SCIENTIFIC COMMUNICATION:
USING REUSABLE LEARNING MODULES TO ENHANCE COMMUNICATION IN AGRICULTURE

Holli R. Leggette, Theresa Pesl Murphrey, & Shannon Norris

Texas A&M University

NACTA Conference

June 12-15, 2018

USDA-NIFA Funding

- Create learner-centered, reusable learning modules (RLMs) for communication instruction for undergraduate students in the animal, plant, and poultry sciences.

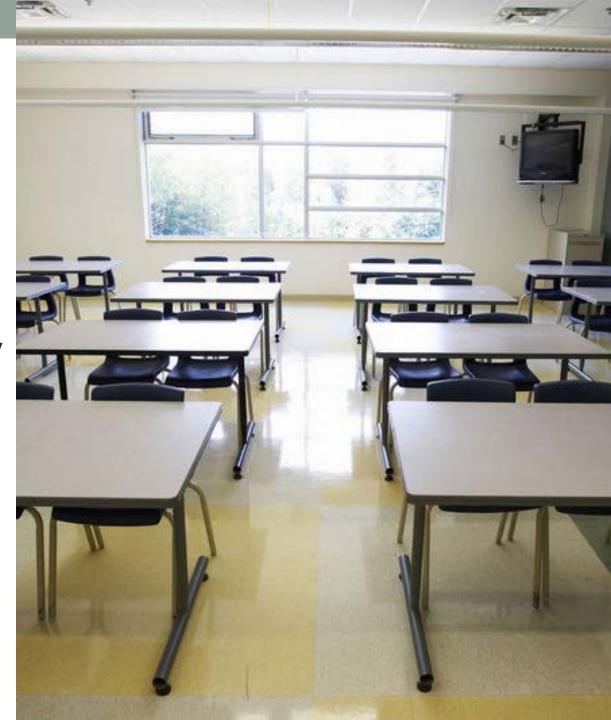- Support from advisory group of faculty and industry professionals.

Employer Needs (Crawford et al., 2011)

8,111 participants: 31 universities and 282 employers

1. Listen effectively.
2. Communicate accurately and concisely.
3. Effective oral communication.
4. Communicate pleasantly and professionally.
5. Effective written communication.
6. Asking effective questions.
7. Communicate appropriately and professionally using social media.

Instructor Needs

- Incorporate technology into courses.

- Design high-quality courses with time remaining.

- Curriculum is designed for faculty who teach communication- or writing-intensive courses.

Module Characteristics

- Instruction text + videos + decision trees

- Scenarios based on current issues in agriculture with immediate feedback.

- Integrate audio, video, interactions, and text to engage learner.

- Reflection and comparison to industry expectations.

(TAMU, 2017)

Communicating Orally Instructor Guide

Presentation and oral communication skills are important attributes of new graduates, yet many students are not taught how to effectively communicate orally. Students are often expected to [give] presentations as part of course assignments, but they are rarely provided presentation [instruc]tion. This module will provide foundational skills focused on communicating orally. [Strateg]ies for creating and conducting oral presentations will be shared.

[Learni]*ng Outcome:* Students will be able to communicate effectively through oral presentation by:

- Describing an audience persona.
- Developing a message to connect to an audience.
- Delivering dynamically and effectively through oral presentation.

The following is a list of activities that are included in the "Communicating Orally" mod[ule.] [You] can use as many or as few of these activities as needed for your course. The module will i[nstruct] the students to "follow your course instructor's guidelines for submitting this assignmen[t."]

- ☐ 9-page Communicating Orally Worksheet (fillable PDF form): **Answer key included in** [this] **packet.**
- ☐ Online module with 5-question quiz
- ☐ 5-8 minute oral presentation (mp4 file): **Rubric included in this packet.**

Module Description
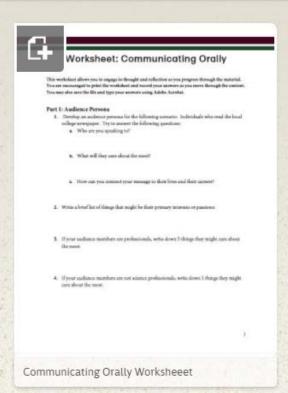
Learning Outcomes

List of Assignments

Communicating Orally: Worksheet and Packet

This module encourages you to engage in thought and reflection throughout as the material is presented.

Print or save the Communicating Orally worksheet (fillable PDF) now to record your answers as you proceed through the material. Completing this worksheet will also help you construct your oral presentation.

If desired, you can also **print or save the Module Packet** now - this document will include copies of all readings used in this module.

Submit the completed worksheet according to your instructor's guidelines.

Worksheet: Communicating Orally

This worksheet allows you to engage in thought and reflection as you progress through the material. You are encouraged to print the worksheet and record your answers as you move through the content. You may also save the file and type your answers using Adobe Acrobat.

Part I: Audience Persona

1. Develop an audience persona for the following scenario: Individuals who read the local college newspaper. Try to answer the following questions:
   a. Who are you speaking to?

   b. What will they care about the most?

   c. How can you connect your message to their lives and their careers?

2. Write a brief list of things that might be their primary interests or passions.

3. If your audience members are professionals, write down 5 things they might care about the most.

4. If your audience members are not science professionals, write down 5 things they might care about the most.

Communicating Orally Worksheeet

Module Delivery

- Face-to-face, hybrid, and stand-alone delivery modes.

- Multiple learning management systems.

- Used in existing courses as a supplement to current curricula.

(TAMU, 2017)

Communicating Orally
Status: Incomplete

This module will provide you with foundational skills to increase your effectiveness when communicating orally. You will also learn strategies for evaluating agricultural issues and connecting with an audience.

At the conclusion of this module, you will develop a message and learn skills to delivery this dynamic message in an oral presentation. You will submit this presentation according to your instructor's guidelines.

In business, the ability to effectively and confidently speak in front of groups will set you apart from other candidates or employees in the workforce. Not only do you need to be familiar with your content, but the secret to being an effective oral communicator is being able to connect and hook your audience.

In a TED Global Talk (**use the link to watch a 4-minute video**), Melissa Marshall, a communications professor, shared six key steps for scientists and engineers to effectively deliver a message:

1. Be aware of your audience.
2. Show the relevance.
3. Paint a picture.
4. Make numbers meaningful.
5. Banish bullet points.
6. Deliver dynamically.

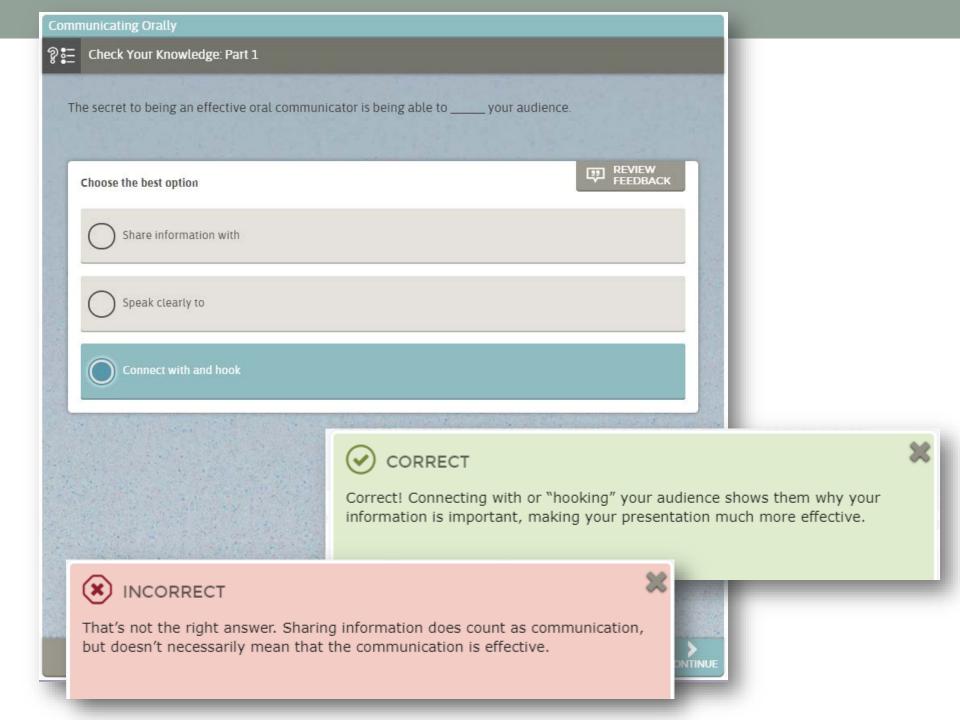Keep these key steps in mind as you begin creating your oral presentation in the next few slides.

BACK   MENU   CONTINUE

Impact of RLMs

- Student assessments:
  - Formative
  - Summative
  - Pre- & Post-Assessment
- Faculty Feedback.
- Industry Review.

(TAMU, 2017)

The secret to being an effective oral communicator is being able to _____ your audience.

Choose the best option

REVIEW FEEDBACK

- ○ Share information with
- ○ Speak clearly to
- ● Connect with and hook

✓ CORRECT

Correct! Connecting with or "hooking" your audience shows them why your information is important, making your presentation much more effective.

✗ INCORRECT

That's not the right answer. Sharing information does count as communication, but doesn't necessarily mean that the communication is effective.

CONTINUE

Pay attention to these seven delivery tips and the Oral Presentation Rubric while recording a 5-8 minute speech. Recording your speech is an important process in improving your speaking capability even if you don't submit the recording.

The following free programs can be used to record your presentation. Follow your course instructor's guidelines to submit your recording.

- Techsmith Camtasia with free trial
- Microsoft Office PowerPoint "Record Slide Show" feature
- Audacity (free open-source software)

Communicating Orally: Oral Presentation Rubric

Module Timeline

- **Summer 2018:**
  - Complete writing curricula.
- **Fall 2018 – Spring 2019:**
  - Pilot test modules at TAMU and PVAMU.
- **Fall 2019:**
  - Available for broad dissemination.

(TAMU, 2017)

THANK YOU!

Holli Leggette | hollileggette@tamu.edu

Theresa Murphrey | t-murphrey@tamu.edu

Shannon Norris| shannon.norris@tamu.edu