

*PROFESSIONAL
DEVELOPMENT: COMMITTING TO
PROFESSIONALLY VALUABLE
HABITS OF THINKING.*

Suzanne Hendrich, University Professor,
FSHN

shendric@iastate.edu

Learning outcomes for today

- Make meaning of FSHN graduate student learning outcomes.
- Plan actions using frameworks for professional development focused on FSHN graduate student learning outcomes

FSHN proposed graduate student learning outcomes

- Apply scientific thinking in the analysis, synthesis and evaluation of knowledge within the discipline of food science, nutritional sciences or dietetics.
- Apply ethical reasoning within the discipline of food science, nutritional sciences or dietetics.
- Effectively communicate discipline-specific information in written and oral forms to scientific audiences.
- Effectively interact within scientific teams.
- Facilitate learning within FSHN courses.

Case study

- You have been asked by your major professor to assist an undergraduate in their research study and have been given the following proposal:
- Tea is very popular in Asian countries, a tradition with long history. Tea is good for human health, and it can reduce the risk of cancer and cardiovascular and cerebrovascular diseases. Tea is a natural antioxidant and preservative, and it can be used for prevention of dental caries. The most functional elements in tea are the polyphenols. Their antimicrobial properties will be investigated using different teas.
- Objective: Test how different tea polyphenols perform against some major model food pathogens.
- Methods: Extract tea polyphenol from different types of tea then test tea polyphenols against some major food pathogens.
- How would you approach helping the undergraduate and why?
- How would you use the scientific thinking framework as you proceed?
- How would you use the teamwork framework as you proceed?

Case study part 2

- The tea polyphenol study has proceeded and obtained the following results for minimal inhibitory concentration (μL extract/mL medium). The undergraduate is very upset about these results.

Treatment	<i>C. rodentium</i>	<i>S. typhimurium</i>	<i>E. coli</i>
Vehicle	100	100	100
Black tea extract	100	100	100
Green tea extract	100	100	100

How would you further use the scientific thinking framework?
How would you use the teamwork framework?

Plans for assessing FSHN graduate student learning outcomes

- Align FSHN courses to include these learning outcomes
- Use annual review form and self assessments to be accountable for working on these learning outcomes

- How to proceed?
- How to best use the self-assessments for your learning?
- What next step will you take and why?
 - Faculty?
 - Students?