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The Perceptions of Professionals, Faculty, and Students Regarding the Implementation of an Agricultural Communications Degree Program in the United Kingdom

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Perceptions of Professionals, Faculty, and Students Regarding the Implementation of an Agricultural Communications Degree Program in the United Kingdom

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Table of Contents

Abstract

The purpose of this study was to determine the perceptions of professionals, faculty, and students regarding the implementation of an agricultural communications degree program in the United Kingdom. It aimed to gather detailed opinions to aid in the planning of future agricultural communications disciplines. This study used a qualitative approach in the form of interviews. Interviews were designed to gain in-depth opinions on four different research objectives. Subjects were pooled from three different subject groups: Professionals, faculty, and students. Subjects expressed that writing and journalistic skills were extremely important for agricultural communications graduates to possess. Interpersonal skills were also useful. A generalized knowledge of agriculture is preferred. The study found that placements would be a beneficial addition to a potential program, and they could look different depending on the needs of the student. It also found that the program would fit well into a bachelor's or master's program or a single module (course) being integrated into an already existing program could be useful in garnering interest. Recommendations of the study focused on the layout of the potential degree program. They also focused on conducting further research on placements and the impact an agricultural communications degree program could have on females in agriculture.

CHAPTER I: INTRODUCTION

Background

The agricultural communications academic discipline in United States colleges and universities was designed to address two primary industry needs (Terry, Vaughn, Vernon, Lockaby, Bailey-Evans, & Rehman, 1994). The first was to provide students—future agricultural communications professionals—with a strong understanding of technical agriculture and a strong awareness of sources of agricultural information. The second was to introduce agricultural students to methods of journalistic writing and other public communications skills (Terry et al., 1994). In the United States, the field of agricultural communications is among the fastest growing agriculture-related disciplines in the industry (Miller, Large, Rucker, Shoulders, & Buck 2015). The focus of most coursework in the discipline has been on preparing professionals to communicate agricultural information to those within the agriculture industry but also to those outside the industry, including consumers and the general public (Evans & Bolick, 1982). This focus requires programs to equip graduates with a variety of communications skills they need to succeed as communications professionals in the diverse agriculture sector (Evans & Bullock, 1982). In 2015, Miller et al. reported a total of 48 higher education institutions that offer degree programs in the discipline, helping supply the growing demand for communications professionals in the industry.

In the United Kingdom, agricultural studies are the fastest growing discipline at the university level (Truss, 2016). Not coincidentally, the need for an agricultural communications degree program in the United Kingdom has already been identified (Maples, 2018). According to Ben Briggs, editor of The Preston, England-based *Farmers Guardian,* agricultural communications employers typically hire graduates skilled in agriculture, then teach them to be

strong communicators, or they hire graduates skilled in journalism and train them in agricultural technologies and issues. Employers in the U.K. typically do not have the ability to hire employees trained in both areas (B. Briggs, personal communication, May 30, 2017). A recent study conducted interviews with employers in the agricultural communication related professions, college professors, and students studying agriculture at Scotland's Rural College (SRUC). The study was designed to determine what skills employers, prospective students, and faculty would deem most important for students graduating from an agricultural communications discipline to possess when entering the work force (Maples, 2018). Maples found there was little variation in results between the three subject groups, and most aspects of agricultural communications programs in the U.S. were viewed as important in any future program in the U.K. One interesting trend identified by the study was journalistic writing and interviewing were consistently listed as important skills for agricultural communications students to have, while photography and managing social media were lower on the importance scale, yet still important.

Furthermore, in the United States, the number of women involved in agriculture has increased significantly. Fifty years ago, women rarely went to college, much less studied agriculture. Besides working on a farm, they were seldom involved in the industry to begin with. Over time, that has changed tremendously. According to a Purdue University (2016) study, most students studying agricultural disciplines are women. Enrollment numbers among agricultural disciplines have been increasing in general, but women are currently outpacing men in U.S. programs. Female farmers and ranchers are part of the largest growing segment of people working in agriculture. More women than ever before are pursuing careers in the agricultural industry (Farm Bureau Financial Services, 2018). According to U.S. labor statistics data, females were reported to make up nearly 80% of 2017 college graduates in agricultural communications

and journalism in the U.S. (Data USA, 2020). Also, more than half the reported agricultural communications faculty members in Miller et al.'s (2015) survey were female. According to Pinchbeck (1930), historically in the U.K., females have been at the forefront of British agriculture and food safety innovations. Yet, opportunities for females in the U.K. agricultural industry are just recently beginning to grow significantly. In 2016, 25% more women (1,115) than men (820) enrolled in agriculture-related courses (U.K. Department for Environment, Food, and Rural Affairs [DEFRA], 2016).

Problem Statement

The need to develop an agricultural communications degree program in the U.K. has already been established by research conducted by Maples (2018). Building on this study, further research needs to be conducted to determine what types of academic modules should be included in a degree plan. Understanding what competencies employers would expect from a recent graduate, as well as understanding what students expect to learn and what faculty might expect to teach are all important. Also, examining how an agricultural communications program might be structured in the U.K. as compared to what programs look like in the U.S. is important. Though some literature exists on these topics, especially literature focused on building academic programs in the U.S., little to no information exists to guide the development of agricultural communications academic programs in the U.K.

Purpose and Objectives

This study was designed to gather detailed information to aid in the planning of future academic programing in the discipline of agricultural communications. Its purpose was to gather the opinions of professionals, academic faculty, and students involved in the industry as well as in academia whose informed opinions were valued because in aggregate, they constituted

important advice that could be used to guide the creation of a new agricultural communications academic discipline in the U.K.

This purpose was accomplished through the following overarching objectives:

1. Further determine professional skills U.K. agricultural communications professionals, faculty, and students would expect to have after completing an agricultural communications degree.
2. Determine what modules will be more useful and important to graduates entering the agricultural communications field.
3. Determine the organization of the potential degree plan and if apprenticeships could be beneficial in transitioning from student to employee.
4. Determine what impact implementing an agricultural communications degree could have on females in agriculture.

Limitations

One limitation of this qualitative study was the cultural differences between the United States and the United Kingdom. Because the researchers were engaged in a U.S. agricultural communications academic program, it is possible concepts and interview questions could have been misinterpreted and misunderstood because of cultural and language differences. There are also significant differences between higher education structures in the U.S. and the U.K., so the differences between the educational cultures of the researchers and the subjects could have caused misinterpretations of the subjects' responses. Additionally, because the research was conducted between academic semesters during summer, there was also a possibility the students and faculty who were accessible were not representative of the normal population of students and faculty during the time classes are in session.

Assumptions

1. It is assumed all subjects participating in the survey answered truthfully and accurately.

Chapter II: Literature Review

Issues relating to agricultural production, trade and environmental policies are abundant in the U.K. political and corporate news. As news coverage of these public issues continues to grow in prominence, and as marketing communications efforts in the agriculture industry become more important, more university-trained agricultural communications professionals will be needed to facilitate public communication among all audiences involved—farmers, corporations, policy makers, consumers, and the general public. While the academic discipline of agricultural communications is well established in the United States, no such programs exist in the U.K., yet a demand exists for this discipline (Maples, 2018) to educate and train skilled communicators who are knowledgeable of the agriculture industry (Miller, Large, Rucker, Shoulders, & Buck (2015). To better understand the factors involved in creating a new academic discipline in the U.K. it is important to understand the issues facing U.K. agriculture, the characteristics of the academic discipline in the United States, the higher educational structure in the U.K, as well as the role women in the U.K. play in agriculture and the opportunities for women to strengthen the agricultural communications discipline there.

Agriculture in the United Kingdom

Agriculture in the United Kingdom utilizes 71% of the nation's total land area, which equates to 17.4 million hectares. Since 2014, agricultural production in general has been on an upward trend in the U.K. For example, total crop-able area is up by 0.8%, cereal crops are up by 2.4%, pork numbers have increased by almost 1%, and the agricultural labor force has increased by 0.6% for a total of 477,000 (U.K. Department of Environment, Food, and Rural Affairs [DEFRA], 2018).

Another important factor to note is the emphasis the U.K. government places on environmental impacts of agriculture. U.K. agriculturalists are constantly working towards more sustainable agriculture practices. Agriculture in the U.K. contributes to less than 1% of the economy; however, it is responsible for approximately three fourths of the countries indigenous foods eaten, helps shape the landscape, and boost ecosystems (U.K. Department of Environment, Food, and Rural Affairs [DEFRA], 2018). Production agriculture, land use, and management are some of the key-drivers of the environmental impacts of the agricultural sector. There have been some significant changes in leading climate changes issues directly connected to agriculture. For example, agriculture is a major contributor to greenhouse gas (GHG) emissions. Some gases that contribute to this are carbon dioxide, methane, and nitrogen oxide (Bayer, 2020). Since 2000, U.K. nitrous oxide emission have fallen by 11%, methane emissions have decreased by 10%, and ammonia has shown a significant decrease of 18% (U.K. Department of Environment, Food, and Rural Affairs [DEFRA], 2018). These numbers prove the U.K. places significant emphasis on reducing its carbon footprint and bringing agriculture from a contributor to a mitigator.

The U.K. has long been a net importer of food and agriculture products, with the trade gap of imports to exports being £24.3 billion (Department for Environment, Food, and Rural Affairs [DEFRA], 2018). The National Farmers Union president, Minette Batters, has been a loud voice for agriculture and food security in the British government. She has been dedicated to raising Britain's food self-sufficiency ahead of Brexit (Leahy, 2019). Brexit is the name given to the United Kingdom's departure from the European Union (Government of the Netherlands, 2019). Batters said in a February 2019 interview with Sky News's "Sophy Ridge on Sunday" that while the country will never be completely self-sufficient in terms of food production, it is vital that Britain take its role as a food producer seriously and not rely on the rest of the world to

feed its population, which is likely to grow to 73 million people in 20 years' time (Ridge, 2019). This increased push for Britain to be more self-sufficient in food will presumably lead to an increase in the agricultural sector overall.

The exit from the European Union (EU) has left Britain agriculturalist uncertain. The commitment is expected to be part of the biggest shape up of British agriculture in 40 years (Harvey, 2020). Supporters of Brexit claim it will transform British farming by enabling a balance between food production and environment, which will allow the U.K. to move away from the European Union's bureaucratic common agriculture policy towards a better system for U.K. farmers (Harvey, 2020). However, farming leaders are concerned with the lack of a trade commitment in the bill (Harvey, 2020). Minette Batters specifically worried that a lack of a trade commitment opens the door to import food produced to lower standards than current food imports from the EU (Ridge, 2019). With so many unknowns and issues that come with Brexit, the demand for strong communicators who can facilitate conversation between the public, farmers, and policy makers may be needed.

Agricultural Communications in the United States

The first course in agricultural communications was taught in 1905 at Iowa State University (Evans & Bolick, 1982). The course was focused on agricultural journalism and dealt with writing for the agricultural press. This course marked the beginning of modern agricultural communications courses (Tedrick, 2009). The first department of agricultural communications was established three years later in 1908 at the University of Wisconsin (Tedrick, 2009). In 1970, the Agricultural Communicators of Tomorrow (ACT) was founded as an organization for college students interested in agricultural communications careers. ACT is still to this day, the main association for college students interested in careers in agricultural communications (Agricultural

Communicators of Tomorrow, 2020). By the year 2000, agricultural media had become an important part of the U.S. agriculture industry. By 2000, there were 101 agricultural newspapers, 432 magazines, thousands of radio stations, and three television stations dedicated solely to agriculture (Tedrick, 2009), and numerous national and international professional and trade organizations existed to support the profession of agricultural communications.

Agricultural communicators are important to agriculture and society as a whole because they are able to bridge the gap between farmer and consumer. Agricultural communications programs provide students the opportunity to study journalism, public relations, and graphic design with an emphasis on the agricultural industry (The Ohio State University, 2020). Therefore, agricultural communications graduates are equipped with the skills to communicate agricultural issues to the public.

As of 2014, 41 undergraduate programs have developed across the country. A degree program is considered a major, minor, and/or concentration/specialization/emphasis/option of an agricultural communications degree. Table 1 displays a list of current agricultural communications programs as of 2014 (Large, 2014).

Table 1.

Agricultural Communications Programs in the U.S., 2014 (N=41)z

University	Type	University	Type
Auburn University	Land Grant	**Tarleton University**	State University
California Polytechnic State University	State University	**Tennessee Tech University**	State University
Clemson University	Land Grant	**Texas A&M University**	Land Grant
Connors State College	Community College	**Texas Tech University**	State University
Cornell University	Land Grant	**University of Arkansas**	Land Grant
Fresno State University	State University	**University of Florida**	Land Grant
Iowa State University	Land Grant	**University of Georgia**	Land Grant
Kansas State University	Land Grant	**University of Idaho**	Land Grant
z	Land Grant	**University of Illinois at Urbana-Champaign**	Land Grant
Michigan State University	Land Grant	**University of Kentucky**	Land Grant
Mississippi State University	Land Grant	**University of Minnesota**	Land Grant
Murray State University	State University	**University of Missouri**	Land Grant
New Mexico State University	Land Grant	**University of Nebraska-Lincoln**	Land Grant
North Dakota State University	Land Grant	**University of Tennessee**	Land Grant
Ohio State University	Land Grant	**University of Wisconsin-Madison**	Land Grant
Oklahoma State University	Land Grant	**University of Wisconsin-River Falls**	Land Grant
Pennsylvania State University	Land Grant	**University of Wyoming**	Land Grant
Purdue University	Land Grant	**Utah State University**	Land Grant
South Dakota State University	Land Grant	**West Texas A&M University**	State University
Southern Illinois University	State University		

Source: Large, M. M. (2014). *Characteristics of Agricultural Communications Undergraduate Programs.* (Master's thesis, University of Arkansas]. Scholarworks@UARK. https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=3709&context=etd

A study of curricula conducted by Evans and Bolick (1982) found agricultural communications programs in the U.S. during the 1980s had many similarities. In general, the programs were designed to pursue the best of both the agricultural and journalism disciplines. This enabled graduates to know the basics of both agriculture and journalism. Graduates were then better able to communicate between farm and off-farm audiences. Evans and Bolick (1982) also observed there was overwhelming support by agricultural communications academic programs for students to have general knowledge of agriculture, but knowledge of specific agricultural practices was less important. Sprecker and Rudd's (1998) study on creating the agricultural communications curriculum for the University of Florida, found some themes that corroborate Evans and Bolick's findings in support of promoting a general knowledge of agriculture for agricultural communications students. One main theme of the study was communications skills were, overall, more important than agricultural knowledge. "Oral and written skills need to be excellent. Students need to be versatile, able to do a variety of communication functions in both print and electronic media" (p. #6). A second theme revealed a broad overview of Florida food, agricultural and natural resources was essential. The study's subjects, who were agricultural communications professionals in Florida, thought requiring specialized agricultural courses would be inappropriate. An overview of agriculture would be more beneficial (Sprecker & Rudd, 1998).

Sprecker and Rudd's study was the basis of the University of Florida's agricultural communications program. The study stated courses should teach students to conduct communications campaigns and manage issues, especially in crisis situations. It also found interpersonal networking is key for many careers in agricultural communications and

experiential learning—internships and other real-world experiences—are critical components to graduate success (Sprecker & Rudd, 1998).

Many programs across U.S. have followed the same basic outline for their agricultural communications curricula. According to Sprecker and Rudd (1998), agricultural communicators are not agriculturalists primarily, but specialized communicators. Programs in the U.S. require students to complete as many as 29 credit hours (typically 9-10 semester-long classes or course modules) of mass communication courses (Maples, 2018). Large (2014) identified the following communications courses common in U.S. programs:

- Agricultural Communications Law
- Communications Campaigns
- Communications Theory
- Electronic Communications in Agriculture
- Ethics in Communications
- Publications
- Technical/Scientific Writing
- Writing for Agricultural Media

Students in typical U.S. programs are also required to take an array of general agriculture classes that teach the fundamentals of agricultural science. Some of the classes required among U.S. programs are the following (Large, 2014):

- Agricultural Economics
- Agricultural Education
- Agronomy
- Animal Science

- Environmental Science
- Food Science
- Horticulture
- Soil Science

After completing a degree in agricultural communications, graduates tend to find employment in various fields in the agricultural industry. Some of these jobs include (University of Arkansas, 2020):

- Communications specialist/director
- Public relations professional
- Sales representative
- Journalist
- Graphic designer
- Extension agent

Higher Education in the U.K.

The U.K. higher education system is known worldwide for its quality and standards (Study in the UK, 2020). In some ways, the British education systems differs from the structure and system in the United States. For example, in the U.S., there are 3 different major degrees:

- Associate's Degree (Two Years)
- Bachelor's degree (Four Years)
- Master's Degree (Two years)

The U.K. higher education system is comprised of several different levels. Students can earn basic certificates which would be equivalent to trade certificates in the U.S. The most notable degree levels are (Study in the UK, 2020).

- Higher National Certificates (HNC)
- Foundational Certificates
- Higher National Diploma (HND)
- Bachelors (BSc)
- Bachelors with honors (BScH)
- Master's degrees (MSc)
- Doctoral Degrees

A major difference between higher education in the U.S. and U.K. is students can complete a BSc in three years in the U.K. If a student qualifies and chooses to study for four years, they will complete a BSc with honors. In the U.S., the typical bachelor's degree is designed for students to study for four years. The first two years of college include general core courses every student in the university is required to take. The next two years focus more on courses in each students desired academic major. Students who wish to graduate with honors take specialized "honors" courses, complete research, and write a dissertation.

Many programs in the U.S. and U.K. require internships, or placements, as part of their degree program. There are many benefits to participating in internships in college. Students learn to apply the knowledge gained in the classroom to a professional work environment. For kinesthetic learners, hands-on experience is vital to success in the professional world. Another benefit is that students can gain exposure to their chosen field. This is a way for students to explore careers in the major to decide if it's really what they like. Students can also establish networking connections. This can allow students to network with potential future employers and build their network of contacts. Internships also allow them to build their resume and gain crucial work experience (The College of St. Scholastica, 2018).

There are 67 higher education institutions in the U.K. that offer at least one course in agriculture (IDP Company, 2020). Among them are numerous agricultural and land-based colleges and universities. Figure 1 pinpoints every higher education institution in the U.K. that offered an agricultural module in 2020.

Figure 1

Map of Agricultural Colleges and Universities in the U.K.

Source: Google Maps. (2020). *Agricultural Colleges and Universities in the UK*. Retrieved from Google Maps: https://www.google.com/maps/d/viewer?mid=1Yy_odmElhxoSKYyCAbI7mMVhtec&ie=UTF8&t=m&vpsrc=6&source=embed&showlabs=1&oe=UTF8&msa=0&ll=53.85962710371566%2C-4.004273568753433&z=6

Women in Agriculture

The United Kingdom is focused on bridging the gender gap across all sectors, including agriculture. In 2013, women made up just 16% of agriculturalist in the U.K. (U.K. Department of Environment, Food, and Rural Affairs [DEFRA], 2018). Of that, only 2% of female farmers are under 35 years of age. However, with advances in technology and increasing education, that number may be on the rise. Higher education enrollment for women in agriculture in around 25%. The goal for the U.K. is to have a 50/50 gender split among all degree programs. The number of women enrolling in agricultural courses is on the rise. For example, Harper Adams University found the number of female agricultural students has doubled in enrollment in the last five years (Shields, 2019). Also, the Royal Agriculture University reported in 2019 enrollment had increased by 44% over the previous five years. Now, more and more women are moving into senior and management roles in agriculture. One of the biggest spotlights on women in agriculture in the U.K. has been the election of Minette Batters as the first female president of the National Farmers Union (AFTP, 2019). She has used her platform to encourage other women to get involved in the agricultural sector.

In the U.S., the percentage of women in agricultural disciplines in the U.S. increased from roughly 3% in the 1970's to around 60% in 2016 (Hopkins, 2016). The agricultural communications sector holds a big responsibility for keeping women involved in agriculture. Approximately 79.6 % of students enrolled in the degree program are female (DataUSA, 2020), and more than half the reported agricultural communications faculty members in Miller et al.'s (2015) survey were female.

Chapter III: Methodology

General Design Approach

This study employed a qualitative research approach to examine perceptions regarding the prospect of creating agricultural communications curricula in the United Kingdom. A qualitative approach was valuable because it allowed for subjects to express in-depth opinions regarding an agricultural communications curriculum (Valenzuela & Shrivastava, 2009). To achieve the objectives of this study, qualitative field interviews were conducted with three different subject groups: professionals, academic faculty, and students. Because online surveys on the subject have already been conducted (Maples, 2018), using face-to-face interviews allowed for more in-depth responses from the subjects (Valenzuela & Shrivastava, 2009). They are a more personal form of research than a survey or a questionnaire, and they are known to elicit deeper, more detailed descriptions of subject's perceptions, thoughts, and feelings (Valenzuela & Shrivastava, 2009). The study developed an in-depth set of questions to further analyze perceptions of the three subject groups regarding an agricultural communications program.

> Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires, e.g., to further investigate their responses (Valenzuela & Shrivastava, 2009, p. 2).

Subject Selection: Agricultural Communications Professionals and Agricultural Students

Interviewees were selected from three subject groups. The pool of professional subjects in the agricultural communications sector was drawn from the Guild of Agricultural Journalists (GAJ) in Edinburgh. Respondents consisted of editors, journalists, broadcasters, photographers,

and public relations/marketing specialists. Respondents also included people who engage in journalism, press, and/or public relations in the United Kingdom's rural sector. These subjects were logical interview choices because of their knowledge and expertise in agricultural communications related fields. GAJ members are also potential employers for future agricultural communications academic program. The pool of academic faculty subjects was drawn from the agriculture faculty at Scotland's rural college in Edinburgh.

Student respondents were pooled from agriculture students attending Scotland's Rural College. The student respondents were enrolled in an agricultural academic degree program. To recruit student participants, an introductory email was sent to participants recommended by faculty and staff at Scotland's Rural College. The agricultural student subjects had experience in and around the agricultural academic programs and provided a student-oriented perspective that could inform the study.

Institutional Review Board

In compliance with the University of Arkansas policies and federal regulations, research involving human subjects is required to be submitted, reviewed, and approved before research completion. Following this policy, this study was approved by the University of Arkansas Institutional Review Board (IRB) office and granted permission to proceed the gathering of data. The approval number provided for this research is IRB #1904195519

Instrument Development

Faculty members experienced in agricultural communications and qualitative research skillfully curated interview questions designed to provoke subject opinions. The instrument used to complete the data collection was a researcher-developed interview questioning route. Questions were developed to provoke in-depth opinions regarding the perceptions of students

and professionals regarding implementing an agricultural communications degree program in the U.K. The instrument was composed of questions to elicit the opinions of the two subject groups regarding four research objectives. These four objectives guided the development of the questions in the questioning route:

1. Communications competencies after graduation
2. Technical agriculture and communications courses
3. Degree program structure
4. Effect on women in agriculture

Two studies conducted earlier on agricultural competencies in the U.S. and U.K. served to guide the development of questions related to the perceptions of several subject groups on implementing and agricultural communications degree program in the U.K. (Large, 2014; Maples, 2018).

Data Collection

The interviews were conducted in person or by phone call. An introductory email was sent out to inform participants of the study and gauge whether they would like to participate. The email was sent on June 10, 2019, and interview times were arranged around the subjects' availability.

Data Analysis

After the collection period, interviews were transcribed and stored on a password protected laptop. Transcribed interviews were coded by the researcher using NVivo qualitative data analysis software. NVivo allowed the researchers to develop a hierarchy of descriptive, thematic codes based on the research objectives, which emerged as a result of continuous patterns that surfaced during the interviews among the subject groups. Codes and patterns

developed as a result of the thematic analysis of six interview questions to determine the opinions of students, faculty and professionals regarding the implementation of an agricultural communications degree in the United Kingdom (Corbin & Strauss, 1990).

Research Rigor

Qualitative data analysis was documented in NVivo and was peer-reviewed by a panel of experts, constituting the type of audit proposed by Lincoln and Cuba (1985). Lincoln and Guba (1985) proposed the use of an inquiry audit where reviewers examine both the process and the product of the research to increase dependability. Concerning the analysis of qualitative data, an audit trail (in the form of an NVivo project file) exists to confirm the presence of themes that emerged among the qualitative responses.

Reflexivity Statement

Credibility in qualitative research is closely tied to the relationship of the research and the subjects. It is increased when the researcher(s) interprets their relationship to the study with a subjectivity statement (Sandelowski, 1986). The principle and secondary researchers of this study are both directly involved in the agricultural communications field as both a student and an agricultural communications faculty mentor at the University of Arkansas. Involvement in the field may produce slight bias towards implementing an agricultural communications degree program in the U.K. because of personal involvement in the discipline in the U.S. However, the researchers worked to remain as objective as possible during data analysis by focusing on the themes that emerged through the process of employing the NVIVO qualitative data analysis software.

Chapter IV: Findings

Chapter IV presents findings from this study related to the research objectives which guided the study. The findings are reported in categories guided by the objectives of the study.

A total of 14 subjects participated in the study. Of those 14, three were students, five were faculty members, and six were industry professionals.

RO1: Further determine professional skills U.K. agricultural communications professionals, faculty, and students would expect to have after completing an agricultural communications degree.

Research objective one aimed to understand what skills potential employers would expect new graduates to possess after completing an agricultural communications degree. It also aimed to understand what students would expect to be learning as well as what faculty would expect to teach.

Three overarching themes emerged that indicated the skills students might be expected to learn while studying in an agricultural communications program in the U.K:

- Writing and Journalistic Skills
- Interpersonal skills
- Digital Skills

Writing and Journalistic Skills

Among all three subject groups, writing and journalistic skills were found to be a priority. Many subjects expressed the need to be able to communicate through writing. A strong consensus emerged across professionals, faculty, and students alike on the ability to write well. A faculty member shared her perspective:

If you can write, you can think. So, if you can communicate clearly in that written form and order your thoughts correctly, then you have kind of crunched together a lot of things about communications. [CM, faculty]

Being able to logically and correctly structure stories was deemed a valuable skill as well. Another faculty member and a student explained:

I think being able to write in an interesting way with logically presented information is an extremely valuable skill. [CH, faculty]

It would be important to know how to write, get information across on paper, how to structure stories, and decide what it most important in a story piece. [AR, student]

The agricultural communications professionals interviewed in this study clearly placed an emphasis on the ability to develop and write stories about agriculture, serving as a communications mediator between farmers and their audiences. There was much agreement among all the subjects, but especially among the professionals, that being able to accurately portray the important aspects of an agricultural story to the public is a key part of an agricultural communicator's job. To do this, one must have a basic knowledge of agriculture to begin with, so having an understanding of the agricultural sector while also having strong writing skills is key.

At the [agricultural publication], we find it's easier to teach an agriculturalist to be a journalist than it is to teach a journalist to be an agriculturalist, and that is mainly because of the complex nature of agriculture, and they have to have a deep understanding of it. [KF, professional]

Interpersonal Skills

Another finding was interpersonal skills were highly valued among students, faculty, and professionals. Many subjects stressed the importance of being able to verbally communicate with people. Having people, presentation, interview and others soft skills were vital to an agricultural communicator's success.

> *I think these soft skills, like people skills, communications skills, and all the other fundamental things are really important.* [SM, faculty]

> *It is important to be able to interact with a range of people and to be able to draw insights from those interactions.* [PH, faculty].

PH, one of the faculty members, also stated they thought people in general devalue human interaction, so, they think it is critically important to integrate interpersonal skills into agricultural communications curriculum.

Another point of consensus among the subjects was the need for agricultural communications graduates to be able to effectively explain key concepts and core messages related to agricultural issues and topics. Professionals especially indicated the importance of knowing how to find the key message in a story of any type—journalistic, marketing, or public relations—and being able to portray that message in words, as well as writing, is a highly desirable skill.

> *If the core messages are not clear and are not properly expressed, then polishing it up still means it is flawed. So being able to explain the key concepts, being able to explain them clearly and correctly and then being able to make it accessible is extremely important.* [DH, professional]

Many of the subjects' comments about important agricultural communications skills grouped together interpersonal skills and writing skills. Speaking skills appeared to be equally important as writing skills for future agricultural communications professionals to possess.

Digital Skills

Findings related to the need for agricultural communications graduates to have digital skills lacked a clear consensus. However, analysis clearly indicated digital skills were perceived as not as critical as writing and interpersonal skills. Some subjects said it was important for potential graduates of the program to develop technical skills like photography, graphic design, and website design. Other subjects explained their organizations hired professionals trained in these "specialized" skills and they would not be as imperative for agricultural communications students to learn.

The subjects who discussed the importance of including digital skills in the curriculum had a more "generalist" view of to the duties of an agricultural communications professional. These respondents agreed graduates should have a basic knowledge of a broad spectrum of skills related to journalism and marketing communications in the agriculture industry. So, they needed to have strong writing, interpersonal, and digital skills.

> *Being able to tell a story is really important, but I also do a lot of stuff with design work, photography, and videography as well. So, I have to know it all.* [WS, professional]

> *You need to be able to go to a farm, take a good picture, take a quick sound bite, and then tell some of the story quickly all in one. So, for some communications jobs, they need to be an all-rounder. They need to be able to meet people, interview them, write up*

stories but then also be able to do website stuff, take photos and be able to film. [JV, professional]

I think graphic design and other skills are really important because everything today is aesthetic and it's all about visuals. [GN, professional]

The excerpts above were from subjects who favored a more general skillset for graduates of an agricultural communications degree program. This group agreed students should have a basic knowledge of digital skills. However, digital skills were not deemed nearly as important as writing or interpersonal skills even among this group. Notably, a majority of industry professionals shared this opinion.

A larger number of subjects overall—particularly students—claimed digital skills weren't as important for agricultural communications students to learn. Many were of the opinion agricultural communications organizations already employed professionals who specialized in digital skills like graphic design, website design, and photography, while some viewed the skills as able to be acquired through on-the-job training.

I mean graphic design and photography is an element of communication, but actually, my judgement may be a little bit harsh here, but it is essentially a cosmetic overlay on top of communications. [DH, professional]

Digital skills like graphic design and photography are probably just easier things to pick up as you go along. [KD, student]

I think with regards to photography and graphics, there's just a lot of people out there who already do all of that. [AR, student]

In summary, many professionals stated the importance of graduates having a working knowledge of all aspects of communications, with writing and journalistic skills being the most critical. Faculty appeared to focus heavily on interpersonal skills. So, they stressed the importance of human interaction and soft skills. They also placed heavy emphasis on the need for students to be able to write and articulate their thoughts in a well-organized manner. Students seemed to focus on the need for writing skills because they are the most difficult to perfect, and generally, the student respondents felt digital skills weren't imperative to learn.

RO2: Determine what modules will be more useful and important to graduate's entering their field.

The second research objective aimed to assess what modules professionals, faculty, and students felt would be most useful in the degree program. Questions related to this objective focused on what agriculture-related course modules and what communications course modules should be implemented into the degree program.

Agriculture-based course modules

Subjects' responses show there was a consensus in the need for students to have a generalized knowledge of agriculture. Many did not feel the need for students to get a highly specialized education in the technical disciplines of agricultural production, such as livestock reproduction or plant genetics. Rather, having a basic working knowledge across a wide span of agricultural fields should prove to be more beneficial.

I think it should be at a fairly fundamental level of agriculture across the corridor. So arable crop production, livestock production systems, and other things so they

are getting understandings of the basic systems. Different systems of production of different species of livestock and things like that. [SM, faculty]

I think they should get a good grasp of all the basics that are driving the food and agricultural sector. [SK, professional]

Yes, in terms of agriculture, generalize. I mean, I would not get specific. I wouldn't have them take a botany class because I don't think there's a need for that, but I think they should definitely take a general horticulture class and I think they should learn about general agriculture like animal practices and why they do things like de-horn, dock tails, and castrate animals. So yeah, I think general classes would most beneficial. [CD, faculty]

I think having a basic understanding in things like animal science, crop science, that type of thing. [AR, student]

Some subjects stressed the importance of students having a knowledge of hot topics in agriculture, like animal handling and welfare, so they would know how to better communicate about those topic in their jobs. They also said it was important for journalists to be able to communicate what goes on around the farm and to be able to promote agriculture from the agriculturalists' perspective.

They should have an understanding on welfare. So there should definitely be some animal science welfare classes that they should take because those are some of the issues that the public are always questioning. So, as a journalist you need to be able to back up the

reasons why we do things. Anything that we can do to promote agriculture within our writing, I think is crucial. [CD, faculty]

Some subjects said that with the advancement of new technologies being used in agriculture, it was important for students to also be aware of new technological advancements in the industry. Others said understanding the business behind agriculture would also be beneficial.

A general knowledge of the technical fields so having an understanding on new developments and technologies. [KD, student]

I think a business perspective would be a good one to start with. This would give them a handle on how the industry works and how a lot of business decisions are made—have ramifications due to the practical level of how it's implemented on the farm. [KF, professional]

Communications course modules

Overall, the subjects' opinions regarding the types of communications course modules that should be offered focused more on skills than course modules. Having little to no frame of reference for the types of modules offered in an agricultural communications program, they mostly reverted to discussing particular communications skills when answering questions about which communications classes they would expect to students to take. However, some subjects suggested that the journalistic and communications courses should take precedent over the agriculture-based courses.

The communications classes are probably more important for students than the agriculture side. [CH, faculty]

The findings for the communications courses followed the results of the first research objective, with heavy emphasis being placed on journalistic writing and interpersonal communication skills. So, it is reasonable to interpret that the subjects would expect to see courses modules focusing on these skills. There was, again, strong consensus for students to know how to write well in terms of choosing proper angles, organizing a story, and reporting with accuracy. Moreover, subjects' comments demonstrated their perceived importance of students possessing those soft skills like speaking and communicating tactfully with people.

> *I think they should know how to write and get information across in a piece. I think that type of thing and also how to structure stories and decide what is important in a piece.* [AR, student]

> *You have to know how to write, but you also need to know how to chat to people or you're not going to get the information you need.* [CM, faculty]

> *They need to have the ability to write, or they need to be taught the ability to write. Plus, the number one thing we insist on it complete and utter accuracy at all times. And you need to be taught the basics of constructing a story—putting it together and adding value to it by having a knowledge of where to go in the industry to get that knowledge.* [KF, professional]

> *In terms of communication courses, interview skills, presentation skills and all these soft skill areas would be very helpful to get credibility in that kind of industry.* [SM, faculty]

Some interview subjects also brought up the importance of having a basic knowledge of digital media skills as well. Notably, people who brought up digital skills were professionals in the industry whose job included digital work. These professionals worked with websites, graphics, videography, and/or photography in their careers as agricultural communicators.

> *I think students should have a good, broad understanding of digital media and content production.* [WS, professional]

> *I think it's important to know about the digital side of things like how to use your social media and create website content and things like that.* [GN, professional]

The findings for research objective two showed overwhelming consensus for students getting a basic, general knowledge of agriculture through their coursework. The findings indicated that students would benefit most from generalized course modules like introductory classes in animal science, horticulture, crop production, economics, or issues in agriculture. Some subjects placed a special importance on skills and coursework in business or economics as well.

The finding for communications-based course modules were in line with the findings for research objective 1, which focused on perceived necessary skills. An overwhelming majority of subjects claimed that writing and journalistic skills were extremely important for students to learn. It is was clearly important to the subjects that students be able to structure stories by prioritizing facts that are most crucial in news stories. They should also know how to correctly structure a story and heavy emphasis was placed on being accurate. Another important finding was that students should learn soft skills, including public speaking and interpersonal communication skills, through their coursework. So, it is important for students to know how to

speak in front of crowds, as well as be able to hold a conversation with someone one-on-one. It was also brought up that they should learn how to interview people and know how to get the information they needed from an interview subject.

Another finding that followed suit from RO1 was the lack of emphasis placed on digital skills. Though potential course modules in digital media were brought up a few times by interview subjects, is notable that most subjects either did not bring them up at all or placed less importance on students having a basic knowledge of digital skills. The subjects who did place emphasis on the digital skills and coursework were professionals in the industry who were more "generalists" in their jobs, so they did a little bit of everything. Overall, digital skills weren't deemed nearly as important as writing and interpersonal skills, but some subjects thought they may be beneficial for students, who will need working knowledge of basic digital media in their professional positions as agricultural communicators.

RO3: Determine the organization of the potential degree plan and if apprenticeships could be beneficial in transitioning from student to employee.

Research objective three aimed to determine three different aspects regarding the organization of the degree program. It aimed to determine what degree structure the degree program would fit. It examined the potential to integrate an agricultural communications degree program into an existing discipline as an area of emphasis or concentration. It also gauged how subjects felt about experiential learning placements being part of the degree program and how those may be structured with regards to compensation, location, and duration. Three interview questions were aimed to determine perceptions of the structure of the potential degree plan.

Degree Structure

The goal of this interview question was to determine what degree structure the program would best fit in to. The U.K. has three potential structures that the agricultural communications degree program could potentially fit:

- Higher National Diploma (HND) – two-year program
- Bachelor's degree (BSc) – three- or four-year program
- Master's degree (MSc) – one-year program, post-bachelor's degree

The findings regarding this topic didn't result in a clear consensus. Two subjects insisted that starting off with an HND program would be beneficial to garner interest in the program because it is so new and not a lot of students have heard of it. They noted that students in the U.K. are not likely to choose an academic program in an "unknown" discipline, or a field they didn't grow up around or learn about in primary or secondary school.

I think it would take a little bit of time to build demand. [DH, professional]

So, some subjects weren't convinced that a full three to four-year program would draw very much interest.

I think it should start off as an HND program because I just don't see there being a massive desire to go into a four-year program, so I think it would be wise to just introduce it in an HND. [CD, faculty]

However, other subjects were of the opinion that an HND program structured too generally for such a specialized degree program.

I think it's too specialized to fit into an HND, the whole point of the Higher National Diploma qualifications is that they are broad and not very specialized. [DH, professional]

The structures with the most consensus were the bachelor's degree and the master's degree. Many subjects thought the degree program could fit into both of these programmatic structures. The bachelor's degree was the structure that was mentioned the most, and it was the one that many subjects tended to think of first.

I think it would fit really well into a bachelor's degree. [AR, student]

I think it could fit in to any, but I think it would go really well into just a traditional three or four-year program. [PH, faculty]

Several subjects who showed a preference for developing a bachelor's degree also mentioned offering the program as a master's degree option. Many thought it would do well as a specialized master's degree because students could either get a bachelor's in journalism or agriculture and then get the master's in agricultural communications.

I would think a BSc, but I could really see it fitting into an MSc because you can do a BSc in journalism or agriculture and then use the MSc as a specialization. [SM, student]

I think maybe a master's—a one-year master's program—might be the best way to add value to it, not just for our point of view, but to the student's point of view. [KF, professional]

I actually think having sort of both options would be really good. Having the bachelor's degree that you could go through from the beginning and learn joint agriculture and journalism at the same time, or having an MSc where say if you've done an agriculture or animal science degree, an MSc to then learn journalistic topics in depth would probably be really good for some graduates as well. [KD, student]

I think at least a BSc degree and a master's would be nice, too, because then you can already be specialized in an agricultural field and then bolt your journalism content on to the end of it. [JV, professional]

There was consensus on making the program available as both a bachelor's and master's structure. The most important issue with the HND was the potential lack of interest in the program. Many thought it would fit well into a traditional three to four-year program or as a one-year master's if there were enough interest in the program. This brings up another notable point. Some subjects felt that introducing the discipline as single modules into an already existing academic program would be a beneficial way to initiate a program. This would allow students to learn about agricultural communications and journalism and introduce them to the field. This also could build awareness of the discipline among prospective students and might garner some student interest that could lead into making it a complete degree program in the future.

I think the program would be quite hard to sell. I think to start it off, it would probably be easier to introduce, easier and more likely to be successful, to introduce it as a single module, a single unit, a single course within an existing program. [DH, professional]

I think introducing the elements of it into the current degree programs would be great. [JV, professional]

Existing Discipline

The concept of integrating modules focused on agricultural communications into existing disciplinary programs was well received, and ideas regarding this concept flowed freely during the interviews. Findings showed overwhelming consensus that communications-based modules would fit very well into either general agriculture programs or rural business management programs.

Subjects stated that the general agriculture course already gives students a broad perspective of the U.K. agriculture industry. It isn't typically specialized or targeted toward one certain sector. For the same reason, subjects also stated the rural business management degree would be a good program to integrate some communications modules into.

So, rural business management students study almost everything the same as the agriculture students, but rather than doing a lot of business-related stuff, you could bring in the journalistic modules. For me, as an agriculture student, I would find it really interesting if we had a module on (agricultural communications). [AR, student]

I think it would fit into the rural business management because it is really general, or the agriculture program, which is the other general one. [CM, faculty]

Probably the agriculture degree, because I think our graduates leaving that course really should have more skills in terms of being able to communicate better with the

government, with other stakeholders, with farmers, and with the public. I think that would be a really valuable skill. [JV, professional]

I would say it would probably fit really well with the general agriculture program because people are already getting that broad base. [KD, student]

The clear consensus was that agricultural communications modules would fit well into either of these already existing degree programs. There was consensus of this across professionals, faculty, and students alike.

Experiential Placements

The interview question regarding experiential learning opportunities in an agricultural communications program aimed to elicit opinions on a placement being part of the degree program and, if so, what would those placements might look like with regard to the duration, location, and pay. There was great consensus on the need for a placement to be part of the degree program. Professional, students, and faculty all felt that placements should be integrated into the program. Placements seemed to be viewed as essential among all the subjects. They claimed placements give students valuable work experience and help students gain a broader knowledge of the field they plan to go into.

Because we don't have a degree program at the moment, I think industry experience detailing what that course could lead onto in employment would be quite essential. [AW, student]

I think placements are reasonable to any vocational applied subject. It is going to give the student more experience, it's going to make them more employable, it's going to give them a different set of experiences than they would have it they didn't do one. [DH, professional]

I would think a placement would be essential because of that communications. Direct communication skills are an art that you need to develop and learn. [CM, faculty]

So, subjects' discussion of the need for an experiential learning placement experience in an agricultural communications program produced an overwhelming consensus. However, what those placements might look like produced some controversy. One trending opinion was that placements should be flexible and tailored to fit the student's lifestyle within some minimum requirements.

I wouldn't expect this to be a one size fits all. It would be up to the organization that is doing the internship and hosting those candidates. [CD, faculty]

So, I think a placement should be part of every program, no matter the subject. I think that the placement should be flexible to allow for the student to be able to take that up. [PH, faculty]

The subjects' discussion of the potential durations of the placements also failed to show any kind of consensus. Opinions on the duration of a student's placement ranged from one day a week to over a year. However, many indicated that students typically do work placements over

the summer break. Other than the few subjects who recommended summer placements, opinions on this topic were widespread.

The discussion of locations of potential experiential placements generated more of a consensus, as many subjects said the location could be anywhere. Again, they brought up that placements should be flexible to the student.

The location can really be anywhere. I mean, agriculture is such a huge part of the landscape that it could be anywhere. [CD, faculty]

Location, it really could be anywhere. [CH, faculty]

Comments regarding compensation aspect of placements also resulted in consensus. Most subjects felt that students should expect to get paid in a work placement if their work was benefitting the organization that they were working for. A few subjects claimed it was really up to the organization providing the placement on whether they would be paid or not. However, the majority said they would expect students to be paid for their work and they would expect the pay to be the U.K.'s national living wage.

I think placements should be paid, and I think that the national living wage is appropriate these days. [KD, student]

Placements would be paid kind of program. [KF, professional]

I don't necessarily know that pay would be required. Depending on what the placement was, if the placement was a lot of work or you were actually doing work that benefited

the organization that you were placed with, I think some form of payment would be expected by many students. [AR, student]

I would expect it to be paid and I would expect it to be at least the national living wage. [PH, faculty]

Questions related to the organization of the program generated the most in-depth discussion among the subjects. Many thought the program would fit into a BSc as a traditional three or four-year program. There was also support for the program being a capstone, or top-off course, in the form of a one-year master's program. However, many also thought that introducing the program as a single module into an existing BSc program may be the best way to garner interest in a future full-fledged degree program. Subjects believed that the agricultural communications module(s) could be easily integrated into a general agriculture program or a rural business management program.

There was also strong consensus for placements being integrated into an agricultural communications degree program. Many thought the placement should be flexible and could look different depending on the needs of the student, as well as the needs of the organization hosting the student. Many participants said that they would expect the placement to be paid. Overall, consensus was that placements would be essential, and the details should be flexible.

RO4: Determine what impact implementing an agricultural communications degree could have on females in agriculture.

Research objective four aimed to determine the impact implementing an agricultural communications degree program would have on the number of females involved in agriculture.

Subjects were asked to explain their thoughts on how/if implementing an academic program in agricultural communications would attract more females to the agricultural sector.

Impact on Females in Agriculture

Consensus on this topic was not as consistent as some other findings in this study. While many subjects didn't think the imbalance in attractiveness of the program toward females would be large like it is in the United States, they still thought more females might be interested in studying agricultural communications. For the ones who did think the percentage of females studying communications would be higher, their reasoning was that more females than males tend to study art, humanity, and social science subjects such as English, journalism, and business management.

> *Currently, a lot of the agricultural journalists and farming press that we have over here are female, and female students from farming families tend to study rural business management as opposed to straight agriculture.* [AR, student]

> *I think that in the U.K., in subjects like English going from high school onto university, there are lots of young women who go on to study things like that. So, I think there might be a small bias maybe towards females in a course like that, but maybe not massively.* [KD, student]

> *I've employed people for about the past four years and there seems to be more young ladies interested in journalism and communications.* [KF, professional]

Many reasoned that more females tend to go into regular journalism and communications courses in general. So many of the media workers in the U.K. now seemed to be females because it was just a field that women tend to gravitate towards more.

> *I think that … the journalism aspect and the marketing and communications is a field that females tend to go towards just in general.* [SK, professional]

> *The percentage of students just studying communications and journalism in general tend to be higher for women.* [PH, faculty]

The U.K. is aiming to reduce gender segregation or gender imbalances across all employment sectors, and some subjects thought that the agricultural communications degree program could potentially help reduce the gender gap in the agriculture industry.

> *I guess there are two sides to this, it could either be that by having an agricultural communications course, we actually bring some women into agriculture, which would be fantastic considering in Scotland, we have a remit that we have to reduce gender segregation and gender imbalances.* [PH, faculty]

Many subjects seemed unsure of the impact that an agricultural communications degree program would have on females in agriculture. Some subjects stated the program would be more skewed towards women, yet others thought it would be a 50/50 split between men and women. There wasn't a clear consensus on whether or not people thought the degree program would majorly impact the number of women involved in the agricultural sector.

Chapter V: Results & Recommendations

The purpose of this study was to gauge the opinions and perceptions of professionals, faculty, and students regarding an agricultural communications degree program in the U.K. It aimed to determine desired competencies graduates should aspire to achieve, how the communications program would fit into a U.K. degree structure, what modules should be implemented into the potential program, and how this degree program could potentially benefit females in agriculture in the U.K. The study was guided by the following objectives:

(1) Further determine professional skills U.K. agricultural communications professionals, faculty, and students would expect to have after completing an agricultural communications degree.
(2) Determine what modules will be more useful and important to graduates entering the agricultural communications field.
(3) Determine the organization of the potential degree plan and if apprenticeships could be beneficial in transitioning from student to employee.
(4) Determine what impact implementing an agricultural communications degree could have on females in agriculture.

The following conclusions are representative of the respondents' collective opinions expressed in the study.

RO1: Further determine professional skills U.K. agricultural communications professionals, faculty, and students would expect to have after completing an agricultural communications degree.

RO1 was reached by asking respondents what skills they deemed most important for agricultural communications graduates to possess after completing a degree program. According to Sprecker and Rudd (1998), agricultural communicators are not agriculturalists primarily, but rather specialized communicators. The data collected indicates that writing skills and interpersonal communications skills were crucial skills for graduates to possess after graduation. Interestingly, results showed that digital skills such as graphic design, photography, or web design were deemed of less importance across professionals, faculty, and students alike, though some professionals—typically agricultural communications generalists who practiced those skills often—viewed them as very important.

RO2: determine what modules will be more useful and important to graduate's entering their field.

Objective two was reached by asking research subjects what the important technical agriculture courses would be and what the important communications type courses would be. Similar to a study conducted by Sprecker and Rudd (1998), respondents agreed that students should get a broad base of all areas in agriculture, so a generalist approach would be critical. This follows much of the same layout as the program in the U.S. (Large, 2014). The important communications courses followed suit with the important skills determined by objective one. Subjects felt that students should have a strong basis in journalistic writing and interpersonal communications, like interview skills and presentation skills, while courses teaching digital skills were either deemed less important or not brought up at all by subjects.

RO3: determine the organization of the potential degree plan and if apprenticeships could be beneficial in transitioning from student to employee

Objective three was reached by asking participants three different interview questions. One was created to gauge the opinions on what degree structure the potential program would best fit into. One determined what existing discipline an introductory communications course would best fit into. The last question aimed to determine how subjects felt about a placement being part of the degree program and what that placement would look like.

The results on what degree structure the agricultural communications degree program would fit into were mixed. However, many felt that the higher national diploma program wouldn't fit because it was too general, much like an associate degree in the U.S. The most common answers were the Bachelor's (BSc) and the one-year master's (MSc) programs. Some subjects said an MSc would fit best because students could complete and agriculture or journalism degree and use the MSc to specialize. However, there were strong results to show that introducing the program as a single module into an already existing degree program first would be beneficial in increasing interest in the program. This would increase awareness in the new program by introducing students to the field. Some programs in the U.S. have taken this approach, with several prominent programs growing out of the agricultural education discipline (Large, 2015). Subjects stated that the communications module would probably best fit into the agriculture degree or the rural business management degree because they are the two most generalized programs in agriculture.

The last question in determining the potential degree structure was gauging the opinions on whether a placement should be a part of the program. There are many benefits to participating in placements and other experiential learning activities in college. Students learn to apply the knowledge gained in the classroom to a professional work environment (The College of St. Scholastica, 2018). There was a strong consensus for making a placement part of the program.

This is supported by Large's (2014) examination of U.S. programs, which showed a strong trend toward integrating experiential learning into the curricula through internships as well as practical capstone coursework. However, what the placement might look like in the U.K. differed from subject to subject. Many thought that the placement should be flexible and, ultimately, up to the student and organizations hosting the placement, most thought that students should expect to be paid for their work (Large, 2014).

RO4: determine what impact implementing an agricultural communications degree could have on females in agriculture

Research objective four was created to gauge the opinions that participants had on how this degree program might affect women in agriculture. This objective produced the least amount of consensus. Some thought the program would attract a 50/50 split of males and females, and some thought it would be slightly skewed toward women. In the U.S., females account for nearly 80% of students studying agricultural communications (DataUSA, 2020). However, many participants in the study either did not know how it would affect women in agriculture or were indifferent.

Recommendations

First, this study was limited to a relatively small collection of purposively selected individuals. A study collecting even more insight from professionals, faculty, and students would add depth to the findings on this topic and would help solidify knowledge of how best to initiate an agricultural communications academic discipline in the U.K.

Additional research should also be conducted to determine what an experiential placement (e.g., internship) in an agricultural communications academic program would look

like. The results of this study were inconclusive regarding this issue, so it would be beneficial to conduct additional research on placements in the U.K. and how one would fit into the agricultural communications degree program.

Additional research should be conducted to gauge the effect the agricultural communications degree program would have on females in agriculture. The agricultural industry in the U.K. is heavily populated with male professionals, but the U.K. government is interested in adding gender diversity to the industry. Developing a stronger understanding of how an agricultural communications degree program would affect females could be helpful in future recruiting activities and could also result in data that could be used as a rationale for government support. It is important to note that a large majority of students studying agricultural communications in the U.S. are female (DataUSA, 2020), so further research to gauge how the program would appeal to women in the U.K. is certainly warranted.

Practical Recommendations

It can be concluded from the findings emphasis should be placed on students gaining a broad base in agriculture. The program should also focus on writing and interpersonal communications-related classes. Based on the results of the study, it is recommended the United Kingdom higher education system should use the following list of potential modules/classes as a starting point for an agricultural communications degree program:

Agriculture courses

- Animal Science
- Horticulture
- Agriculture Economics

- Agriculture Business
- Crop Science

Communications Courses

- Communicating Agriculture to the Public
- Technical Writing
- Agriculture Reporting and Feature Writing
- Crisis and Risk Communications
- Communications Campaigns
- Public Speaking
- Placement in Agricultural Journalism
- Electronic Communications

The agricultural courses recommended are the type of general agriculture courses that are taught in the agricultural communications discipline in the United States (Large, 2014). The recommended communications courses mirror the capstone courses taught in the U.S. program with emphasis on writing courses (Large, 2014).

Conclusions

This study strived to garner the perceptions of professionals, faculty, and students regarding the implementation of an agricultural communications degree program in the United Kingdom. A total of 14 respondents participated in the study. Collected data showed that answers across the three subject groups were overall very similar, there were no major differences. All three groups found that writing and interpersonal skills were of upmost importance and should be heavily integrated into the potential degree program. It can also be

concluded that placements should be a part of the program, but further research should be conducted to determine what it would look like. Further research should also be conducted to determine how this program will affect women in agriculture.

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APPENDICES

Appendix I: IRB Approval

UNIVERSITY OF ARKANSAS

To:	Abigail Dallyn Taylor
From:	Douglas James Adams, Chair IRB Committee
Date:	07/16/2019
Action:	**Exemption Granted**
Action Date:	07/16/2019
Protocol #:	1904195519
Study Title:	Perceptions of Professionals, Faculty, and Students regarding the Implementation of an Agricultural Communications Academic Program in the United Kingdom.

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Jefferson Davis Miller, Investigator

Appendix II: Introductory Email

Dear Agricultural Communications Professionals,

You are invited to participate in an interview about agricultural and communications competencies that you deem important. Your participation is critical to planning the foundation of an agricultural communications academic discipline in the United Kingdom.

The interview will take around 15-20 minutes or less.

Please contact the principle researcher, Abigail Taylor, at adt028@uark.edu, or faculty advisor, Dr. Jefferson Miller, at jdmiller@uark.edu

Appendix III: Consent Form

You are invited to participate in this study about agricultural competencies that you deem important. Your response is critical to assisting the foundation of an agricultural communication's academic degree program in the United Kingdom.

This interview will take approximately 15-20 minutes. There are no anticipated risks or benefits. Your participation is voluntary and anonymous. You have the right to withdraw from this study at any time. All information will be secured on a password protected computer.

Please contact the principal researcher, Abigail Taylor, at adt028@uark.edu, or faculty advisor, Dr. Jefferson Miller, at jdmiller@uark.edu, if you have any questions or concerns about the study. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University of Arkansas Research Compliance Office at (479) 575-2208 or irb@uark.edu.

Please indicate below if you agree or disagree to participate in this survey.

O Agree (1)

O Disagree (2)

Signature_____ Date_____

Appendix IV: Interview Questionnaire

Interview Questions

Gender, title, work duties

1. In the United States, a large percentage of students studying agricultural communications are female, do you think this will be the case in the U.K.? Why or why not?
2. Regarding the structure of the program, how to you feel about a placement being part of the program and what do you think it would look like?
    a. Pay
    b. Location
    c. Housing
    d. Duration
    e. Is it reasonable to expect placements to be paid?
3. A recent study found that skills like journalistic writing and interviewing were more important than skills like photography and graphic design. In your opinion, what skills do you expect to learn after completing a degree plan? Or what skills would you expect incoming employees to have? Or, which skillset do you think is most important for students to learn.
    a. MAY be a reflection of an ag communicator's role.
4. What learning modules would be most useful and beneficial to graduates entering their field?
    a. What are the most important technical agriculture classes?

b. What are the most important communications classes?

5. What type of course structure would the agricultural communications program fit into?
    a. HNC, HND, BSc, BSC(Hons), MSc (1-year), MSc (2-year)
6. If an agricultural communications curriculum could be integrated into an existing discipline, which disciplines would be most appropriate?
    a. Agribusiness, food policy, general agriculture, etc.??