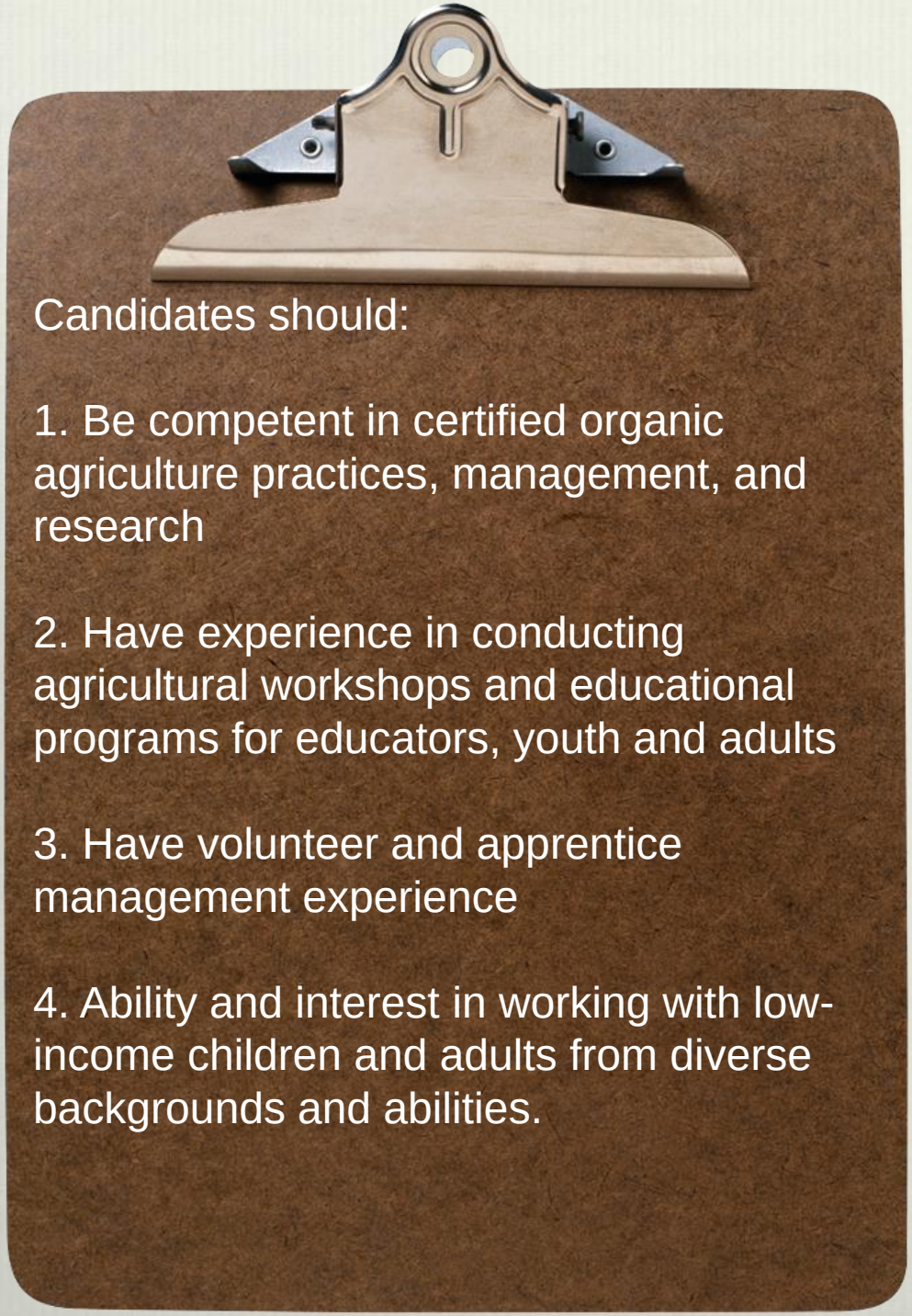


Wanted!

Urban Farm Manager for a 20 year old non-profit organization focusing on innovative urban agriculture-based education programs and food system projects committed to the creation of urban school and community urban agriculture-based education and research programs for youth and adults. $44,625. Paid vacation and holidays. Health insurance allowance

Can educational tools help increase food security?

- Food security one of the greatest challenges facing our society
- North Carolina has 12th highest obesity rate (28%); and 1 in 5 children are food insecure
- *"We need to develop educational tools to foster the development of urban agriculture, promoting improved nutrition for children"*-SSSA Grand Challenges, 2010

Service-Learning

- Service-learning is **a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.** - *National Service-Learning Clearinghouse*
- **Why service learning with community gardens?**
  - Helps students actively engage with course material and understand food insecurity in their community.
  - Assists community partner in improving local food security and hopefully will encourage students to stay active after course.

Courses

- **Course 1: *Introduction to Agroecology***
  - Core course: Agroecology Minor and Concentration programs
  - 3 credits, increasing enrollment (40-50 students/course)
  - Diverse students from various majors
  - Short term service learning experience (4 hrs/semester)
- **Course 2: *Service-Learning in Urban Agriculture Systems***
  - Required course: Agroecology Minor and Concentration programs
  - 1 credit, small enrollment (8-12 students)
  - Learning Objectives:
    - Design and carry out an 8-week teaching lesson appropriate for a urban audience
    - Develop professional skills, including problem solving, public speaking, ability to lead a group and resourcefulness.
    - Increase their ability to think critically about social issues related to agriculture and food production

Inter-Faith Food Shuttle
a member of Feeding America

We feed. We teach. We grow.
"Give a man a fish. Teach a man to fish. Stock the pond for all."

Home | About Us | How to Help | Hidden Hunger | What We Do | News & Events | Connect

PROGRAM GOALS:

To provide **fresh**, **local** fruits and vegetables to **community members in need** that excels in taste and nutrition

To **empower** community members and put them back in control of their food

To **improve** community health

To provide **gardening education**, **skill building**, opportunities for **physical activity**, and **youth development**

IFFS Community Gardens help build community health, wealth, and security by bringing our community together to EAT, GROW, COOK, SHARE, and MOVE.

The Inter-Faith Food Shuttle partners with communities to grow Community Gardens and promote healthy lifestyles. Through innovative initiatives and partnerships, we provide community members with education and tools necessary to improve community health and nutrition. Community members are empowered to take back control of their food choices and lead healthier lives through increased access to fresh produce, nutrition and culinary education, and opportunities for leadership development, community building, and physical activity.

How you can help...
- Donate Now
- Volunteer
- Receive Updates

From Our Blog...
- YFTP Apprentices: Cooking Matters graduates!
- Jam Session: YFTP Apprentices learn to preserve what they grow
- Jill & Sun's Excellent Cuban Adventure: Lessons for Food Production in NC
- Inter-Faith Food Shuttle and Longview School as a Growing Power ROTC: Training Young Farmers and Food Activists
- Kids Eat Here Free

Document Downloads


What are the learning gains of students enrolled in each of our service-learning courses?

Collecting the data

Intro to Agroecology

Reflective writings (3); Pre- and post survey; Post course focus groups

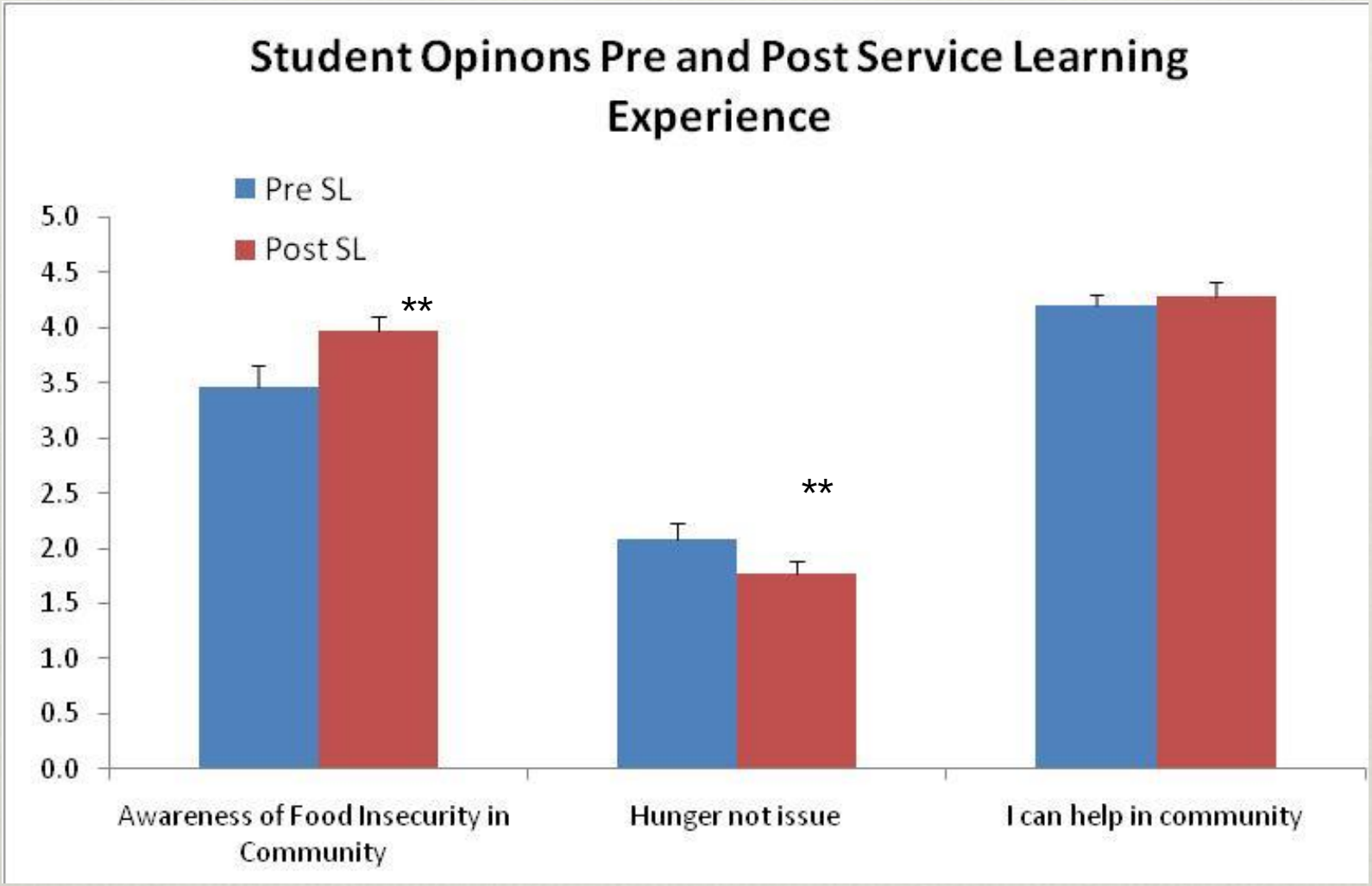
Service-Learning in Urban Agriculture

Reflective writings (3); Pre- and post-survey; Pre-and post-interviews

Control group: Intro Soil Science

Students work with community youth to paint benches in the Mayview community garden, Click on photo for video of agroecology student in garden.

Intro to Agroeoclogy: Pre/Post Surveys Reveal Increased Student Awareness



Likert Scale 1= Strongly disagree; 5= Strongly Agree; ** Sig different at <0.005, n=39

Service Learning Reflections from Intro to Agroecology Course

"**I went into this service learning project with a bad attitude.** I talked about how unfair it was for my professor to "force" us to do manual labor and give back to the community. With this learning project I realized that even though I go to school full-time and work almost 35 hours per week, **I can still make time to help others. I am going to try to make an attempt to help others more**… and maybe if I do that it might benefit me in the long run"

Service Learning Reflections from Intro to Agroecology Course

"At the time I was just participating in this project because it was necessary for the class but now that I reflect back on it I realized that I was contributing to the community and I am very proud of myself. In light of this service learning project I would like to start my own garden. I thought agriculture was boring but this class and **this project made me interested in agriculture and realize how important it is for us to come together and help those who are in need**"

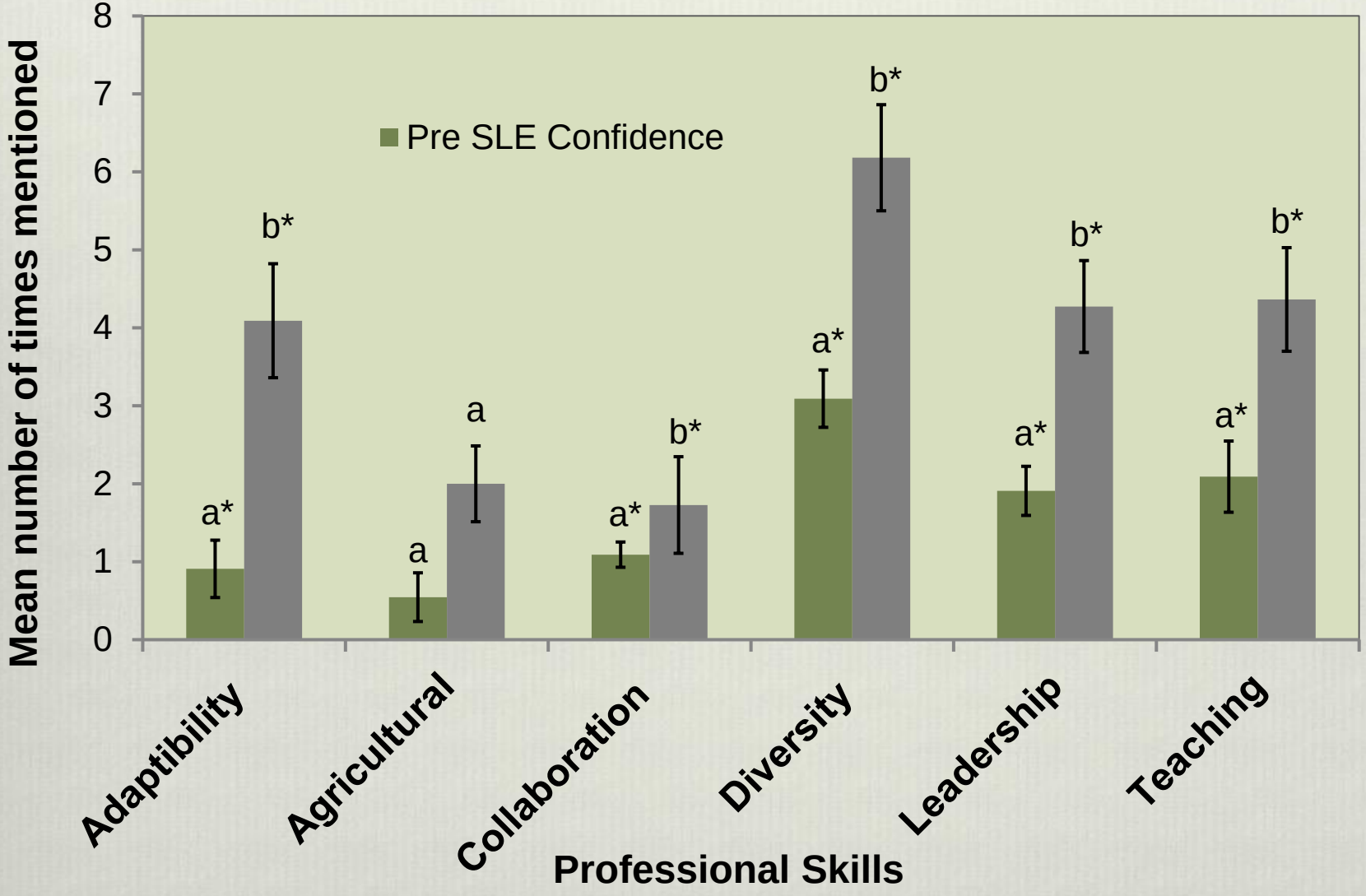
NC State students lead a vermicomposting lesson

Did Service-Learning Affect Skill Development?

Survey Question	Non service-learning		Service-learning	
	Pre	Post	Pre	Post
I am able to identify resources I need to be able to teach a hands-on science lesson to the public.	3	3.14	3.17	**4.67***
I am able to confidently develop a science lesson for diverse audiences from social, economic, or cultural groups different from myself.	2.87	2.29	3.33	**4.33***
I am able to confidently teach a science lesson for diverse audiences from social, economic, or cultural groups different from myself.	2.87	2.29	3.17	**4.33***
I am able to work effectively with diverse populations (i.e. income, ethnicity, class, education or ability different from myself).	4.27	3	4.00	**4.50***
I am able to prepare a lesson.	3.2	2.29	4.00	4.00
I am able to teach a lesson to the public.	3.2	2.29	3.67	**4.50***
I am comfortable communicating soil science concepts to the public.	3.27	**2.71***	2.50	**4.00***
I am comfortable teaching diverse audiences.	3.27	2.29	3.50	**4.17***

*Significant at the .05 probability level; Likert Scale 1= Strongly disagree; 5= Strongly Agree

Coded interview results: student confidence in professional skills



*Significant at the .05 probability level; n=11; Likert Scale 1= Strongly disagree; 5= Strongly Agree

Biggest learning gains in adaptability and problem solving

*"I think that you **had to adjust** more than the content you were teaching. So we planned our content out, but how we related to the kids changed depending on who showed up."*

*"…and I walked out of there after the first day just being like, "holy @#$%, **that was quite different** than what I thought it was going to be like."*

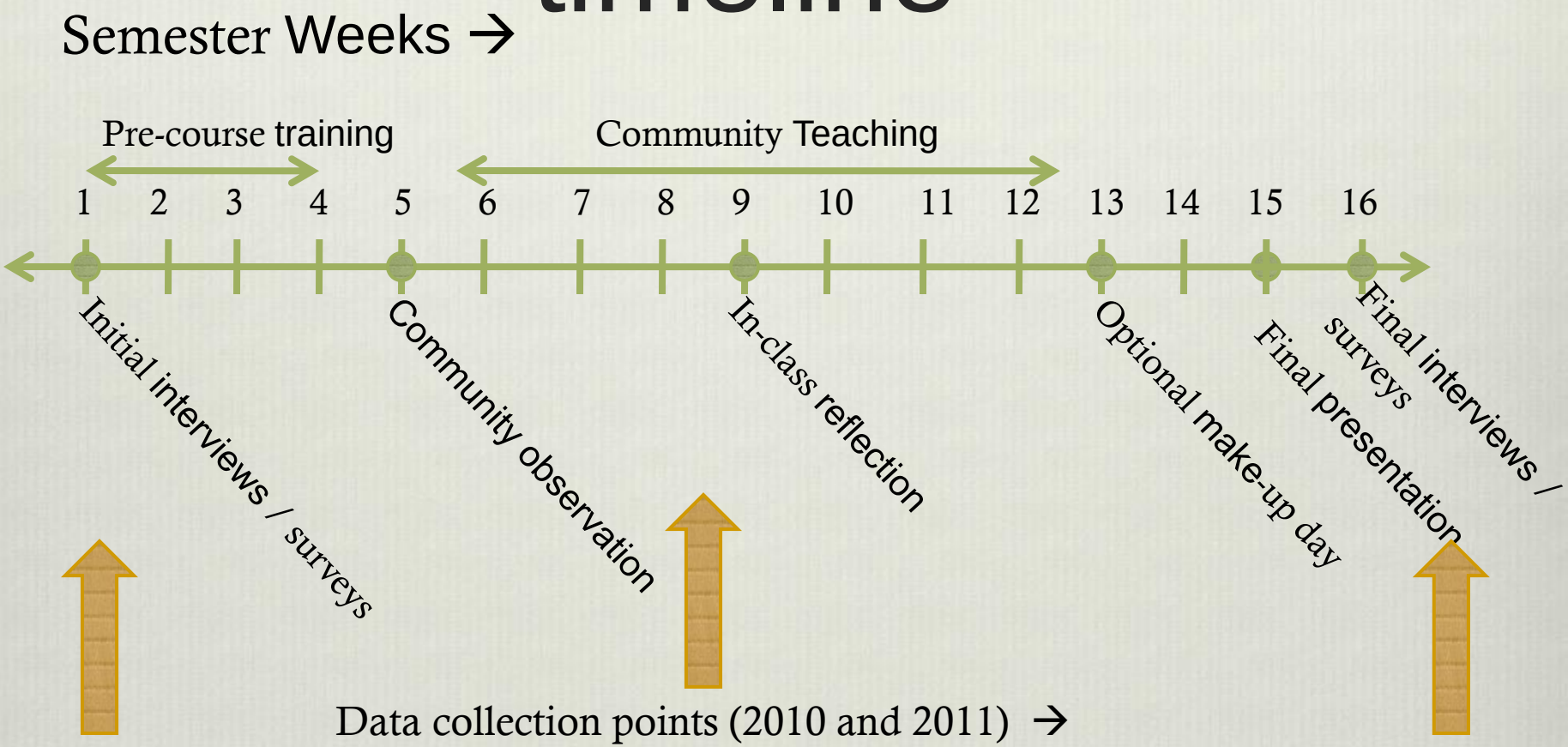
*"…you had to (be flexible), there is no other choice, **you had to improvise…you have to change**. So, how to do (the lesson) depends on the situation"*

*"…since we had a lot of different kids we kind of **had to think on our toes** about who, what, when we had to recap or review"*

Words of Advice for Developing Service Learning Activities with Community Gardens

- Take time to develop community relationships, choosing activities that mutually benefit the garden and community partner(s).
- Understand this is going to take more time than traditional teaching but the payoffs are significant.
- Develop clear goals for students and means of evaluation, linking class content to community activities

Sample semester timeline



Survey results compared to non-service-learning control class *Introduction to Soil Science,* SSC 200

Y1 SL (n=5); Y1 Control (n=7); Y2 SL (n=6); Control (n=11)