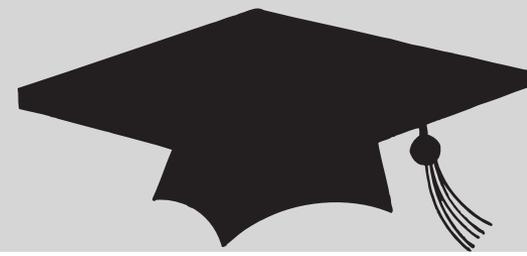




Jennifer Ann Smith, Shelly Sitton & Jon Ramsey
Oklahoma State University Agricultural Education, Communications and Leadership

Core Components of a Doctoral Program in Agricultural Communications: A Delphi National Study

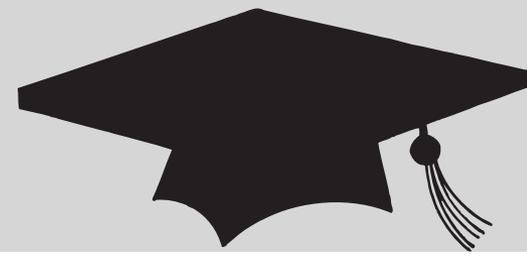
Why conduct the study?



- **Agricultural communicators are needed more than ever to support the industry.**
(Tucker, Whaley, & Cano, 2003).
- A pressing need exists to **examine the agricultural communications graduate curriculum.** (Sprecker and Rudd, 1998)
- For a doctoral degree, one must enter an agricultural education program and emphasize agricultural communications coursework.
(Birkenholz & Simonsen, 2011).



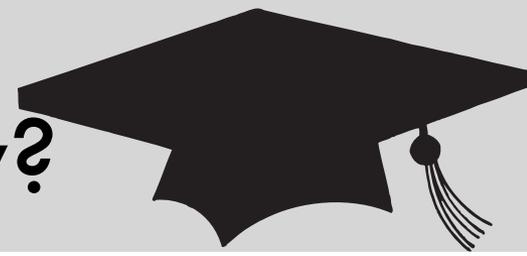
What did we not know?



Core components for secondary, undergraduate and master's degree programs exist in the literature; however, **core components for a doctoral program in agricultural communications did not exist.**



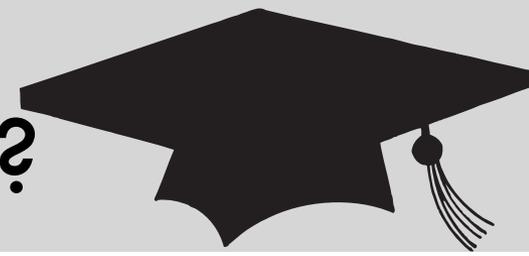
What did we want to know?



- To describe the panel of experts.
- To determine the core content needed within a doctoral curriculum in agricultural communications.
- To determine core competencies students would gain by completing an agricultural communications doctoral program.



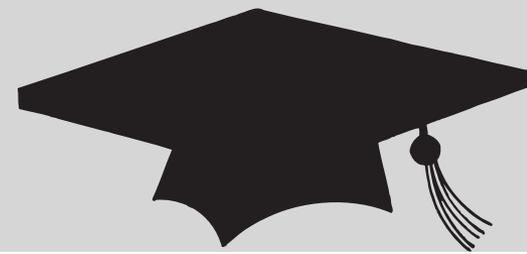
What methods did we use?



- This study employed the three-round modified Delphi technique using Qualtrics to collect information.
 - Panel of Experts
 - University faculty in undergraduate agricultural communications throughout the United States ($N = 22$).
 - Thirteen agreed to participate ($n = 13$).
- Conducted in May and June 2011, the study had a 100% ($n = 13$) response rate throughout all rounds.

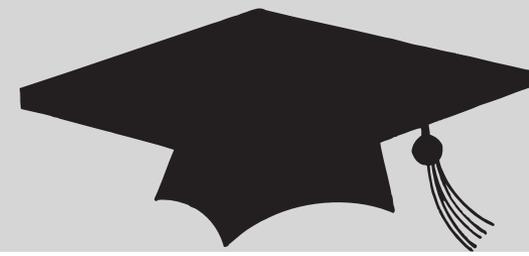


Step 1



- Round 1
 - Personal and professional characteristics
 - Two open-ended questions
 - For this study, core content is defined as the instructional material students will be exposed to: What core content will be needed for a Ph.D. in Agricultural Communications?
 - For this study, core competencies are defined as the skills and attitudes students will obtain: What competencies will the participants achieve by participating in this program?



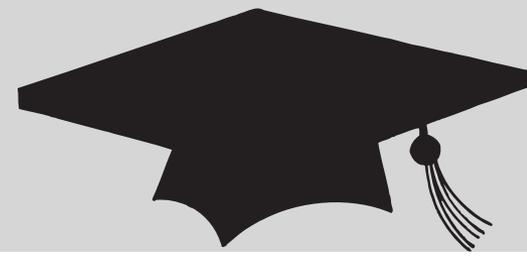


Panelists' Characteristics

- 13 held a Ph.D. (100%)
- 8 were professors; 4 were associate professors; 1 was an assistant professor
- 12 were tenured
- 3 held an administrative role in addition to faculty appointment
- Years of industry experience
 - Range 1 to 36 years ($M = 7.26$; $SD = 13.09$)
- Years of higher education experience
 - Range 4 to 36 years ($M = 17.85$; $SD = 9.24$)



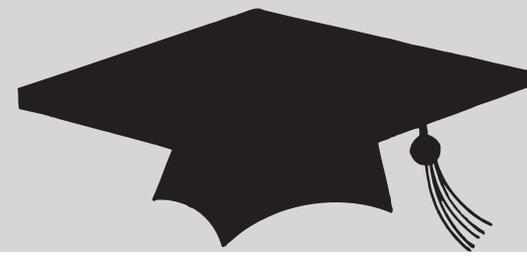
Step 2



- Round 2
 - 112 core content items and 120 core competency items identified by panelists in Round 1 were edited to provide list of 60 core content and 59 core competency items
 - Panelists indicated their level of agreement with each item on a six-point scale (strongly disagree to strongly agree)



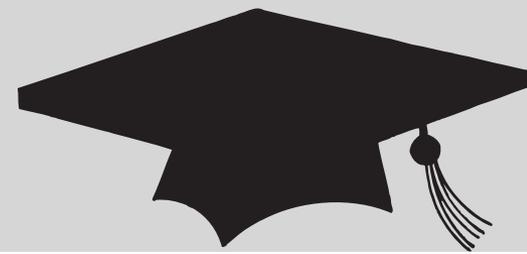
Step 3



- Round 3
 - 58 core content and 58 core competency items reached agreement from Round 2
 - Panelists indicated their level of agreement with each item on a six-point scale (strongly disagree to strongly agree)



Core Content Items



Agricultural Knowledge and News

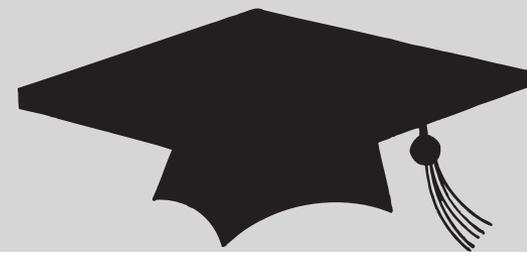
- Agricultural knowledge of **policy and current events**
- **Characteristics of news**
- History and philosophies of agricultural communications and general media
- Media influence and **global issues** in food, agriculture, and communications
- **Understanding connections between** agricultural communications and its related **disciplines**
- Understanding of business, environmental policy, and science

Communications Knowledge

- **Change theory** beyond diffusion
- **Communication theories**
- Human communication theory
- **Practical understanding of mass communications**
- Public opinion processes
- **Public relations**
- **Reasoning** on an individual and community level
- Rhetorical theory and criticism



Core Content Items

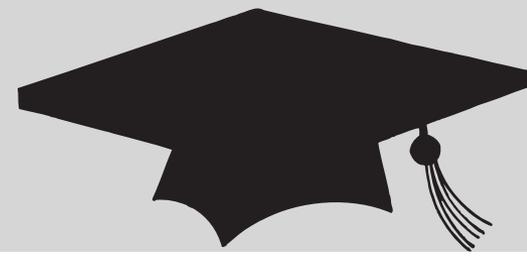


Employability

- Assertiveness
- **Conflict and content management**
- **Ethics**
- Facilitation
- **Leadership and supervision**
- Listening
- Management of people, processes, media, and resources
- Moving audience segments from information intake to knowledge development to sensemaking
- **Oral communication skills**
- Organizing and planning
- Relationship building: **people skills**
- **Risk and crisis management**
- Setting goals and objectives
- **Strategic planning and visioning**
- **Team building**
- Visualization



Core Content Items



Media

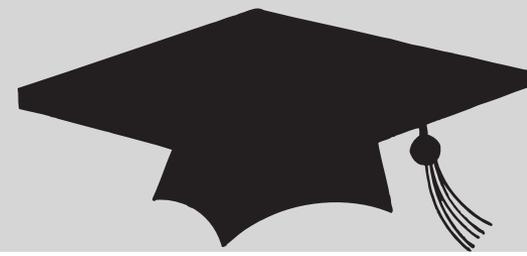
- Basic concepts of **photography**
- **Campaign** development
- Emerging tools
- Layout and principles of **design**
- **Social media** (new media)
- Use of **technologies** and innovations
- **Video and audio production**

Research

- **Evaluation methods** for focus groups and needs assessments
- **Qualitative and quantitative research** methods
- Research: **survey** design, survey errors, data analysis, data management, and process
- **Scale development:** constructs and anchors
- **Statistical analysis:** bi-variate, descriptive, inferential, multi-variate, non-parametric, parametric
- Statistics: social science



Core Content Items



Teaching and Education

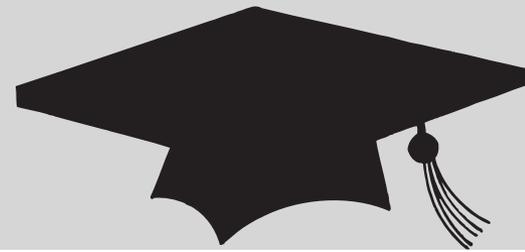
- Adult education
- Educational philosophy and theory
- **Grantsmanship**
- **Instructional design**
- **University-level teaching:** methods, application of, learning and development, andragogy and pedagogy

Writing

- **Accurate, accepted rules of style and usage such as AP and APA**
- **Writing and editing:** research, technical, scientific, journalistic, and media



Core Competency Items



Agricultural Knowledge and News

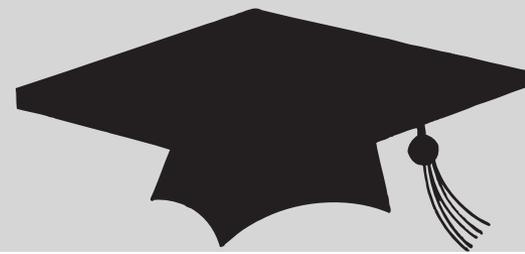
- **Agricultural, agricultural policy, and science literacy and knowledge**
- **Analysis of agricultural issues**
- Create knowledge useful to those employed in the realm of agriculture
- Technical agriculture and agriculture science

Communications Knowledge

- **Develop strategic and tactical communication plans**
- **Understand how communication affects agriculture**



Core Competency Items

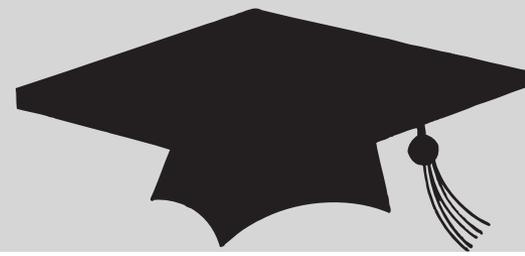


Employability

- Apply their knowledge
- Ask questions
- **Collaborate**
- **Critical thinking**
- Develop industry partnerships
- Interpersonal communication
- **Interviewing skills**
- **Manage time, manage multiple tasks at one time, focus, and live a balanced life**
- Networking
- Oral communication skills
- **Presentation development**
- Professional development
- **Public speaking**



Core Competency Items

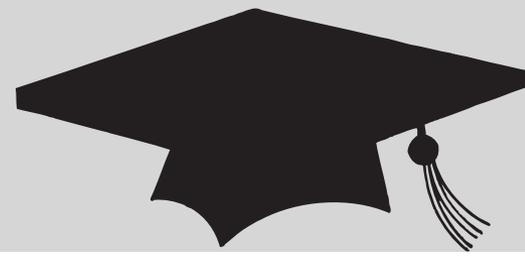


Media

- Computer technology
- **Design a media campaign**
- **Digital video and audio techniques**
- Evaluate media products
- **Media relations**
- **Photography**
- **Social media**
- Visual design theory
- Web design theory and processes



Core Competency Items

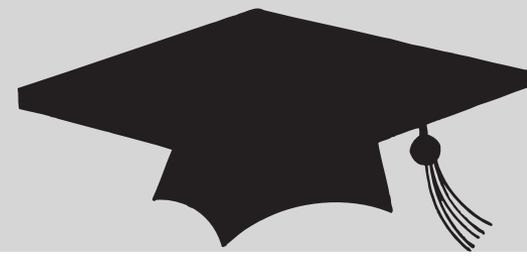


Research

- **Audience analysis** and measurement
- **Conduct original research** studies using experimental design, case studies, content analysis, focus groups, and survey research
- Independently design, compile, analyze, and report social science information
- Know how to use theory for inquiry
- **Publish original research**
- **Qualitative and quantitative research methodology**
- Research design
- Research identification, planning and development
- **Statistics: interpret and data analysis**
- **Survey research**
- Theory development



Core Competency Items



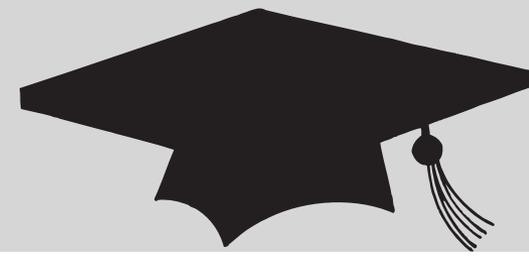
Teaching and Education

- **Efficiently and effectively design and deliver graduate and undergraduate courses that maximize student learning**
- **Fundraising and grant seeking skills**
- Higher education **policy and procedures**
- Message analysis: effectiveness, presentation, readability
- **Syllabi design and project rubrics**
- **Teach a variety of learning styles**
- Teaching effectiveness

Writing

- AP Style
- **Critique articles for both scholarly and journalistic print publications**
- Editing processes
- Public relations writing, processes, and planning
- **Write effectively for public forums, news, journals, journalistic, professional, and technical**





What now?

- **Research should be conducted to determine if a doctoral program in agricultural communications is needed.**
- Institutions where agricultural communications curriculum is offered **should consider developing doctoral curriculum** based on the findings of this study.
- Doctoral students should be encouraged to take courses **outside of their home departments** to seek the core content and competencies to make them more employable.
- **Institutions** planning to implement curriculum for a doctoral program should **collaborate** to take advantage of expertise across the nation.

