

Guidelines for Developing Instructional Modules to Improve Students' Communication Skills

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*This project was supported by Higher Education
Challenge Grant no. 2017-70003-26386 from the
USDA National Institute of Food and Agriculture.*



Background

- **Increasing expectations** for faculty to incorporate communications curriculum
- **Communications skills critical** for industry: Challenges in communicating with lawmakers and public



Hot Topics in Agriculture

“pink slime”

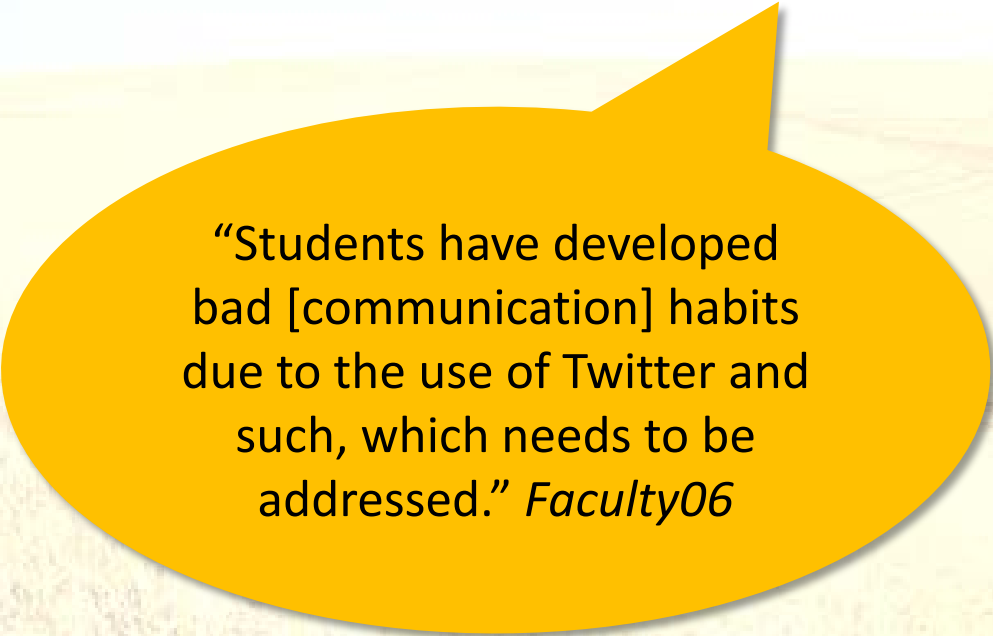
Using herbicides and pesticides on crops

GMOs

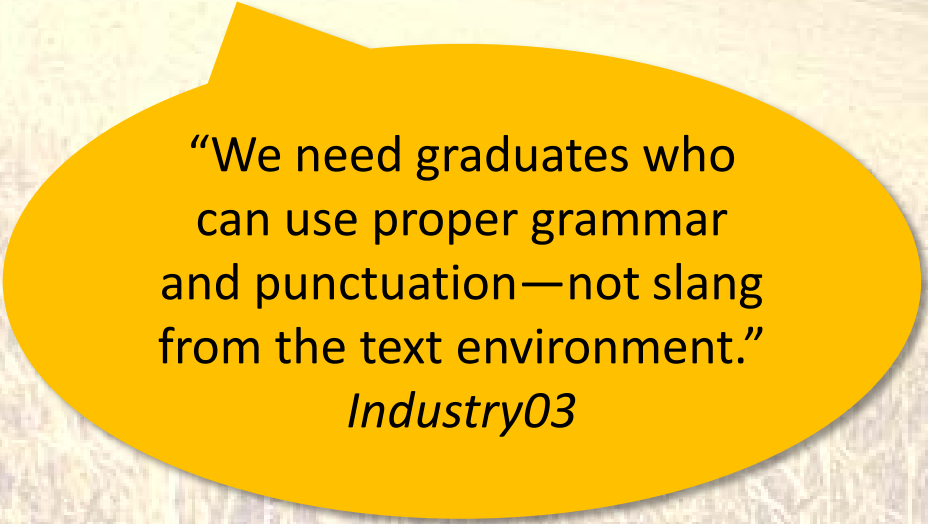
Mass-production of certain crops

Raising poultry and swine in enclosed areas

“free range” vs. “organic” vs. “pasture-raised” labels on products

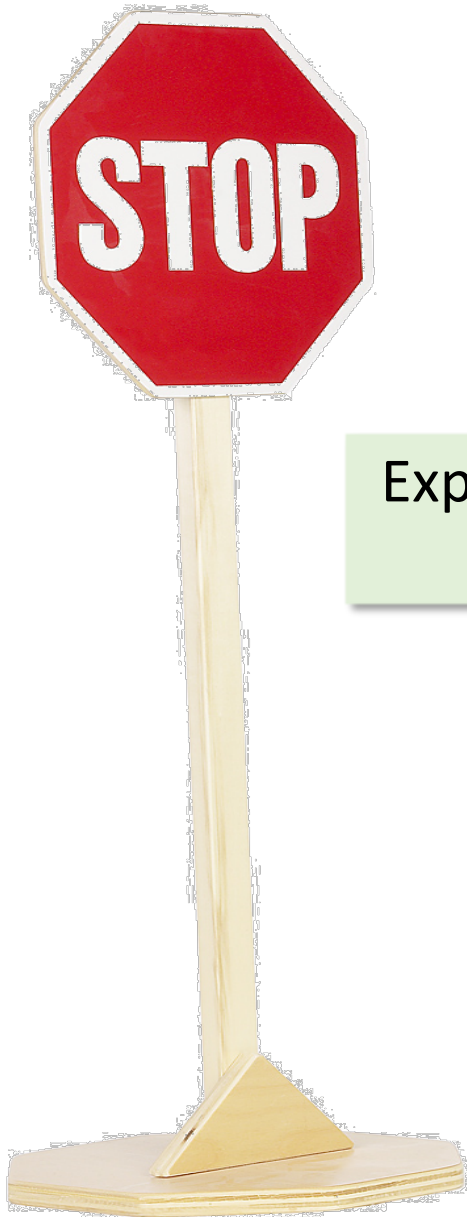


“Students have developed bad [communication] habits due to the use of Twitter and such, which needs to be addressed.” *Faculty06*



“We need graduates who can use proper grammar and punctuation—not slang from the text environment.”
Industry03

The Problem

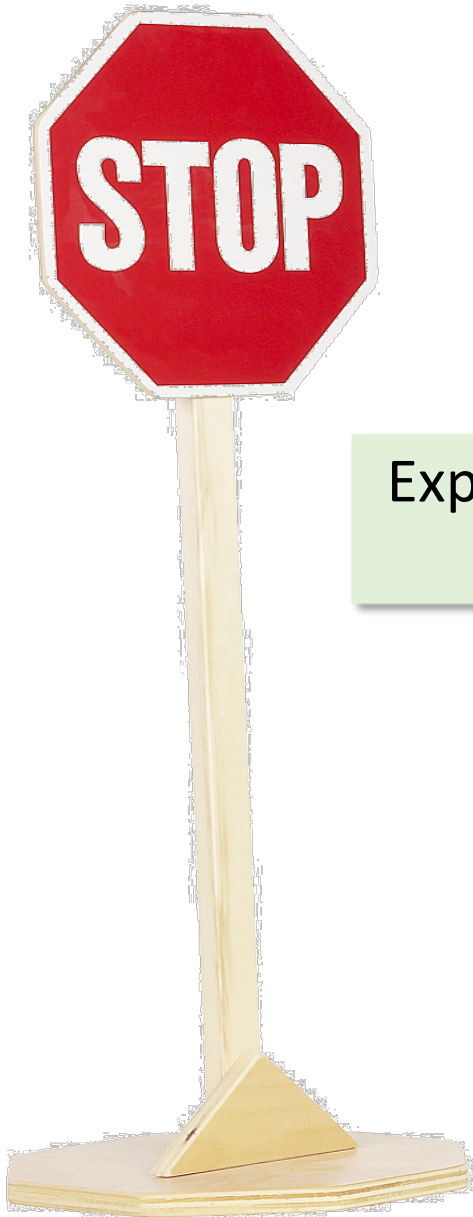


Faculty
(Agricultural & Food Sciences)

Experts in specific sciences

Not necessarily experts in teaching methods or teaching communication skills

The Solution

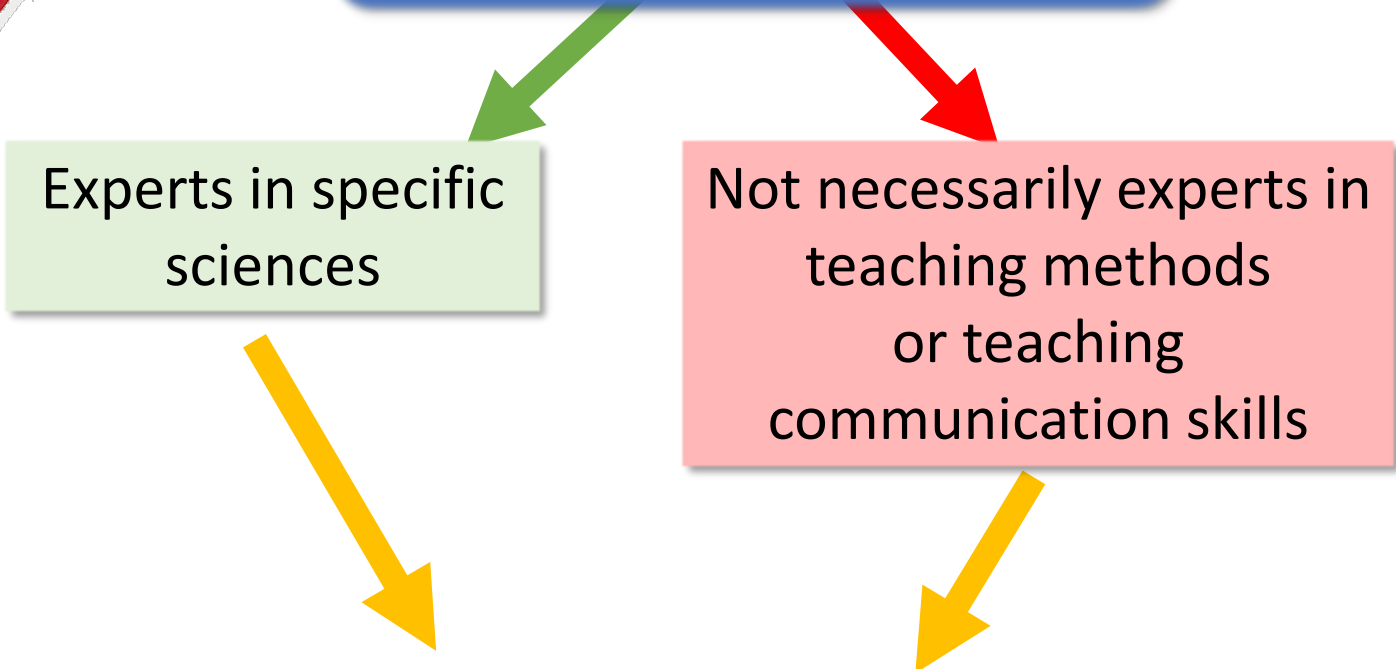


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Create Reusable Learning Modules



Reusable Learning Modules


- Reusable Learning Object (RLO) is a digital resource that can be used in multiple courses
- **However**, adoption can be challenging if modules don't meet faculty delivery needs
- **Purpose of the study:** Gather faculty and industry input on best delivery methods and contextual content

Communicating Orally

Oral Communication in Agriculture

In agriculture, you often have the challenge of **communicating a science-focused topic to a general audience**. To best deliver an oral message confidently, this module will help you:

- Know Your Audience
- Prepare the Message
 - Introduction and Connection
 - Body: What? So What? Now What?
 - Conclusion and Challenge
- Deliver Dynamically



Navigation: BACK, MENU, CONTINUE

Methods

- Qualitative interviews via phone
- 3 industry leaders + 7 faculty members
 - Potential use of modules
 - Content topics
 - Best practices for delivery
 - Best practices for content



Results: Design Considerations

- Respondents provided five design considerations:
 1. Context-specific examples
 2. Easy-to-use format
 3. Engaging content
 4. Method for tracking completion
 5. Facilitator guide
- Critical that examples accurately reflect industry experiences:
 - Effective executive summaries, engaging presentations, concise emails preferred over long term papers

Context-Specific Examples

- Animal
- Plant/Horticulture
- Poultry

Communicating Orally



Worksheet Activity: Select a Topic

Read through the following agricultural issue descriptions and **select one to deliver a 5-8 minute speech on at the end of the module**. These topics are provided to give you a starting point. You may select a different topic based upon your own experience.

- Animal Science:
 - Spread of zoonotic disease.
 - Global population growth and food security.
- Plant Science:
 - GMO labeling.
 - Dependency on undocumented immigrant labor.
- Poultry Science:
 - Leg and skeletal abnormalities in birds raised for meat.
 - Increasing feed costs and availability.

Write your selection in Part 2: Select a Topic: Agricultural Issues on your worksheet:

Communicating Orally:
Speech Scenarios

Animal Agriculture

1. **Zoonotic disease spread.** Zoonotic diseases are diseases that can be transmitted between domestic animals, wildlife, and humans. They can be caused by bacteria, viruses, parasites, fungi, and protozoa. Global human population increases (requiring more food) to be produced with intensive farming methods, wildlife habitat reduction, and transportation have led to increases in zoonotic diseases as humans come in closer contact with animals. Examples of zoonotic diseases are severe acute respiratory syndrome (SARS), Hantaan virus, Swine flu, salmonellosis, West Nile Virus, Listeria monocytogenes, bovine spongiform encephalopathy (BSE) or mad cow disease, and Brucellosis. The spread of these diseases can be mitigated through vaccination and food safety practices, but global trade and travel enable diseases to spread faster than ever before.
2. **Global population growth and food security.** By 2017, the United States produced the world population would reach 8.6 billion by 2050, which is an increase of 1 billion people in less than 10 years. As cities expand to house these additional people, agricultural land usage declines. Agricultural operations must then use novel production methods or expand into previously unused land to make up for the lost space. Pressure on water and energy resources will increase along with pressure on land. Additionally, animal protein requires more land, water, and energy to produce than plant proteins, leading many people to explore the possibility of moving to more plant-based diets, which in turn, may decrease the demand for meat. From soil efficiency practices, genetic research, and back meat for demand to fill this gap and prevent or lessen global food shortages. Food insecurity and poor sanitation can lead to chronic disease, behavioral issues, and increases in conflict.

Plant Agriculture

1. **GMO labeling.** In recent years, the debate on whether to require companies to label food products that contain GM (genetically modified) ingredients has gained much interest. Consumers increasingly demand to know if their foods contain GMOs, but some argue that requiring companies to label all products containing GMOs is excessive and curbs the availability of a growing number of consumer GM products. Additionally, health risk concerns are usually not with the GM crop itself, but with the pesticides, specifically

Communicating Orally: Speech Topic Descriptions

“Make sure they have practical knowledge.” – Faculty03

“...opportunity to look at a real world scenario. I have found the students respond well to this.” – Faculty05

BACK

MENU

CONTINUE

Easy to Use Format & Method for Tracking Completion

“The most important aspect is easy accessibility.” – *Faculty06*

Modules created in StepStone

SCORM files published and put online

Faculty upload files to course & track completions

“How the modules are delivered will make a difference.” – *Industry01*

Engaging Content

- Worksheets
- Short videos
- Embedded quiz questions
- Assignments

“The more engagement and interest that can be added, the better.” – Faculty04

Worksheet: Communicating Appropriately and Professionally Using Social Media

This worksheet allows you to engage in thought and reflection as you learn. You are encouraged to print the worksheet and record your answers as you work. You may also save the file and type your answers.

Worksheet 1: Consumer Values

What are five things 21st-century agricultural consumers value?

- 1.
- 2.
- 3.

Module 5: Communicating Orally

Module 5: Communicating Orally

TAMU Agricultural Communications 5 months ago

...video explains why it is so important for agricultural scientists to communicate orally.

“The ability to write and communicate a message...is important.” – Industry01

Module 2: Communicating Accurately & Concisely

Check Your Knowledge

Which component is not part of a scientific argument?

Choose the best option:

- Observations
- Expectations
- Scientific idea
- Data

BACK MENU CONTINUE

Facilitator Guide

- Developed for each module
- Available for download with SCORM files
- Allows instructor to use without viewing entire module
- Contains:
 - Description of module and learning outcomes
 - Copy of all handouts/documents used in module
 - List of assignments/activities to choose from

Communicating Appropriately and Professionally Using Social Media: Instructor Guide

This module provides students with an overview of how to communicate appropriately and professionally using social media. The module includes content related to effectively communicating through social media within the context of animal science, poultry science, and plant science. Students have access to exercises within the module and instructed to record their answers within the Worksheet. As the instructor, you can use the entire module or pieces of the module. Additionally, you can use the context only within animal, poultry, or plant science, or within all three contexts.

Learning Outcome: Students will be able identify agricultural brands that have effectively positioned themselves in the digital environment; develop scientific, evidence-based information for delivery on social media platforms; defend agricultural issues on social media platforms using evidence-based arguments; and analyze agricultural issue arguments

The following is a list of activities that are included in the Communicating Orally module. You can use as many or as few of these activities as is needed for your course. The module will instruct the students to “follow your course instructor’s guidelines for submitting this assignment”.

- 4-page Communicating Appropriately and Professionally Using Social Media Worksheet (fillable PDF form): **Answer key included in this packet.**
- Online module with embedded quiz
- Additional assignments: **Descriptions included in this packet.**
 - Defending Agricultural Issues on Social Media Platforms
 - Analyzing Agricultural Issue Arguments on Social Media Assignment
 - Brand Social Media Case Study Presentation

“The instructor guide is good—because you can go back and look at those” - *Faculty01*

Conclusions

- Faculty and industry personnel shared 5 main design considerations to be incorporated for these RLMs:
 1. Context-specific examples
 2. Easy-to-use format
 3. Engaging content
 4. Method for tracking completion
 5. A facilitator guide
- Conducting continuous review with this group
- Creating 7 modules

Discussion



Institutions continue to request writing-
/communication-
intensive courses



Additional instructional
responsibilities placed
on agricultural and food
sciences faculty



Faculty must have access
to resources for content
and delivery to meet
demands



Thank you!

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