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).
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.
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.