

# Updating Agricultural Communications Curriculum: A Delphi Study

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# Background

- AGCM programs have a duty to “equi[p] those in the industry as well as college graduates with the skills to effectively share agriculture’s story” (Steede, Gorham & Irlbeck, 2016, p. 54).
- The AGCM discipline has evolved since its beginnings because of changes in communications technology and should periodically be evaluated (Doerfert & Miller, 2006; Morgan, 2008; Sprecker & Rudd, 1997; Terry, et al., 1994).



# Human Capital Theory

- This theory states the best way to give to society and for society to thrive is to invest in its people (Sweetland, 1996, p. 341).
- As a person's human capital develops, the more likely he or she will become employed (Becker, 1994).
- Gillies (2015) inferred Human Capital Theory has expanded beyond education and training “knowledge and skills” to include experiences as a definition (p. 2).
- For the purposes of this study, human capital shall be defined as a person's knowledge, experiences, and skills in a specific career field (Becker, 1994; Robinson & Mulvaney, 2018).



# Problem & Purpose

- A need existed to determine industry's perspectives of the competencies required of an AGCM graduate because of changes in technology, introduction of new social media platforms, and evolution of the AGCM industry.
- The purpose of this study was to determine the knowledge, skills, and experiences required of an AGCM professional according to AGCM professionals.



# Objectives

1. To describe the selected personal and professional characteristics of Delphi panelists.
2. To determine the knowledge required of an AGCM graduate.
3. To determine the experiences required of an AGCM graduate.
4. To determine the skills required of an AGCM graduate.



# Methodology — Panel

- According to the literature, agricultural professional organizations serve as somewhat of a network for professions and are a great base for knowledge, skills, techniques, and scholarly advices about the needs of the agricultural communications industry (Kearl, 1983).
- To select the jury, the researcher chose individuals from organizations or companies attending the 2017 Agricultural Media Summit (AMS), the largest gathering of crop and livestock communications professionals in the United States (AMS, 2018).
- The researcher identified professionals ( $N = 39$ ) from the chosen companies to serve as potential panelists in Round One of the study.
- Of these 39 potential panelists, 16 professionals agreed to participate in the Round One of the study ( $n = 16$ ).



# Methodology — Delphi

- Developed by Dalkey and Helmer at the Rand Corporation in 1963, the Delphi Technique is defined as a way “to obtain consensus from a group of ‘experts’ about the likely pattern of future events and to show where these experts disagree” (Anderson and Jones, 1986, p. 11).
- In most cases, three rounds have been determined sufficient to reach **CONSENSUS** (Brooks, 1972; Custer, Scarcella, and Stewart, 1999; Hsu & Sandford, 2007;).
- This study was designed to be interpretive, included descriptive statistics, and was conducted using a three-round modified Delphi technique.



# Methodology — Round One

- Instrument asked panelists to provide:
  - personal and professional characteristic and demographic questions
  - exhaustive list of the knowledge, experiences, and skills panelists perceived an agricultural communications graduate must possess
- Researchers organized the responses into the following categories:
  - Computer skills
  - Written communication\*
  - Mass communications law\*
  - Photography\*
  - Public relations\*
  - Oral communications\*
  - New media
  - Career-readiness skills
  - and a category for those necessary traits or skills that didn't align with other categories.



# Methodology — Round Two

- Using a 4-point Likert-type scale (1 = Strongly Agree to 4 = Strongly Disagree), panelists were asked to rate their level of agreement with 127 statements, which the researchers compiled and categorized from 232 items from the Round One responses.
- To determine if an item reached consensus, Buriak and Shinn's (1989) frequency distribution valid percentage was used.
- Statements receiving at least 75% agreement (defined as items that received a score of "1" for "Strongly Agree" or "2" for "Agree" among panelists) reached consensus.
- Items receiving less than 51% of agreement did not reach consensus and were removed from further investigation.
- Items receiving between 51% and 75% moved to Round Three for further investigation (Ramsey, 1997; Simon, Haygood, Akers, Doerfert, Davis & Bullock, 2004; Smith, 2010; Stitt-Gohdes & Crews, 2004).
- Round Two allowed panelists to add or re-phrase items missed in Round One.
- Fourteen panelists completed Round Two for a response rate of 87.5% ( $f = 14$ ).



# Methodology — Round Three

- To establish a final consensus among panelists, the Round Three instrument included 10 statements (those which received more than 51% and less than 75% agreement from Round Two) as well as 7 new competencies added by panelists in Round Two.



# Findings – Objective 1

- Of the panelists ( $n = 14$ ), 12 (85.71%) panelists indicated they came from a heavy agricultural background.
- Nine (64.29%) panelists indicated they reside in a rural area.
- Seven (50%) panelists indicated they had a bachelor's degree, and seven (50%) indicated they had obtained a master's degree.
- Ten (71.43%) panelists had more than 10 years of professional experiences.
- Ten (71.43%) panelists were female.
- Ten (71.43%) panelists were over the age of 30.

## **Objective #1:**

Describe the selected personal and professional characteristics of this study's Delphi panelists.



# Findings – Objective 2

- Panelists identified 26 knowledge-related competencies.
- Of those, 16 received 100% agreement.

1. *understand ethics in communication*
2. *be able to understand graphic design and its fundamentals/principles*
3. *keep up to date with emerging software technology*
4. *understand basic computer operations*
5. *understand the difference in long and short form writing;*
6. *understand written communication*
7. *understand successful brand promotion*
8. *understand brand management*
9. *understand crisis communications*
10. *understand principles of public relations and marketing*
11. *understand marketing plans*
12. *understand media relations*
13. *understand non-verbal communication*
14. *be knowledgeable about social platforms – current and emerging*
15. *possess knowledge about the industry*
16. *be familiar with terms used in production agriculture.*

*Note: See handouts for all 26 knowledge-related competencies*

**Objective #2:**  
Determine the knowledge required of an AGCM graduate



# Findings – Objective 3

- One competency was identified as a required experience. It received a 100% level of agreement:
  - *AGCM graduates should have internship experience.*

## **Objective #3:**

Determine the experiences required of an AGCM graduate.



# Findings – Objective 4

- Panelists identified 81 skill-required competencies.
- Of these, 53 items received 100% agreement.

1. *be able to operate Microsoft Word*
2. *be able to write well – without grammar, spelling, and punctuation errors*
3. *portray a professional image on social media*
4. *be able to operate Microsoft PowerPoint*
5. *be able to operate Microsoft Outlook*
6. *serve in an editor role when needed*
7. *possess storytelling ability*
8. *possess interviewing skills – in-person and online*
9. *write in AP style*
10. *be able to write press releases*
11. *write for news*

12. *be able to write in active voice*
13. *be able to write creatively*
14. *be able to read and interpret business periodicals, professional journals, and technical procedures*
15. *be able to write for business/professional – letters, memos, reports, etc.*
16. *possess client relations skills – knowledge of client's needs, goals, etc.*

Continued ...

**Objective #4:**  
Determine the skills required of an AGCM graduate.



# Findings – Objective 4

17. *Marketing*
18. *possess some level of comfort with being interviewed via phone, radio and television, so as to be a good spokesperson for the employer/industry*
19. *be able to communicate orally*
20. *be able to translate technical agriculture terminology to understandable information for the public*
21. *be able to verbally communicate face-to-face*
22. *be able to verbally communicate over the phone*
23. *be able to speak succinctly and on message/point*
24. *be able to effectively present information and respond to questions from groups of managers, clients customers, and the general public*
25. *be able to write for social media*
26. *be able to manage social media*
27. *listen*
28. *be a team-player/collaborator*
29. *think strategically/solve problems*
30. *be able to manage time – deadlines*
31. *express reasoning and judgement talents*
32. *have work-ethic*
33. *ask questions if unsure what to do*
34. *exude professionalism – in-person and online*
35. *be able to think critically*
36. *be able to examine situations from all perspectives*
37. *be teachable*
38. *be able to take constructive criticism*
39. *be able to organize*

*Continued...*

## **Objective #4:**

Determine the skills required of an AGCM graduate.



# Findings – Objective 4

- 40. *be able to schedule appointments promptly*
- 41. *be able to present oneself professionally – appropriate clothing and wardrobe, professional and basic etiquette skills, appropriate communication skills, etc.*
- 42. *have interest in continuous learning*
- 43. *be reliable/dependable*
- 44. *have basic interpersonal skills*
- 45. *possess soft skills – email, phone, conference call, schedule, memos printing, etc.*
- 46. *be able to handle conflict and the communication skills to resolve issues internal and with clients*
- 47. *be able to represent an organization in various settings*
- 48. *be able to take notes;*
- 49. *be able to interpret a variety of instructions furnished in written, oral, diagram, or schedule form*
- 50. *possess people skills*
- 51. *be able to contact strangers for interviews, photos, quotes, etc.*
- 52. *be able to research agricultural topics they are not familiar with*
- 53. *be able to use appropriate imagery and language when communicating to and about agricultural audiences.*

*Note: See handouts for all 81 competencies*

## **Objective #4:**

Determine the skills required of an AGCM graduate.



# Conclusions – Objective 1

- The typical panelist:
  - Had a heavy agricultural background
  - Resided in a rural area
  - Was a female over the age of 30 with 10 or more years of professional experience
  - Had a master's or bachelor's degree.

**Objective #1:**  
Describe the selected personal and professional characteristics of this study's Delphi panelists.



## Conclusions – Objective 2

- An AGCM graduate must possess ethics in communications and should understand mass communications law such as copyright and government regulations.
- They should also understand computer skills like graphic design software technology and basic computer operations as well as written communication and long- and short-form writing.

**Objective #2:**  
Determine the knowledge  
required of an AGCM  
graduate



## Conclusions – Objective 2 (cont.)

- An AGCM graduate should understand basic photography, camera composition, and photo storage techniques.
- They should understand brand promotion, crisis communications., marketing plans, media relations, and other aspects of public relations, in addition to, non-verbal communication.
- They should be knowledgeable about aspects of new media such as social media platforms, content management systems and videography.

**Objective #2:**  
Determine the knowledge  
required of an AGCM  
graduate



# Conclusions – Objective 3

- An AGCM graduate must possess internship experience.

## **Objective #3:**

Determine the experiences required of an AGCM graduate.



# Conclusions – Objective 4

- AGCM graduates must be able to operate Microsoft Word, write well, and portray a professional image on social media.
- They should be able to operate other Microsoft programs, Adobe programs, Mac and PC systems, and possess other computer skills like editorial and feature layout design.

## **Objective #4:**

Determine the skills required of an AGCM graduate.



# Conclusions – Objective 4

- They should be able to serve as editor, tell a story, write creatively and in various styles, possess interviewing skills and a variety of other written communications skills.
- An AGCM graduate should possess various photography, public relations, and oral communications skills such as face-to-face communication, be able to translate technical agriculture terminology, speak succinctly, and communicate about agriculture to the general public.

## **Objective #4:**

Determine the skills required of an AGCM graduate.



# Recommendations

- For future practice:
  - Existing undergraduate AGCM programs across the United States should consider these 109 competencies in the development and re-evaluation of their curriculum.
  - New undergraduate AGCM programs should use these findings as a guide to develop their curriculum as well as seek assistance from established programs who have implemented these 109 competencies.



# Recommendations

- For future research:
  - Investigate creation of an AGCM Code of Ethics to address ethical needs of each sector of the AGCM industry.
  - Determine AGCM faculty perceptions of the required knowledge, experience, and skills required of an AGCM graduate.
  - Compare AGCM industry professionals and AGCM faculty opinions to determine if consensus exists among industry and academia.



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Questions?

