MEASURING PREPAREDNESS TO ADVOCATE FOR AGRICULTURE: A PRE-TEST/POST-TEST

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Introduction and Review of Literature

• There is a large gap between public perceptions and knowledge of science (Funk & Raine, 2015).

• Scientists have trouble communicating with the general public (Folta, 2012; Ruth, Gay, Rumble, & Rodriguez, 2015).

• The public struggles with seeing differences between their attitude and scientific information (Folta, 2012; Ruth, Gay, Rumble, & Rodriguez, 2015).

• Consumer misinformation and distrust in science has made it increasingly important for agricultural communicators to be equipped with the knowledge to advocate for a variety of industries (Steede, Gorham, & Irlbeck, 2016).
About the Class

• Two Major Components:

• Guest Speakers
  – Representatives from state or national organizations for their industry
  – Discussed the industry
  – Discussed challenges the industry faces in advocating

• In-Class Lectures and Activities
  – Role-playing Exercises (Elevator Speeches)
  – Online communication techniques
  – Interpersonal communication techniques
  – Formal and informal presentation techniques
Purpose and Research Questions

• The purpose of this research was to determine how students’ knowledge and ability to advocate for agricultural increases over the course of a semester while enrolled in an agricultural advocacy course. The following research questions guided this study:

  RQ₁: Do students feel that their overall ability to advocate for agriculture increased through the course of the semester?

  RQ₂: Which industries or commodities saw the greatest increase in confidence to advocate face to face?

  RQ₃: Which industries or commodities saw the greatest increase in confidence to advocate online?
Methods

• Researcher-developed pre-test/post-test instrument through Qualtrics.
• Students enrolled in Advocating for Agriculture at Texas Tech University were administered a Likert-type survey at the beginning and end of the fall 2016 semester.
• Students were asked to respond to four statements regarding 15 agricultural industries with 1 indicating strongly disagree and 5 indicating strongly agree.
• The statements enquired about student knowledge, comfort level with face-to-face advocacy, comfort with online advocacy, and connection with an expert in each of the 15 agricultural industries.
• Demographic information was collected including membership in 4-H and FFA, family involvement in farming and ranching, and individual involvement in farming and ranching.
Findings

• Twelve students completed both the pre-test and the post-test.
• Do students feel that their overall ability to advocate for agriculture improved?
  – Increases in Knowledge $t(12) = -2.28, p = .036$, Cohen’s d = -1.209
  – Comfort level with face-to-face advocacy $t(12) = -3.21, p = .009$, Cohen’s d = -1.194
  – Comfort with online advocacy $t(12) = 2.94, p = .022$, Cohen’s d = 1.448
  – Connection with an expert $t(12) = -2.90, p = .016$, Cohen’s d = -1.174
  – Paired samples $t$-test
Findings

Which industries or commodities saw the greatest increase in confidence to advocate face to face?

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Mean score increase</th>
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<tbody>
<tr>
<td>Peanuts</td>
<td>1.33</td>
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<tr>
<td>Corn</td>
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<tr>
<td>Cotton</td>
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<td>Sorghum</td>
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<tr>
<td>Dairy</td>
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<td>Horticultural crops</td>
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<tr>
<td>Equine</td>
<td>.92</td>
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## Findings

Which industries or commodities saw the greatest increase in confidence to advocate online?

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<tr>
<td>Peanuts</td>
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Conclusions

• Students enrolled in the course significantly increased their ability to advocate for agriculture, both online and in person.

• Biggest increase came in confidence about crops
Discussion

• Other agricultural programs would benefit from implementing an agricultural advocacy course into their curriculum.

• Course could be offered in any department.
Future Research

• Qualitative interviews at the start of the semester and conclusion of the semester
• Qualitative interviews with students who have completed the course and later completed an internship
• Survey and qualitative research with agricultural communications graduates who completed the course during their undergraduate work
Thank You