

# Introducing the Academic Discipline of Agricultural Communications to the United Kingdom: A Needs Analysis

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# Problem and Purpose Statement

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- Problem

- Anecdotal evidence indicates that employers in the field of agricultural communications in the U.K. have two choices:
  - Hire trained journalists who learn about agriculture on-the-job
  - Hire agriculturalists who learn about communications on-the-job
- No formal academic scheme for training in agricultural journalism or agricultural marketing communications exists in the U.K.

- Purposes

- Characterize the opinions and perceptions of agricultural communications professionals and agricultural students in the United Kingdom regarding their visions of an agricultural communications academic discipline in the U.K.
- Identify desired professional competencies potential U.K. agricultural communications graduates should aspire to achieve and the potential coursework that could provide these competencies

# Objectives

- Determine demographics of survey participants-- agricultural communications industry professionals and agricultural students in the U.K.
- Determine professional competencies industry professionals and students would expect agricultural communications graduates to have
- Determine potential employers' and students' opinions about topics and classes/modules that should comprise an agricultural communications curriculum
- Describe discrepancies among professionals and students regarding their opinions on desired competencies, topics, and classes/modules in the curriculum



# U.S. Ag Communications Programs

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- Agricultural communicators are not typically agriculturalists primarily; instead, they are communicators with special knowledge of agriculture and food topics, issues, technologies, and policies (Sprecker & Rudd, 1998)
- The first agricultural communications courses in the U.S. were taught in 1905 (Doerfert & Miller, 2006)
  - Yet, the profession had existed for 100 years prior in the U.S. (Tucker, 1996; Tucker, Whaley, & Cano, 2003)
- 48 agricultural communications programs were identified in the U.S. (Miller, Large, Rucker, Shoulders, & Buck, 2015 )
  - Associate's, Bachelor's, Master's, and Ph.D. degrees offered
- Female enrollment in U.S. agricultural programs continues to increase (Hopkins, 2016)



# Ag Communications in the U.K.

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- Selected highlights:

- Farmers Guardian (Preston Guardian) founded in 1844 (Ben Briggs, personal communication, June 3, 2019)
- (The Guild of Ag Journalists was formed in 1944 by Sir Reginald Dorman-Smith, former agriculture minister in 1939 and 1940. (GAJ, 2019)
- Agricultural studies is the fastest growing subject at university level (Truss, 2016)
  - 19,000 students studying agriculture in the U.K. in 2016
- 44% increase in female students over 5 years at RAU (Truss, 2016)
- Female students doubled at Harper Adams University in last 5 years (DEFRA, 2016)

# Ag Communications in the U.K.

- No academic discipline in U.K.
  - Agricultural publications and organizations seeking marketing communications professionals hire candidates who are either skilled in agriculture or skilled in journalism and communications
  - Employers typically do not have the opportunity to choose a candidate who is institutionally trained in both



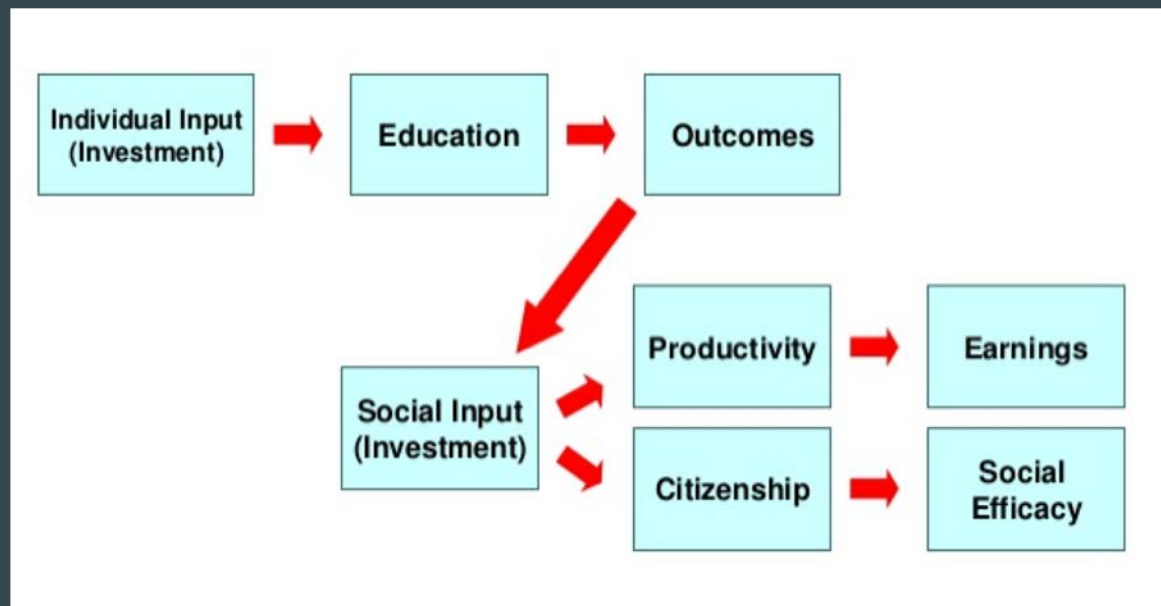
# Logic for adding academic programs in the U.K.

- More work-ready graduates in
  - Agricultural and rural-life journalism (print, radio, TV)
  - Agricultural and food marketing communications
  - Commodity/trade marketing communications
  - Environmental and land-use communications and education
  - Agricultural and extension education/consulting/training
- Stronger corps of journalists who understand ag issues in the U.K. and the U.S.
  - Could help UK and US consumers better understand issues related to biotechnology, animal welfare, environmental sustainability, etc.
  - Could help producers and landowners understand and adopt new technologies more readily
  - Especially important if U.S. and U.K. become stronger trade partners



# Human Capital Theory

- “Investment in people through training and education which has a direct and indirect impact on all stakeholders at large” (Ahmed, Arshad, Mahmood, & Akhtar, 2017, p. 132)



Human Capital Theory Model (Swanson & Holton III, 2001).



# Research Design--Survey Approach

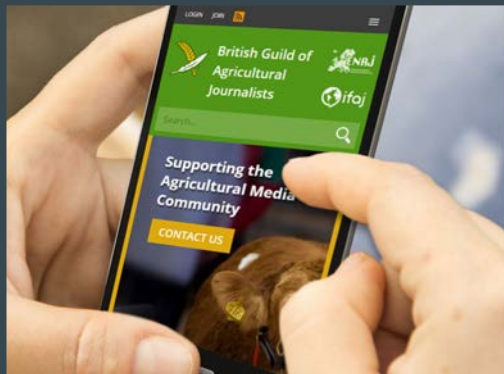
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- Quantitative Descriptive Survey
  - Qualtrics online platform
  - Subjects: UK ag communicators and UK higher ed agriculture students
  - Subjects recruited by email through key contacts at GAJ, Writtle University College and Scotland's Rural College
  - Opinion rating questions with 4-point Likert-type scales (Dillman, 2007)



# Subject Selection--Ag Communications Professionals

- British Guild of Agriculture Journalists (GAJ) (population=~200)
  - 23 respondents completed the survey
    - One response was incomplete, so response rates vary by question
  - Editors, journalists, broadcasters, photographers, and PR/marketing specialists
  - Potential employers of students in agricultural communications academic discipline



# Subject Selection--Agricultural Students

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- 1,575 **agricultural undergraduate** students from Scotland's Rural College (SRUC) (population 1,525) and Writtle University College (population 50)
  - 107 respondents
  - Enrolled in agriculture academic degree program
  - Recruited through introductory email forwarded from administrators and faculty
  - Numerous incomplete responses



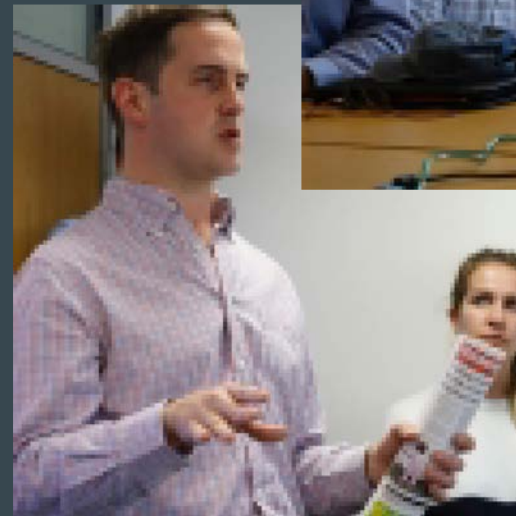
# Key Survey Instrument Components

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- Ratings of competencies and potential classes/modules
  - Professionals' and current students' opinions of important classes/modules that should be included
- Four-point Likert scale
  - Very important, important, slightly important, not at all important (Dillman, 2007)
- Lists of competencies and courses were developed from previous literature surveying U.S. ag comm curriculum:
  - Deering, 2005, Large, 2014; Maiga, 2011; Miller, et al., 2015; Morgan, 2012; Sprecker & Rudd, 1997, and Terry et al., 1994

# Demographics of Professionals and Students

- Professionals
  - 65% female
  - 69% B.S. degree, 17% M.S. degree (mostly journalism or agriculture)
  - 48% Print journalists/editors
  - 37% PR/Marketing communications professionals
- Students
  - 69% male
  - 46% had lived on a farm
  - 64% had worked on a farm





# Agricultural Communications Competencies

(1=very important, 2= important, 3= slightly important; 4=not important at all)

	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	<i>X</i> <sup>2</sup>	<i>p</i>
<b>Understand public perceptions of agricultural issues</b>	1.52	1.41	2.28	0.52
<b>Understand the impact of government and political involvement on agriculture</b>	1.39	1.26	1.98	0.37
<b>Understand the agricultural community in the U.K.</b>	1.65	1.38	4.51	0.10
<b>Describe the international impact agriculture creates</b>	2.04	1.46	16.23	0.0003
<b>Understand the cultural impact of agriculture in the U.K.</b>	2.09	1.42	15.52	0.0004

# Writing Competencies

(1=very important, 2= important, 3= slightly important; 4=not important at all)

**Table 2**  
**Writing Competencies--Comparison between Agricultural Communications Professionals and Agricultural Students**

	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	$\chi^2$	<i>p</i>
<b>Interview a source effectively</b>	1.30	1.6	3.25	0.35
<b>Understand and practice effective journalism</b>	1.39	1.88	7.89	0.05
<b>Write features on agricultural topics</b>	1.40	1.48	3.45	0.18
<b>Write using appropriate journalistic style</b>	1.43	1.55	3.95	0.27
<b>Write news stories</b>	1.52	1.96	6.71	0.08
<b>Appropriately attribute journalistic sources</b>	1.52	1.83	4.35	0.23
<b>Write using appropriate grammar and punctuation</b>	1.57	1.83	3.07	0.38
<b>Write for print media</b>	1.65	1.95	4.73	0.19
<b>Write for the internet</b>	1.78	1.93	2.08	0.56
<b>Write social media posts</b>	1.83	1.9	0.63	0.89
<b>Write opinion columns</b>	2.04	2.04	4.95	0.18

# Layout and Editing Competencies

(1=very important, 2= important, 3= slightly important; 4=not important at all)

	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	<i>X</i> <sup>2</sup>	<i>p</i>
<b>Identify appropriate audience</b>	1.86	1.47	1.65	0.48
<b>Effectively edit and proofread the works of others</b>	1.5	1.69	1.39	0.71
<b>Appropriately attribute journalistic sources</b>	1.86	1.81	1.06	0.79
<b>Use correct editing marks and symbols</b>	1.91	1.82	0.94	0.82
<b>Edit layout and designs of publications</b>	1.95	1.83	0.41	0.94

# Broadcasting Competencies

(1=very important, 2= important, 3= slightly important; 4=not important at all)

	<b>Agricultural Communications Professionals</b>	<b>Agricultural Students</b>		
	<i>M</i>	<i>M</i>	$\chi^2$	<i>p</i>
<b>Interview a source effectively</b>	1.27	1.52	2.49	0.48
<b>Use appropriate tone and voice</b>	1.41	1.65	2.64	0.45
<b>Present effective video/radio broadcast</b>	1.77	1.68	1.05	0.79
<b>Budget and supervise video/radio production</b>	2.09	2	3.03	0.39
<b>Understand technical aspects of broadcasting equipment and editing software</b>	2.09	2.15	0.37	0.95

# Technology Competencies

(1=very important, 2= important, 3= slightly important; 4=not important at all)

	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	<i>X</i> <sup>2</sup>	<i>p</i>
<b>Navigate the Internet and download important information</b>	1.45	1.55	0.55	0.91
<b>Effectively use social media</b>	1.68	1.65	5.68	0.13
<b>Use spreadsheet software</b>	2.18	1.87	4.03	0.26
<b>Effectively utilize media equipment (cameras, recorders, speakers, etc.)</b>	2.05	1.98	2.24	0.52
<b>Design websites and blogs</b>	2.59	2.06	12.33	0.006
<b>Use photo editing software</b>	2.27	2.23	1.41	0.70



# Ag Communications Classes/Modules

(1=very important, 2= important, 3= slightly important; 4=not important at all)

**Table 6**  
**Agricultural Communications Related Classes/Modules Relationships between Agricultural Communications Professionals' and Agricultural Students**

	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	$\chi^2$	<i>p</i>
<b>Communicating Agriculture to the Public</b>	1.59	1.32	5.99	0.11
<b>Risk and Crisis Communications in Agriculture and Natural Resources</b>	1.77	1.64	1.23	0.75
<b>Apprenticeship/internship/placement/practicum in agricultural journalism</b>	1.68	1.85	2.56	0.46
<b>Public Relations Principles</b>	1.73	1.85	1.37	0.71
<b>Development of Agricultural Publications</b>	1.77	1.88	1.8	0.61
<b>Communication Law and Ethics</b>	1.64	1.88	2.97	0.4
<b>Advanced Public Speaking</b>	2.32	1.91	4.43	0.22
<b>Technical Writing</b>	1.36	1.97	10.4	0.02
<b>Agricultural and Environmental Photography</b>	2.23	2	6.08	0.11
<b>Electronic (Online) Communication in Agriculture</b>	1.73	2.02	2.96	0.4
<b>Communications Campaigns</b>	1.73	2.06	3.66	0.3
<b>News Reporting and Feature Writing</b>	1.27	2.06	19.51	0.0002
<b>Video and Radio Broadcast Production in Agriculture</b>	1.77	2.08	2.81	0.42
<b>Photo Journalism</b>	2.18	2.33	3.73	0.29
<b>Graphic Design</b>	2.73	2.60	2.96	0.4

# Ag Science Classes/Modules

(1=very important, 2= important, 3= slightly important; 4=not important at all)

<b>Table 7 Agricultural Science Related Classes/Modules Relationships between Agricultural Communications Professionals' and Agricultural Students</b>				
	Agricultural Communications Professionals	Agricultural Students		
	<i>M</i>	<i>M</i>	$\chi^2$	<i>p</i>
<b>Agricultural Education</b>	2.27	1.43	24.54	<0.0001
<b>Animal Science</b>	2.05	1.43	21.56	<0.0001
<b>Agricultural Business</b>	1.86	1.45	9.78	0.02
<b>Agricultural Economics</b>	2.05	1.49	11.07	0.01
<b>Pest Management</b>	2.32	1.51	19.91	0.0002
<b>Agronomy</b>	2.09	1.55	12.38	0.006
<b>Environmental Sciences</b>	2.14	1.57	14.25	0.002
<b>Food Science</b>	2.23	1.72	14.52	0.002
<b>Horticulture</b>	2.18	2.17	3.41	0.33

# RO1 Conclusions--Participant Demographics

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- SRUC and Writtle respondents were mostly identified as **male (70%)** with **farming backgrounds**
- Agricultural communications professionals mostly identified as **female (65%)** **print/journalism specialists (49%)** or **PR/marketing communications specialists (37%)**



# RO2 Conclusions--Communications Competencies

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- Nearly all competencies were identified as “very important” or “important”; only a few were “slightly important”
- Professionals
  - Identify appropriate and newsworthy story ideas
  - Interview a source effectively
  - Identify appropriate audience
  - Navigate the Internet and download important information
- Students
  - Practice effective oral communication
  - Write features on agricultural topics
  - Identify appropriate audience
  - Interview a source effectively
  - Navigate the Internet and download important information



# RO3 Conclusions--Coursework

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- Students

- Communicating Agriculture to the Public
- Agricultural Education
- Animal Science
- Agricultural Business

- Professionals

- News Reporting and Feature Writing
- Technical Writing
- Agricultural Business





# RO4 Conclusions--professionals' opinions vs. students' opinions

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- Statistically different competencies (students desired more)
  - Design websites and blogs
  - Describe the international impact agriculture creates
  - Understand cultural impact of agriculture in the U.K.
- Statistically different agricultural communication courses/modules (professionals desired more)
  - News Reporting and Feature Writing
  - Technical Writing
- Disagreement among students and professionals on ag courses
  - Students generally desired all technical ag courses; professionals placed less importance on all ag courses

# Recommendations

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- The fact that most professional respondents were female and most students were male is an important observation
  - Opportunity for UK females to become more involved in agriculture academically, supporting Hopkins (2016) and Truss (2016)
- Professionals' opinions of key competencies may be most important and should mostly drive curricula development (Doerfert & Miller, 2006)
- Students' expectations should also be considered, especially in relation to new media and in thinking about recruiting
- Ag knowledge has always been an important part of the discipline in the US (Terry et al., 1994), but UK professionals viewed it as less important than students did. Why?

# Points for Discussion

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- Providing academic training in a UK agricultural profession that attracts females is an important virtue of this concept
- Developing ideological, academic, and financial support from government, industries, and academia in both the US and the UK will be key (Who are the most likely supporters?)
- Developing curricula with the guidance of professionals is key; however, students' expectations should also be considered, especially in relation to new media and in thinking about recruiting
- Ag knowledge has always been an important part of the discipline in the US (Terry et al., 1994), but UK professionals viewed it as less important than students did. Why?

# Future Research

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- Expand upon quantitative studies to
  - Concretely identify the most important competencies
  - Determine the potential economic and social value of creating an ag communications discipline in the UK
- Further qualitative studies to
  - Determine the motivations and feelings of professionals about the prospect of creating a new academic discipline
  - Identify key financial and political supporters for the effort
  - Determine the proper type/level of program that might work in the U.K. system (BSc, BSc(H), M.S., etc.)
  - Investigate the importance of studying technical agriculture in preparation for a career in U.K. ag communications

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