THE MASTER OF AGRICULTURAL COMMUNICATIONS: GRADUATES' PERCEPTIONS OF DEGREE AND PROGRAM EFFECTIVENESS AND RECOMMENDATIONS FOR FUTURE DEVELOPMENT

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For my amazing family

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Dream –noun: an aspiration; goal; aim; something of an unreal beauty, charm, or excellence.

One might call a person crazy when they choose to leave everything they've ever known behind and move across the country to pursue a dream. Walt Disney, a true dream-maker himself, said, "If you can dream it, you can do it. All your dreams can come true if you have the courage to pursue them." I've always known I was that crazy girl with big dreams, and luckily I've been blessed with amazing supporters who have always helped me find the courage to succeed, no matter my crazy dream. Thus, these acknowledgements are for those who helped make the dream of earning a master's degree a reality.

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ABSTRACT

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More than a decade ago, concerns were voiced over the lack of research on graduate programs in agricultural communications and, specifically, whether various stakeholder groups felt the degree was essential to prepare graduates for employment in the field. The current research involved in-depth interviews with 20 agricultural communication alumni from six universities that offered a master's option in agricultural communication. Individuals selected to participate in the research completed a master's degree in agricultural communications or in agricultural education with an agricultural communications option from the years 1997 to 2006. Through a telephone interview process, participants were asked to rate the perceived effectiveness of the program they completed, evaluate their overall graduate experience, and offer recommendations for future development of the programs. Interviews were recorded and transcribed for data analysis. The majority of participants earned their degrees in more recent years of the study period, and the large majority of participants had spent only a few years in their current job positions.

Results reveal that participants were extremely positive overall about their academic experience in terms of preparation for careers. Participants felt their master's degrees had served the purposes they intended, and for over half of the participants, the master's degree was pursued as a terminal degree. Most participants felt they had completed a rigorous, quality program. Despite the positive sentiments expressed about the thesis experience, half of the participants did not feel that all master's students in agricultural communications should be required to write a thesis.

Participants also spoke highly of their graduate experiences outside of the classroom in which they enjoyed a supportive department environment.

Participants generally felt their coursework was valuable in achieving their career goals and thought an underlying coursework structure would create a commonality and uniformity among graduates, cautioning that such a degree structure must still allow flexibility to allow individuals to tailor the degree to their interests after meeting core requirements. When considering a distance education degree, a little more than half of the participants felt that some of the required courses for a master's degree could be taken online. However, slightly more than half of participants did not feel the master's degree in agricultural communications should be offered solely via distance education. Likewise, a large majority of participants rated earning a degree online as having less quality than the degree they earned, and slightly more than half of participants rated the online degree to be less prestigious. Half of the participants felt the *ideal*

master's degree should have a larger focus on professional skill development than theory and research.

Thirteen different areas of advice were recommended by participants for enhancement of the degree, such as expanding the currently small instructional staffs devoted to agricultural communications and offering a degree specifically in agricultural communications rather than as a track or emphasis of the agricultural education degree. Participants defined a *master* of agricultural communications as a person who can properly mange agricultural issues, is always learning, not afraid of hard work, and who is in the business of educating consumers and others. Just over half of the participants considered themselves masters of agricultural.

Findings from this study will be instrumental for faculty members at institutions to evaluate and enhance master's education in the specialized field of agricultural communications, as the study participants collectively represent all of the key stakeholder groups in agricultural communications: industry, academia, students, and alumni.

CHAPTER 1. INTRODUCTION

Agriculture is a vital industry in America, and also one of the nation's largest industries. Its workforce is composed of twenty-two million people who produce, process, market, sell and advocate for the food and fiber of the nation ("General Facts About Agriculture," n.d.). Today, only 17 percent of Americans live in rural areas, and an even lesser two percent of the nation's population are farming for a living ("NIFA Extension," 2010). Despite the challenge of increasing productivity with a decline in the number of farms, the United States Department of Agriculture reported in 1997 that one farmer supplied the food needs of nearly 140 citizens, nearly nine times more than the 15.5 persons in 1950. It is estimated farm receipts total over 200 billion dollars each year ("Farm Facts," 2000), providing Americans not only with food products, but also with such things as the textbooks from the trees in our forests, ethanol from the growing biofuels industry, or even a heart valve a patient receives from a pig. The wide range of agricultural products and commodities illustrates the variety of potential audiences for agricultural information that extends well beyond farmers. Communication in this complex field is critical in the production, processing and marketing of food and fiber used in the United States and around the world (Boone, Meisenbach, & Tucker, 2000).

Agriculture has changed dramatically over the years, in turn expanding the number of audiences that must be reached. The gaps between these audiences, farmers, agribusiness, and consumers need to be bridged by those who have strong technical knowledge of the subject matter. Although audience needs vary, there is a need to provide accurate and understandable information about important agricultural issues, such as environmental quality or the safety of the food supply. Thus, communicators serve a vital role within the food and agricultural industry, as they fill a crucial link between society's audiences: scientists, farmers, the agricultural industry, and consumers. With a variety of audiences to reach in a vast field of knowledge, there is an urgent need for professional communicators entering the field of agriculture. Agricultural communications is a specialized profession that requires training and education to provide individuals with the skills needed to meet the broad demands of the ever-changing agriculture industry.

1.1 The Origins of Agricultural Communications

Agricultural communications began in the early- to mid-19th century when the issues within the industry were communicated by word of mouth (Boone et al., 2000). Long before agricultural communications was recognized as an academic field, technological advancements helped the profession slowly unfold, expanding from agricultural publications such as magazines and newspapers to

the later invention of the radio, which provided producers with current market information and weather reports (Marti, 1980).

Ultimately, the field needed trained professionals to meet the needs of a growing and specialized communication industry. University courses and curricula focused on agricultural communications date back more than 100 years as the first agricultural journalism courses were taught at lowa State College in 1905 and the University of Missouri in 1909 (Duncan, 1957). In 1920, lowa State College offered the first Bachelor of Science in Agricultural Journalism (Weckman, Witham & Telg, 2000), and other agriculture colleges across the nation followed suit throughout the years, establishing agricultural communication programs to provide future agricultural communicators the necessary training needed to succeed. The collection of studies and research that have documented and helped advance undergraduate agricultural communication curricula over the last 50 years is one of the most developed bodies of literature in this field (See, for example, Evan, 1972; Evans & Bolick, 1982; Kroupa & Evans, 1973; Kroupa & Evans, 1976).

1.2 <u>Professional Organizations in Agricultural Communications</u>

Agricultural communications can be defined in many ways. This profession "applies communication techniques and theory to decisions of companies that represent food, agriculture, or natural resources" (Sprecker & Rudd,1998, p. 33). Agricultural communicators help disseminate the daily

happenings within the industry to many different audiences on topics ranging from production agriculture and animal welfare to farm markets and organic foods. Likewise, the agricultural communicator uses various types of media to communicate to both rural and urban audiences (Sprecker & Rudd). Whether in the realm of advertising, public relations, marketing or journalism, media utilized include the traditional newspaper, magazine, and radio, as well as emerging social media, such as Web sites, blogs, Facebook, and Twitter.

Agricultural communicators must keep current with communication technology and trends, as well as knowledge and skills in order to meet a broad array of responsibilities. Several organizations provided professional development and networking opportunities within this specialized field, including the following groups (Boone et al., 2000):

- 1. American Agricultural Editor's Association (AAEA)
- 2. Association for Communication Excellence (ACE)
- 3. Agricultural Publishers Association (APA)
- 4. Agricultural Relations Council (ARC)
- 5. Cooperative Communicators Association (CCA)
- 6. International Federation of Agricultural Journalists (IFAJ)
- 7. Livestock Publications Council (LPC)
- 8. North American Agricultural Journalists (NAAJ)
- 9. National Association of Farm Broadcasters (NAFB)
- 10. National Agri-Marketing Association (NAMA).

The importance of providing college students professional development and networking opportunities has also been recognized by the industry. The Agricultural Communicators of Tomorrow (ACT), along with a student NAMA organization, allow students pursuing degrees in agricultural communications to connect to and learn about the industry.

1.3 <u>Undergraduate Programs in Agricultural Communications</u>

Because the agricultural industry is a complicated, science-based field, agricultural communicators often seek specialized education. In 1982, more than sixty years after the first degree was offered, 21 institutions offered undergraduate programs (Evans & Bolick, 1982). In a 1990 study, 26 institutions were identified with undergraduate programs that combined both agriculture and communications (Reisner, 1990). Ten of these 26 programs were housed in a department that encompassed majors such as agricultural and extension education, as well as adult and youth education. Reisner (1990) identified the University of Wisconsin-Madison offered a master's degree specifically in agricultural journalism, and six other institutions offered a master's degree in which the student can combine both agriculture and communications. Reisner's (1990) study also identified a total of 629 undergraduate students earning degrees from the 26 programs during the year 1988. By 1991, four more institutions joined the list, as there were 30 established undergraduate programs identified (Doerfert & Cepica, 1991). The average number of students enrolled in each program was approximately 30, and 12 of the institutions offered student organizations in which students could participate, such as the Agricultural Communicators of Tomorrow (ACT). The number of faculty members on full-time appointment at 18 of the 30 universities was described by a median of 1 per institution.

Reisner's (1990) survey of 30 institutions reported variety as the main characteristic of programs in agricultural communications. The curricular requirements of agricultural communications programs vary from institution to institution from highly prescribed core requirements to flexibility for students to select their specific coursework with an area of concentration (Reisner 1990). Likewise, views on curricular requirements vary from stakeholder to stakeholder.

Bailey-Evans (1994) conducted a national Delphi study utilizing the input from agricultural communications leaders from professional organizations in agricultural communications to further explore enhancement of agricultural communications curriculum at the undergraduate level. Conclusions of the study suggested the agricultural communications curriculum be flexible to allow students to tailor the degree towards their interests (Bailey-Evans, 1994). An internship experience was also recommended for inclusion in the undergraduate curriculum to provide students with valuable hands-on experience.

In a study of agricultural communications practitioners in Florida, the practitioners felt those entering the agricultural communications profession should have a broad knowledge-base in agriculture to be prepared for agriculture's diversities (Sprecker & Rudd, 1998). However, these practitioners

indicated that communication skills were of paramount importance and that graduates needed to be versatile within several communication areas, such as writing, which was unanimously agreed upon by instructors, practitioners, and alumni as the most valuable. The discussion of the findings in this study bring up the important fact that "students are not agriculturalists primarily, but communicators" (Sprecker & Rudd, 1997, p. 9), and these skills will more readily help students find jobs rather than agricultural knowledge. The issue of preparing agriculturalists versus communicators is one of the most common questions addressed in agricultural communications curriculum research, dating back more than 50 years (Duncan, 1957).

In 2000, a survey of Agricultural Communicators of Tomorrow (ACT) advisors from 13 undergraduate agricultural communications programs in the southern region of the United States was conducted. This survey found that each institution had a small number of full-time faculty dedicated to teaching courses in agricultural communications (Weckman et al., 2000). ACT advisors felt their undergraduate programs adequately prepared their undergraduate students to continue beyond the undergraduate level and pursue graduate or professional school.

Wargo (1993) interviewed employers about their perceptions of graduates from different degree programs, including English, journalism, mass communications, and agricultural communications. When focusing only on agricultural communications graduates, employers tended to rate the graduates high at logically presenting agricultural information, particularly in using writing

and print media to do so (Wargo, 1993). Employers rated agricultural communications graduates lowest in dealing with cross-cultural barriers and handling administrative office issues, such as personnel.

Likewise, Irani and Scherler (2002) conducted a descriptive survey of recent graduates from the University of Florida's agricultural communications program evaluating the job satisfaction of graduates in relation to their educational preparation. Overall, these graduates were "generally satisfied" with the job positions they held, and the level of satisfaction increased with graduates who were master's graduates. However, respondents perceptions of the benefits a graduate degree may have on their careers were rated low, and the same for respondents to actually pursue higher degrees.

In a research study of industry professionals, professionals advised institution faculty of agricultural communications programs to stay connected to the industry, as well as seek the opinions of industry professionals when developing program curriculum (Mullett, 2006). Professionals also reported that graduates from agricultural communications programs were effectively prepared to enter the industry, most notably in the area of technological skills expertise (Mullett, 2006). Likewise, Irlbeck and Aker's (2009) study of workplace habits and communication skills confirm recent graduates appear to be effectively prepared to enter the workforce with satisfactory skills in areas such as public relations and graphic design. While employers rated recent graduates as being trustworthy and easy to work with, they felt they lacked creativity and common sense in the workplace and could use improvement in several core

communication skill areas, such as writing and Web design (Irlbeck & Akers, 2009). Mastery of applied communication skills is considered by many to be the chief prerequisite for employment and success in the field (ACE, 1996). However, Doerfert and Miller (2006) recommended that a combination of both theory and skills be utilized in preparing students to enter the workforce or academia.

1.4 The Master's Degree in Agricultural Communications

The master's degree offers individuals the opportunity for advanced coursework beyond the bachelor's degree, as well as the opportunity to learn about and conduct research in the field. In 1982, one institution offered a graduate program in agricultural communications (Evans & Bolick, 1982). Less than 10 years later, Reisner (1990) reported one institution offering a graduate program specifically in agricultural journalism and six other institutions offering graduate programs in which students could combine both agriculture and communications.

In a 1991 study of members in the professional organization Agricultural Communicators in Education (ACE), 62 percent perceived a need for a master's degree in agricultural communications. Of these members, more than three-fourths thought the key objectives of the master's degree should be communication skill development rather than research or management skill development (Wilson, Paulson & Henderson, 1991). Both practitioners and

academicians emphasized the importance of flexible graduate programs that allow each student to tailor to their interests (Boone, Paulson & Barrick, 1993).

In a Delphi study of agricultural communication professionals from six professional organizations, the researchers recommended 23 different topic areas for the master's level curriculum, ranging from writing, emerging technology, and graphic design to management, research, and history and philosophy. Within these different topic areas, 90 curricular areas were identified as essential components of master's curricula in agricultural communications (Simon, Haygood, Akers, Doerfert, & Davis, 2005).

1.5 Justification for the Study

Agricultural communications curricula have been in existence for well over one hundred years. The literature shows that undergraduate agricultural communications programs are generally small, but growing, and offer unique career options for those who wish to combine agricultural and communication expertise. As these academic programs mature, an increasing number are offering masters degree options. A challenge facing agricultural communications faculty is the lack of stakeholder and curricular research at the graduate level, which is needed to guide decisions about new masters programs.

More than a decade ago, concerns were voiced over the lack of research on graduate programs in agricultural communications and, specifically, whether various stakeholder groups felt the degree was essential to prepare graduates for

employment in the field (Boone et al., 1993). The literature typically acknowledges the need for a wide range of stakeholder involvement in discussions and research about curricular requirements (Tucker, Whaley, Whiting, & Agunga, 2002). Wilson et al. (1991) recommended involving a variety of professionals when planning the desirable components of the degree to help ensure the degree students receive from programs is well-balanced.

Several stakeholders, including faculty members, practitioners, and industry professionals, have been studied in attempts to address demands of both entities. To date, however, the perceptions of a third stakeholder group have been largely overlooked: the master's degree alumni. In a synthesis of research, Ettredge and Bellah (2008) called for research in several identified areas, including (1) the satisfaction of current students with the curriculum offered, (2) the value of master's degree programs in the agricultural industry, (3) master's student perceptions of program effectiveness, and (4) the essential components that make a high-quality master's degree program. Simon et al. (2005) described the agricultural communications master's degree as the "forgotten middle child" in higher education, deserving of additional attention and research.

Agricultural communication faculty need a better grasp of perceptions and recommendations of several key stakeholder groups, including other faculty, industry professionals, current students, and agricultural communications alumni. Research that identifies the needs and expectations of these groups is essential to develop relevant curricula that meet the needs of stakeholder groups.

1.6 Statement of the Problem

There is a great need to examine the master's degree in agricultural communications from the perspective of various key stakeholder groups. Industry professionals, academicians and individuals pursuing the degree may well voice different perceptions and expectations of this fledgling degree. While it may not be possible or even advisable to address all the expectations held by various stakeholders, it is necessary for agricultural communications faculty to understand more about the views, preferences and experiences of stakeholders who will hire program graduates, collaborate with universities to help strengthen curricula, and recommend the degree to others.

This research endeavor assesses the perceived effectiveness, value and need of a master's degree in agricultural communications as seen by individuals who earned the degree. An interview method was utilized whereby 20 in-depth telephone interviews were conducted with randomly selected alumni representing agricultural communications master's programs across the U.S. The interview instrumentation, along with all correspondence to institutions offering the master's degree and to the research participants, was developed by the researcher at Purdue University. The interviews were administered by the researcher.

The following questions guided this research:

1. How do agricultural communications master's graduates describe their academic experience in terms of career and professional preparation?

- 2. What are graduates' perceptions of the effectiveness of the degree program from which they graduated?
- 3. What are graduates' perceptions of the essential components to the master's degree in agricultural communications?
- 4. What advice or recommendations do graduates have for updating or enhancing the degree?

1.7 Application of the Findings

The results of this research study will offer a unique glimpse of the perceptions of individuals who have earned a master's degree in agricultural communications. The study will serve as a reference for institutions to evaluate the master's degree in agricultural communications that each offers.

The study encouraged agricultural communications master's graduates to reflect on their academic experiences in terms of career and professional preparation. With this information, institutions may choose to compare the experience they are offering and make changes to more effectively prepare students for careers in agriculture with broad demands.

The study examines the essential components of the master's degree in agricultural communications as perceived by alumni, as well as recommendations alumni feel would enhance the degree. Institutions may compare the essential components perceived to be important, as well as

consider any recommendations offered. The research study provides a basis for growth in this degree area to ensure that degrees are meeting students' needs and career expectations. Findings will also be of value to institutions where faculty are considering the development of new graduate programs in this specialized communication area.

1.8 Limitations

As with all social science research, this study has limitations that should be taken into consideration when interpreting and generalizing findings. Two such limitations involve the target population and the research methodology.

In identifying potential participants, the researcher found that no database or directory exists that lists names of master's alumni in agricultural communications. While most individual institutions maintain a list of their own alumni, the researcher was unable to request such lists due to privacy concerns. Thus, the task of compiling the list of confirmed master's graduates from the years 1997 to 2006 was assigned to the graduate chair in the department at each institution voluntarily participating. Therefore, the researcher cannot control for error in this process and ensure the accuracy of the list of master's alumni each institution compiled to e-mail the research recruitment and reminder e-mails.

Allowing master's graduates to respond to an e-mail appeal sent by the graduate studies chair assured participants' anonymity but the arrangement made it impossible for the researcher to assure accuracy of the list. Indeed, the

researcher found that some respondents did not meet selection criteria set forth by the researcher. Some respondents who received the research recruitment emails either did not study or focus on agricultural communications in their master's degree, or they did not graduate in the specified time period of 1997 to 2006.

Several institutions offer or previously offered master's degrees in agricultural education with a focus, emphasis, or specialization in agricultural communications. The variety of configurations present across institutions was a source of confusion for some of the graduate studies chairs contacted by the researcher. Because recordkeeping practices differed widely among institutions, it was sometimes challenging for graduate studies chairs to identify eligible alumni. While one institution had meticulous, up-to-date records of all master's graduates, another institution included only its master's alumni who received the master's degree in Agricultural Communications, eliminating those master's alumni who received master's degrees in agricultural education with an emphasis in agricultural communications. The task of searching through years of records to create a more-detailed database was too daunting for some participants and represents a source of uncontrollable error in the present research.

1.9 Definition of Terms

Several key terms used throughout this document are defined below as they were used in this study:

- Agricultural Communications: the science of educating
 audiences, both rural and urban, about agricultural topics and
 issues utilizing communication theories and techniques (Boone et
 al., 2000). The literature variously uses the term communications
 and communication. The former term is more prevalent in the
 literature and is used throughout this document.
- Agricultural Communicators in Education; Association for
 Communication Excellence: international organization that
 provides professional development and networking opportunities to
 those within the field; the Association for Communication
 Excellence was previously known as the Agricultural
 Communicators in Education. The acronym ACE will be used in subsequent references.
- Institution: unless otherwise specified in this document, refers to a college or university.
- Master's Degree in Agricultural Communications: a master's degree with a focus in agricultural communications; some institutions offer this degree as a master's degree in agricultural education or a closely related field with a focus or emphasis in agricultural communications. To minimize confusion between the varieties of degree nomenclature among participating institutions, the researcher uses this terminology.

- Perceptions: the views or opinions an individual has about a topic or experience.
- Practitioners: individuals who are employed in the agricultural communications professions and apply the skills and knowledge of agricultural com

CHAPTER 2. REVIEW OF THE LITERATURE

2.1 Introduction

The history of master's education in agricultural communications is influenced by several entities, including both undergraduate education in agricultural communications, as well as master's education in the United States itself. As the literature displays, much research emphasis has been placed upon undergraduate education in agricultural communications, which has been briefly covered in a section of Chapter 1. Master's education in the United States has an expansive history that is much too large to envelop in this chapter, yet is pertinent in discussing the history of master's education in agricultural communications, as this literature is largely overlooked in agricultural communications research.

2.2 Conceptual Framework

Key concepts from human capital theory, meritocracy, credentialism, and the sociology of education are used to develop the conceptual framework that guides this research. Human capital theory, discussed in the context of adult education, is used to describe an individual's education as an investment, for

both society and for the individual who aspires to become a better, more fulfilled person. Meritocracy and credentialism are used by the researcher to discuss the notion that individuals are motivated to pursue master's degrees to earn a credential that provides them with rewards. Lastly, the researcher considers a perspective from the sociology of education literature to help illuminate incentives and barriers within the university that might influence development of master's degree programs.

The current research is guided by the following study questions:

- 1. How do agricultural communications master's graduates describe their academic experience in terms of career and professional preparation?
- 2. What are graduates' perceptions of the effectiveness of the degree program from which they graduated?
- 3. What are graduates' perceptions of the essential components to the master's degree in agricultural communications?
- 4. What advice or recommendations do graduates have for updating or enhancing the degree?

In addressing these study questions, the researcher acknowledges that all social science inquiry is influenced on assumptions and perspectives that individuals bring to the research process. It is important, when possible, to acknowledge these perspectives because of the impact they can have on the

research process, including interpretation of findings and the formulation of conclusions. In addition, addressing one's own perspective helps the researcher to provide a more complete account of his or her conceptual approach so that it can be evaluated and replicated by other scholars. This section provides a brief overview of the key theoretical concepts and perspectives employed by the researcher in carrying out the current work.

2.2.1 Human Capital Theory

This perspective, considered in the context of adult education, serves a unique role in an individual's life. Beder (1989) categorized the major purposes of adult education into the following four areas: "(1) to facilitate change in a dynamic society, (2) to support and maintain the good social order, (3) to promote productivity, and (4) to enhance personal growth" (p. 39).

To facilitate change in a dynamic society. All knowledge cannot be learned during the early years of an individual's youth. Thus, this purpose is simple, taking the knowledge gained from youth education and further refining and updating so an adult can perform adequately amongst the wake of rapid change and meet the expectation of society to behave like an adult (Beder, 1989).

To support and maintain the good social order. The logic behind this purpose is the support of "democratic order" (p. 40), which relies on its citizens to

take part in education in order to become knowledgeable and coherent individuals of the democratic society (Beder, 1989).

To promote productivity. Human capital theory can be used to justify the purpose of promoting productivity. In the workplace, education is seen as a means to enhance the employee's knowledge and skill. However in society, the knowledge and skills a person earns are looked at as a vital investment to all because everyone benefits (Beder, 1989).

To enhance personal growth. Personal growth is lifelong, and to explain this purpose of adult education, Beder (1989) discussed the notion of a "whole person." A whole person meaning the individual has matured, can think rationally, critically, and has moral character. The act of becoming a whole person leads to an individual being a "responsibly member of society" (p. 43). Thus, the fields of adult education and the sociology of education are "mutually dependent" (p. 53). The authors, as well as the researcher, note that adult education is affected by its "vital social function" (p. 38). Key concepts from the social functions of adult education are applicable to the current research. For example, Beder (1989) denoted a distinct social function is "to maintain and upgrade the human capital necessary for the competitive and efficient economy to work for society's good" (p. 62). It is also noted that adult education is directed by individual who self-select and choose to participate (Beder, 1989).

2.2.2 Meritocracy and Credentialism

The concept of "meritocracy," which originates from the sociological and social stratification literature, refers to a society or system in which occupational rewards are based on merit. That is, occupational prestige and other rewards, such as salary and position, are accorded to those who have earned them through their hard work, achievements, and merits (Krauze & Slomczynski, 1985). In modern society, the meritocracy thesis can be interpreted such that individuals who attain a higher level of education and develop valued skills and expertise are more likely to secure a job with a desirable salary and working conditions than are individuals who have not earned such merits. Academicians who subscribe to the meritocracy thesis believe it is educational attainment and credentials that help ensure professional success, as opposed to reliance on other factors such as nepotism or inherited social influence. The ascendance of meritocracy as an explanation for upward social mobility has practical implications for higher education in that there is a greater demand for education as an avenue to achieve merits and, thus, professional success.

The meritocracy thesis is refuted by researchers who adhere to a credentialist perspective. Credentialist theories hold that individuals with academic degrees gain professional success not necessarily because they are more "educated" or have earned more merit that enables them to excel, but because they hold a *certification* that opens doors, confers status, and creates relative advantage for its holders (Boylan & Morgan, 1993). For credentialists, diplomas, degrees and certifications function primarily in providing status, which

helps individuals earn more salary and other rewards. Terms such as "creeping" credentialism and credential "inflation" (Bills, 2004) refer to the proliferation of degree-granting organizations and mechanisms to fill the growing demand for diplomas in what some have described as a modern "credential society" (Collins, 1979). The growing popularity of online degree programs and institutions could be considered one consequence of credentialism.

2.2.3 Sociology of Education

A specialized literature in sociology focuses on the structure and function of the educational system and how both are influenced not only by societal pressures, but also by cultural practices and traditions within the educational system and academy (Torres & Mitchell, 1998). Scholarship in the sociology of higher education focuses specifically, and critically, on organizational decision-making and other key processes in the college and university setting. Key concepts from the sociology of higher education are applicable to the current research. For example, Ballantine (1989) indicated that universities have a relatively flat academic structure that permits significant decision-making and autonomy at the department level. While departments have considerable flexibility to determine and pursue their goals, they are but one part of a diverse organization of disciplines that are continuously competing for resources and prestige within the academy (Becher & Trowler, 2001). Such competition can lead to a hierarchy within the university in which some departments and

disciplines can enjoy relative power and influence, or, conversely, in which they find themselves in a subservient or otherwise undesirable position relative to their peers. Such struggles can profoundly influence important decisions about academic programs and curricula. Finally, due to shifting sources of funding and reduced public support, universities may increasingly find themselves in partnerships with private industry, which can also influence not only academic decision-making, but the university's image and reputation among stakeholders (Brint, 2002).

2.2.4 Application of the Theoretical Perspective

The theoretical perspective used to guide this study was derived from key concepts and elements of human capital theory in the context of adult education, meritocracy, credentialism, and the sociology of education. This unique perspective accords influence not only to the individual who makes reasoned decisions about his or her future, but also to the role of the larger society, which also exerts significant influences on both the individual and the industry in which the individual aspires to develop his or her career. Applying this theoretical perspective to the current research problem results in several important insights that can be used by the researcher in developing instrumentation and in interpreting results.

Human capital theory in the context of adult education suggests that individuals will be motivated to pursue a master's degree because of the

perceived benefits afforded by the degree. Pursuing a masters' degree is considered a positive investment in oneself that will increase productivity and personal fulfillment.

Meritocracy and credentialism provide dual or alternative notions of the role that industry and society play in influencing individuals' decisions to pursue graduate degrees. From meritocracy comes the notion that individuals desire to earn graduate degrees to "better" themselves in the eyes of employers and others in society. Earning a graduate degree demonstrates increased expertise, which translates into increased marketability in the workplace. Credentialism adds to this perspective the idea that the presence of a degree or other certificate itself confers status and increased marketability for individuals, regardless of their actual expertise or merits. Credentialism suggests pressures exist to earn a graduate degree or other certification to demonstrate to others that the holder is entitled to increased pay or prestige because they hold the "sheepskin."

Finally, concepts from the sociology of education help shed light on university processes and procedures that may either encourage or inhibit the development of curricula and programs. This theoretical perspective emphasizes the fact that important decisions about degree programs and their administration are made within the academy and that such decisions may be based on culture and politics, as well as pedagogy.

2.3 Literature Review Methodology

Several sources were used to conduct the review of literature for the current study. The researcher utilized the Purdue University eJournal database. article search tool, and library catalog to find resources pertaining to graduate education or related research studies. Additionally, back issues of several refereed journals were obtained online and canvassed by the researcher to help locate journal articles, starting with the most recent issues and searching in reverse chronological order to locate relevant articles. Journals searched in this manner include the Journal of Applied Communications, the Journal of Agricultural Education, the Journal of Extension, and the North American Colleges and Teachers of Agriculture (NACTA) Journal. The journals were utilized because they serve as the major peer reviewed outlets in the profession. Articles collected by the researcher included following topics: undergraduate programs, graduate education, or curriculum in agricultural communications; perceptions of practitioners or professionals in agricultural communications; distance education in agricultural communications or at the graduate level; the history of the master's degree; and history of the master's degree in agricultural communications. The topics were not limited to the previous list.

The researcher also scanned disciplinary conference proceedings for relevant papers submitted, again, starting with the most recent conference held and working backward. The conference Web sites used included the Southern Association of Agricultural Scientists (SAAS), the Association for Communication Excellence (ACE), and the American Association for Agricultural Education

(AAAE). The Agricultural Communications Documentation Center, which is a specialized library resource housed at the University of Illinois, was also searched to uncover any additional materials.

Lastly, Google Scholar searches were conducted to locate relevant books, articles, papers or related research. Key words used specifically relating to agricultural communications included the following: agricultural communications, master's degree in agricultural communications, and curriculum in agricultural communications. Generic key words used included master's degree, master's degree curriculum, and history of the master's degree.

2.4 Background and Status of Master's Education in the United States

The master's degree was first offered at the University of Paris during the twelfth century and was traditionally considered a teaching degree (Conrad, Haworth, & Millar, 1993). The master's degree enjoyed considerable status until the doctorate became prevalent in Europe. The development of the degree at prestigious colleges, such as Oxford and Cambridge, paved the road for higher education in the United States (Conrad et al., 1993). Thus, the master's degree began as a scholarly degree in the United States. The first master's degree in the United States was conferred at Harvard University in 1642, but the incentive to pursue it was minimal because it was not yet seen as an enhancement for an individual (Conrad et al., 1993; Glazer, 1986).

A *master* has long since been associated with teaching, as the word is derived from the Latin word *magister*, which is the equivalent of teacher (Conrad et al., 1993). Conrad et al. (1993) described the master's degree as education individuals seek to enhance their knowledge and skills. Glazer (1986) noted that the master's degree, which this author dates to the thirteenth century, was actually a license to teach, but is now, however, more of a generic label that describes the level in which the degree was earned or the functions and proficiency level a person has or is qualified to execute because he or she has earned the degree. Glazer (1986) described the master's degree as "the mainspring of graduate education, the first post baccalaureate degree, the midpoint to the doctorate--and the terminal degree for most professions" (p. 1).

The passage of the Morrill Act in 1862, which established land grant colleges, advanced higher education across the nation (Berelson, 1960). When John Hopkins University in Baltimore began focusing attention on doctoral education in 1876, doctoral education gained popularity, triggering scholars and students to begin viewing the doctoral degree as the most important degree in higher education (Conrad et al., 1993). In turn, the master's degree rapidly expanded and thrived not only to fulfill the needed credential to earn a Ph.D., but also because institutions began filling teaching positions with individuals who had earned the master's degree (Conrad et al., 1993). None the less, Storr (1969) wrote that successful recruitment of young men into graduate study required "a practical incentive, as well as a love of knowledge" (p. 130).

Eventually, the master's degree would become a multipurpose degree, as a steppingstone to the Ph.D., as a professional degree, and also a terminal degree for many individuals who ended their studies after completing the degree (Conrad et al., 1993). Not only was the master's degree prevalent in the field of education, but other professional schools within universities across the nation began offering graduate study in numerous other areas, including agriculture (Conrad et al., 1993).

However, as the popularity of master's education grew, so did discussion and criticism of its purpose and goals. Such concerns became prevalent after the establishment of the Association of American Universities (AAU), which served as a public forum for institutions to meet. As early as 1900 to 1945, member institutions of the AAU were concerned about the "purpose, meaning and 'quality' of the master's degree" (Conrad et al., 1993, p. 8). An AAU report in 1935 described the master's degree as a "research degree, a professional degree, a teacher's degree, and a cultural degree" (Conrad et al., 1993, p. 9) and suggested strengthening this multi-purpose degree by offering "a one-year residency requirement, a 'unified' program of graduate courses, a final examination (written, oral, or both), and a thesis" (Conrad et al., 1993, p. 10).

Following World War II, the master's degree flourished due to several factors: (1) businesses and government agencies expressed a demand for graduates, (2) institutions needed master's students to fulfill the roles of research and teaching assistants, (3) master's programs enhanced institutional reputation, and (4) the master's degree was the steppingstone to the Ph.D. (Conrad et al.,

1993). However, the criticism of the master's degree continued to escalate because of the variety of degree nomenclature and a perceived lack of quality. In response, the AAU began to make more recommendations to help improve the quality of the master's degree. Conrad et al. (1993) summarized Berelson's study of graduate education in which he concluded "in terms of quality and prestige, the master's degree had slipped considerably in the post-World War II period" (Conrad et al., p. 14) in part because the degree had shifted to a professional degree and weakened at more prestigious institutions.

By the 1970s and 1980s, United States institutions offering terminal master's degrees in professional fields were predominant. Conrad et al. (1993) summarized Glazer's (1986) explanation of the rise of professional degrees, linking the demand not only to the knowledge-based economy of the time, but also to the demands of industry for trained employees, the demands of professions increasing entry requirements, and the demands of individuals in pursuit of more training and credentials for career advancement. Additional factors influencing demand for graduate and master's degrees are outlined by Syverson (1996).

2.4.1 Unique Role

The idea for a new model for master's education, which included the master of arts and master of science degrees, was introduced in 1851 by the University of Michigan president, Henry Tappan, and the first Master of Arts

degree was conferred in 1859 at the university (Glazer, 1986). These degrees were conferred after individuals studied one year and successfully completed both a thesis and an examination (Glazer, 1986). However, the master's degree was criticized in a study of graduate degrees conducted by the AAU in 1909, not only because the results showed that master's degree titles were used interchangeably, but also because there was no fine line identified between undergraduate and graduate education (Glazer, 1986). As a result, the AAU issued standards for the master's degree according to each title, and both the M.A. and M.S. were dubbed research degrees (Glazer, 1986).

Over the last two decades, the industry has demanded master's degrees that are practitioner oriented, and in 1986, Glazer (1986) reported twelve major areas in which professional degrees were being sought: (1) business and management, (2) teacher education, (3) engineering, (4) fine and performing arts, (5) health sciences, (6) international education, (7) journalism, (8) law, (9) library science, (10) public administration, (11) social work, and (12) combined degrees for individuals trying to include more than one area of study. Conrad et al. (1993) make the case that the benefits this professional master's degree contributes to society have been overlooked within the literature, as their findings indicated that individuals who returned to the industry after earning a master's degree "had immediate value to society because most master's-educated graduates make meaningful and sustained contributions to their professions and communities" (p. 316). Glazer (1986) suggested the trend of such professional

master's degrees is "more vigorous and prestigious than ever, precisely because of its close ties with the professions" (Glazer, 1986, p. 24).

Despite debate about its rigor, quality and purpose over the years, the master's degree has become a popular credential to earn and is a staple of American higher education. According to the Council of Graduate Schools, there are nearly 7,000 accredited institutions across the United States offering programs in post-secondary education as of 2008 (Wiley, 2009). Of 1,200 institutions offering graduate education, approximately 950 are granting master's degrees as the highest degree conferred, and approximately 282 offer the Ph.D. as the highest degree conferred (Wiley, 2009). An overwhelming "ninety percent of graduate degrees awarded in the U.S. are master's degrees" (Tate, 2005, p. 1).

2.4.2 Unique Challenges

Throughout its checkered history, master's education has seen numerous changes, expansions, and shifting purposes. "Master's education, more than any level of education, has most directly responded to these changes by providing a wide range of master's programs and alternative delivery systems that serve the needs of professionals and employers in a knowledge-centered society" (Conrad et al., 1993, p. 317). However, these shifts within master's education present several unique challenges, according to the literature.

One of the issues facing master's education is the sheer diversity of programs. Currently, individuals can choose from among a plethora of master's degree options to suit their needs. This diversity can be helpful for students seeking to tailor the master's degree towards their needs and interests, but can also be seen as a hindrance. Glazer (1986) stated this diversity begins with the hodgepodge of degree nomenclature, as professional programs aligned themselves with various fields of study and separated themselves from the traditional master's degree. There is no single Master of Science degree, but instead an assortment of degree options that vary by discipline, field and institution. This diversity carries over into the purposes intended for pursing the degree, the methods in which the programs are structured and staffed, and the curricula that are administered (Glazer, 1986). Likewise, when discussing the profession of journalism, Glazer (1986) goes as far as to say that diversity limits the value of Graduate Record Examination scores, as the different professions set for different criterion for admission.

Another issue facing master's education is its perceived quality among various stakeholders. Because the doctoral degree overshadows the master's degree, the focus of quality assessment has been largely directed toward the Ph.D. until recently (Glazer, 1986), although high quality is expected by every major stakeholder involved in master's education. However, it is the institution itself that has the final say in the quality of its programs, as it decides the very nature of the master's degree it offers, the resources it allocates, and the faculty it hires (Glazer 1986).

The Council of Graduate Schools (CGS) has been cognizant of quality concerns as early as the 1970s. In a recent article, four challenges were addressed regarding the quality of graduate education as it moves forward: (1) the globalization of the world talent market, (2) changing U.S. demographics with a projected decline of Caucasians in the workforce, (3) the emergence of the millennial student, and (4) an increased emphasis on accountability (Stewart, 2008, p. 1). The trends point to a world in which many talented students have options that go well beyond attending graduate school in the U.S. Institutions must increasingly compete for these students. Particularly important are the demanding customers who comprise the Millennial generation (Stewart, 2008). These and other students want assurance the education they are receiving is of the utmost quality to prepare them for their future career endeavors (Stewart, 2008).

Some fifty years ago, Berelson (1960) took a rather pessimistic view of the quality of U.S. master's education of the mid-twentieth century. He cited two reasons for the diminished quality of the master's degree: its pre-occupation with professional practice rather than "academic scholarship" (p. 187), and the sacrifice of quality at the master's level so that institutions could focus more heavily on the more favored doctoral degree. According to Berelson (1960), "The higher degree tends to crowd out the lower one: if nothing else, there are simply too many theses to supervise, and the doctoral load takes precedence" (p. 187). While he acknowledged the growing popularity of the master's degree, he

questioned the prospect for improving the master's degree as a respected, research-based credential offered by the more prestigious universities.

2.4.3 Future Directions for Master's Education

Conrad et al. (1993) shared results of nearly 800 stakeholder interviews on positive attributes that could help strengthen master's programs and improve the experiences of their graduates. The authors cluster these attributes into four topic areas: (1) culture, (2) planned learning experiences, (3) resources, and (4) leadership and the human dimension (Conrad et al., 1993). Attributes concerning culture include such things as a "supportive learning environment" (p. 297) in which master's students were in an encouraging learning environment that fostered cooperative learning and high expectations met with rigor and challenge. Those attributes within the planned learning experiences topic area included such things as core course work, individualization, and a tangible product. The coursework provided an "understanding of the theoretical underpinnings and practices of their discipline" (p. 299), the students received individualized attention to help advance learning and growth, and a tangible product, whether it be a thesis or project, that was valuable to themselves and their field of study. Resource attributes were straightforward, including both "institutional and departmental support" (p. 304-305), in which strong support enhanced the master's experience. Lastly, attributes associated with the leadership and human dimension included faculty involvement and students with

diverse backgrounds and experiences, in which faculty members were highly involved and devoted time to master's students and where students could learn from a variety experiences available from both faculty and peers.

More recently, the president of the Council of Graduate Schools discussed trends influencing graduate education over the next decade (Stewart, 2005). The author says such trends included growing global competition for talent, too few minorities and women completing degree programs, and challenges in describing graduate education as a public benefit. Other authors (Cole, 2009) suggest that the United States will find itself in increasing competition with other nations for the best students and the production of new knowledge. Despite the seriousness of these trends, Stewart (2005) was optimistic that the U.S. would respond positively.

Another significant trend with the potential to revolutionize graduate education is the growing use of technology by institutions, students, and society. Conrad et al. (1993) argued that the traditional degree is changing in part due to new technologies in which to deliver and receive instruction. These distance technologies allow degrees to be earned by non-traditional students at remote locations, ultimately making higher education more accessible than ever.

In a literature review of employer perceptions of online degrees,

Columbaro and Monaghan (2009) cited a Vault.com study reporting that

approximately half of the 107 employers surveyed preferred a candidate with a

traditional degree over one who earned the degree online. About 40 percent of
the employers viewed the degrees equally.

Tomlinson-Keasey (2002) noted that today's primary method of communication at institutions is via electronic mail, and professors utilize the Web as a resource for courses, whether the course boasts its own Web site, the course notes and presentations are available on the Web, or the course is administered completely through the Web. "On-line learning is clearly a major force in the area of extension education and midcareer credentialing for professionals and managers" (Tomlinson-Keasey, 2002, p. 137). Today, society is increasingly demanding online graduate education that matches the fast-paced, knowledge-based economy in which they live.

2.5 Master's Programs in Agricultural Communications

A master's degree serves the purpose of preparing students to educate, conduct research, and hone professional skills (Berelson, 1960). In 1991, only one institution across the nation offered a master's degree in agricultural communications, with several other institutions offering degrees combining both agriculture and communications (Wilson et al., 1991). A few years later, Boone et al. (1993) confirmed "only one institution offered a master's degree specifically in agricultural journalism " (p. 16). This institution was also the only institution that offered a doctorate in the field of agricultural journalism, and seven other institutions offered master's degree programs in which students could combine both agriculture and communications (Boone et al., 1993).

Today, the number of institutions offering a master's degree in agricultural communications remains comparatively small. According to the academic programs special interest group of the Association for Communication Excellence (Academic Programs SIG, 2008), there were six agricultural communications programs that indicated having graduate students enrolled at the master's level. An additional institution indicated it would have one master's student beginning Fall 2009, which brings the total of institutions to seven that were actively involved in the field's major professional association (ACE) and guiding the education of master's level agricultural communications students.

Few studies have been conducted addressing the need or demand for master's degree programs in agricultural communications. The master's curriculum in agricultural communications has also seen minimal investigation as compared to the undergraduate degree. Boone et al. (1993) found that academicians and practitioners thought graduate programs in agricultural communications were needed. The study also indicated the need for faculty trained in agricultural communications, as well as the need for research to help develop and advance the field of agricultural communications (Boone et al., 1993).

Wilson et al. (1991) found that ACE members perceived several needs for a master's degree in agricultural communications. The authors cited the need to develop agricultural communications curriculum, enhance the credibility of the field, and train individuals who can manage a broad array of agricultural issues. However, ACE members also expressed the view that a master's degree is not

needed to be an effective communicator within the profession. ACE members also felt that communication skills were a more important focus than either research or management skills. However, when they had the opportunity to recommend content areas to include in an agricultural communications master's degree, members mentioned writing, communication technology, and understanding and evaluating research and mass communication theory (Wilson et al., 1991).

One of the common themes in the literature is the need for flexibility in the master's program curriculum to allow students to tailor the degree to match their career interests (Boone et al., 1993; Simon et al., 2005). Wilson et al. (1991) acknowledged practitioners' and academicians' concerns for a flexible degree program, and recommended that students be allowed to focus on areas of interest and to pursue a multi-track degree appropriate to each individual's varying levels of experience and knowledge.

A theme that is starting to appear with more regularity in the agricultural communications literature is the potential of information technology to influence the number and types of available graduate programs. The potential for technology to revolutionize graduate education in agricultural communications is particularly evident through such activities in the AG*IDEA Agricultural Communications Initiative. AG*IDEA is a national consortium of land-grant universities that offers a variety of online programs and courses in agriculture disciplines (AG*IDEA, 2010). According to the organization's Web site, AG*IDEA sponsors courses and certificate programs in agricultural education, agricultural

mechanization, food safety and defense, and grasslands management, and as of March 2010 is developing online programs in seven new areas, including agricultural communications.

Rhoades (2005) stated the advancements within distance education make it possible to provide online students with richer course materials as well as access to an entirely new realm of expertise within the field, no matter their location. Her work revealed that students prefer technologies that allow them to be more interactive, such as videoconferencing. Likewise, Diebel and Gow (2005) surveyed students in five courses that were utilizing a variety of distance and traditional methods. Results showed that all survey respondents preferred traditional courses, although other delivery methods were satisfactory.

2.6 Summary

An extensive literature describes and documents the evolution of master's education through the decades, including its origins, successes and struggles for legitimacy. Over the last two decades, the master's degree has become dominantly practitioner oriented, shifting away from the traditional master's degree in the arts and sciences and instead focusing on both skills and career development as demanded by both the individual and industry needs (Glazer, 1986). "It emphasizes practice rather than theory, skills rather than research, training rather than scholarship..." (p. 83) and many professions have made the degree a terminal degree to meet their practice-oriented needs (Glazer, 1986).

Other trends evident in the literature include increasing competition for students in the global marketplace, a lingering inability to attract and retain minority and women students, and increasing use of information technology to deliver online educational programs. Many of the challenges and trends confronting general master's education are also significant factors with the potential to influence graduate studies in agricultural communications.

As theory and literature demonstrate, a number of different entities influence the development of university curricula, including the institution itself, industry, society and various stakeholder groups that include practitioners, current students, and alumni. Simon et al. (2005) called for research that focuses on the viewpoints and perspectives of future, present and past students, among other stakeholders. Agricultural communications master's alumni are of particular interest in the current research because they are the focus of graduate education in this specialized field of study. It is their professional performance in the communications workplace that convinces managers of the worth of graduate education. Owing to their direct experience in graduate programs, these individuals are also in an ideal position to recommend graduate studies to others and to offer advice to faculty in improving graduate programs.

CHAPTER 3. METHODOLOGY

3.1 Introduction

Four research questions guided this research, as follows:

- 1. How do agricultural communication master's graduates describe their academic experience in terms of career and professional preparation?
- 2. What are graduates' perceptions of the effectiveness of the degree program from which they graduated?
- 3. What are graduates' perceptions of the essential components to the master's degree in agricultural communications?
- 4. What advice or recommendations do graduates have for updating or enhancing the degree?

To address these study questions, the researcher developed a research methodology that included an interview questionnaire, data collection strategy, and data analysis procedures. The following sections of this chapter will outline and describe the various components developed and procedures used in this research. These topics addressed include: instrumentation, population, field

testing, research approval, interview scheduling and administration, data collection, data analysis, and threats to validity.

3.2 Instrumentation

An interview instrument was developed by the researcher at Purdue University targeting the four research questions. The researcher developed items for the instrument based on major findings and trends identified from the literature. The instrument (see Appendix A) begins with general information about the participant's current job position, years of experience, and level of education. The instrument then includes a series of open-ended questions about the participant's graduate degree program, including coursework taken while completing the degree and curricular and non-curricular experiences while completing the degree. The instrument also addressed various attitudinal items, including perceptions of the ideal master's degree, attitudes towards online degrees, and perceptions of industry demand for master's graduates. The large majority of items in the instrument were of the open-ended variety to allow for detailed responses from the participants. Twelve Likert-type attitudinal statements were used to gauge the perceptions of participants overall graduate experiences. The items were scaled from 1 (strongly disagree) to 5 (strongly agree) such that larger numerals denoted a higher level of agreement with the statement. The interview concludes with the request for advice or recommendations to enhance agricultural communications master's programs,

as well as demographic information, such as age, job location and gross annual income.

A copy of the complete interview instrument is provided in Appendix A.

3.3 Population

The target population of this research study included graduates who received a master's degree in agricultural communications or in agricultural education with an emphasis or specialization in agricultural communications from the years 1997 to 2006. These master's graduates were confirmed graduates from institutions that currently offer this degree, as identified by the researcher.

This particular population was chosen due to its experiences gained after completing the degree. Individuals earning master's degrees in 1997 could have more than 10 years of experience following graduation, while individuals earning their degrees in 2006 could have up to three years of experience following graduation. In addition, the sampling time frame of ten years allowed for a widened selection of master's graduates, as the field remains rather small. Such participants would be expected to hold varying roles in the profession and throughout society, allowing for a varying experiences and perceptions amongst those who boast the degree.

The particular institutions included in this study currently offer a master's degree in Agricultural Communications or a master's degree in Agricultural Education with an emphasis or specialization in agricultural communications. To

identify these institutions, the researcher utilized the ACE Academic Programs Special Interest Group (SIG) Web site, which periodically updates enrollment information for undergraduate and graduate programs in agricultural communication programs nationally. This Web search identified six institutions actively offering graduate education. Five institutions were excluded, as they did not have a graduate program or did not have any students actively pursuing graduate education. This preliminary list of six institutions was solidified through an extensive Web search whereby the researcher visited each site to confirm its inclusion.

Assuming more institutions might offer a master's degree in agricultural communications, the researcher also canvassed the Web sites of 30 institutions that offer established undergraduate agricultural communications programs (Doerfert & Cepica, 1991). The researcher visited each Web site to determine if a master's degree in Agricultural Communications or Agricultural Education with an emphasis in agricultural communications was offered. This strategy identified two more institutions currently offering the master's degree, and solidified the earlier identified six institutions offering the degree, as well.

Of the eight institutions identified, one institution did not respond to the researchers invitations to participate in the study. A second institution initially responded to the researcher's invitation, but did not respond to subsequent messages from the researcher and was excluded from the study. The final list of participating institutions who met the selection criteria identified by the researcher is as follows:

- 1. Ohio State University
- 2. Oklahoma State University
- 3. Texas A&M University
- 4. Texas Tech University
- 5. University of Arkansas
- 6. University of Florida

Individuals excluded from the study were those master's graduates receiving their degrees prior to 1997, master's graduates receiving their degrees from 2007 to present, and those master's graduates who received degrees from institutions no longer offering the degree. All master's graduates who participated in the study voluntarily agreed to be interviewed by the researcher.

All interviews were recorded and transcribed for reporting purposes.

Following the interviews, the researcher assigned each participant a corresponding pseudonym and all interviews were labeled with pseudonyms to ensure anonymity. The recordings were destroyed following transcription, making it impossible to identify or link information to individual participants.

3.4 Field Testing

Field tests were conducted in August 2009 to assess the clarity and readability of the interview instrument, as well as the average length of time it took for an interview to be completed. The researcher scheduled three field tests

with Ph.D. candidates pursuing degrees in either Agricultural Communications or Agricultural Education at Purdue University, as their responses and understanding of the research tool would be comparable to that of the target population in this study.

The responses recorded during the field tests were not analyzed, as the field test was implemented to simply assess the clarity, readability, and length of the interview instrument. Field testing also provided the researcher the opportunity to reduce error in interview administration so as to minimize bias and be more thorough. The results of the field tests revealed minor changes needed in phrasing and organization of some items. The researcher made several adjustments to the instrument based on the results of the field tests.

3.5 Research Approval

The request for University approval to conduct the study occurred during July and August 2009. The appropriate forms and documentation were completed and provided to the Institutional Review Board and Committee on the Use of Human Research Subjects of Purdue University in West Lafayette, Indiana. The documents included in the request were the institution recruitment phone script (later revised as Appendix B, see below), the recruitment letter transmittal e-mail to graduate studies chairs (Appendix C), the eligible master's

graduate recruitment invitation e-mail (Appendix D), the graduate recruitment phone script (Appendix E), and the graduate interview instrument (Appendix A).

In July 2009, the research exemption request was submitted to the Institutional Review Board via an e-mail address provided on their Web site. Following the submission, the Institutional Review Board required that revisions be made to the recruitment process in order to streamline the process and provide ease for all involved in the study. The original institution recruitment phone script was eliminated and replaced by an institution recruitment e-mail (Appendix B). These changes were made by the researcher, and a revised version of the research exemption request was sent to the Institutional Review Board via e-mail. The Institutional Review Board and Committee on the Use of Human Research Subjects exempted this research and granted approval to proceed with the research study on August 10, 2009 (Appendix F).

3.6 Recruitment Timeline

In order to ensure timely completion of the research study, the researcher developed a timeline in which to complete the process. On September 1, 2009, the researcher tailored and sent an institution recruitment e-mail to the Graduate Studies Chair at each of the eight institutions identified to offer master's degrees in Agricultural Communications or Agricultural Education with an emphasis in agricultural communications. The institution recruitment e-mail explained the research study to all institutions and asked for each to voluntarily participate in

the study. The researcher allotted one week for graduate studies chairs to review the proposed study and decide whether they wished to participate.

Responses from six institutions were received within one week of sending the institution recruitment e-mail.

On September 8, 2009, the recruitment letter transmittal e-mail was tailored and sent to all eight institutions. In the recruitment letter transmittal email, the researcher thanked the institutions for their willingness to participate in the research study. In this e-mail, the researcher also attached the eligible master's graduate recruitment e-mail to be forwarded to eligible master's graduates, along with the directions directing graduate studies chairs how to do so. The graduate recruitment e-mail that was forwarded by the graduate studies chairs to eligible graduates explained the research study to eligible graduates, ensured their anonymity, and requested them to e-mail the researcher directly if they wanted to voluntarily participate in the study. Sending this e-mail allowed for the six institutions who responded to begin the process of sending the master's graduate recruitment e-mail to their institution's eligible graduates within the research study years of 1997 to 2006. The two institutions who did not reply to the researcher were included so as to provide another opportunity for their participation.

Two institutions sent e-mail correspondence to the researcher to report the graduate recruitment e-mail had been sent to their confirmed graduates from the years 1997 to 2006. On September 11, 2009, the remaining six institutions were contacted via telephone in order to follow-up subsequent to the recruitment

letter transmittal e-mail. During these follow-up telephone calls, a third institution confirmed the e-mail was sent to its confirmed graduates. Another institution informed the researcher the confirmed graduates list was still being compiled, and the particular faculty member e-mailed the researcher when the graduate recruitment e-mail was sent a week later. The researcher left voice messages with four institutions that were not spoken to directly.

On September 21, 2009, the researcher sent an e-mail to all eight institutions (Appendix G) to thank each of them for willingly participating in the research study and for their hard efforts in helping with the study. Following this thank you e-mail, a fifth institution sent the researcher an e-mail list of the institution's confirmed graduates for the researcher to forward the graduate recruitment e-mail on behalf of the institution. The researcher forwarded the graduate recruitment e-mail to the e-mail list the institution provided on September 22, 2009.

On September 28, 2009, the researcher called the remaining three institutions to encourage their participation and left messages with each. Of these three institutions, one institution had previously volunteered to participate; the remaining two institutions did not respond to researcher's messages throughout the entire recruitment process.

On September 29, 2009, the researcher sent an e-mail to all eight institutions (Appendix H) to inform the graduate studies chairs at each institution of the responses received from their master's alumni who agreed to participate in the study. In this e-mail, the researcher requested each of the institutions

forward the graduate recruitment e-mail one last time as an reminder and motivator to any eligible master's graduates who had not yet responded. The researcher requested the reminder graduate recruitment e-mail be sent as soon as possible, but no later than October 2, 2009.

The sixth institution responded to the researcher via e-mail on September 29, 2009 after sending the graduate recruitment e-mail, as well as the graduate recruitment reminder to their respective institutions master's graduates. By October 2, 2009, six institutions volunteered to participate in the research study, and the researcher received e-mail responses from master's alumni agreeing to voluntarily participate from all six institutions. After numerous failed attempts throughout the institution recruitment process to include the remaining two institutions, the researcher began to schedule research interviews on October 5, 2009.

3.7 Participant Selection and Interview Scheduling

Six institutions volunteered to participate in the research study, and successfully sent the graduate recruitment e-mail and reminder to confirmed graduates with master's degrees in Agricultural Communications or Agricultural Education with an emphasis in agricultural communications during the years of 1997 to 2006. Master's alumni from each institution responded to the researcher directly via e-mail, agreeing to voluntarily participate. Ultimately, 27 master's alumni agreed to participate in the research study. Universities represented were

Oklahoma State University, Texas A&M University, Texas Tech University, The Ohio State University, the University of Arkansas, and the University of Florida.

The researcher replied via e-mail to each master's alumnus e-mail response. The researcher's e-mail thanked each person for his or her willingness to participate in the research and informed each that the researcher would be in contact soon to schedule a one-hour interview at the participant's convenience.

The researcher organized all master's alumni participants by the institution from which the master's degree was earned. Within each institution, the participants were alphabetized according to last name and the first person in each institution was numbered beginning with one and continuing so forth until each set of participants from each institution received a number. Using a table of random numbers, the researcher randomly selected one participant from each of the six institutions. This strategy ensured that all institutions were represented in the research.

The remaining individuals were re-alphabetized by last name into one large group and each participant was numbered, beginning with one. Again, using a table of random numbers, the researcher randomly selected seven individuals who would be removed from the group. This procedure resulted in the identification of twenty total participants who would be contacted to complete an interview. Remaining names were maintained by the researcher in a pool to use in case one of the previously selected twenty participants could not complete the interview.

Using the contact information that participants provided in their initial e-mail responses, the researcher contacted nineteen participants via telephone and one participant via e-mail to schedule interviews. E-mail reminders (Appendix I) were sent to the participants to inform them of their scheduled interviews. In this e-mail, the researcher solidified interview dates and provided each participant with information about the general topic areas to be addressed in the interview.

While scheduling interviews, the researcher communicated with one participant who clarified that her master's degree in Agricultural Education did not involve an emphasis in agricultural communications. In another conversation with a potential participant, the researcher verified that the individual did not earn her degree within the specified time period of 1997 to 2006. Both participants were removed from the interview group. To replace these individuals, the researcher randomly selected two names from the participant contingency pool. Both of the selected individuals met the selection criteria and agreed to participate, resulting in a finalized participant list of 20 individuals.

3.8 Data Collection

Data collection was conducted using telephone interview research methods. The researcher conducted each research interview using a speaker phone in a private conference room at Purdue University during October and November 2009. Each participant was contacted at the corresponding

scheduled time via telephone and reminded the interview would take approximately one hour and would be recorded for transcription.

Interviews were recorded with a hand-held digital recorder in conjunction with the speaker phone. The interviews ranged in length from 45 minutes to 90 minutes, with an average length of approximately one hour. The researcher took detailed notes throughout each interview, noting any questions that could warrant follow up.

The recorded interviews were saved in MP3 format and uploaded to the researcher's private computer. When completed, all recordings were saved to a CD for transcription.

3.9 Data Analysis

In this research, the transcribed interview served as the data set that was subjected to quantitative and qualitative analysis. Each transcribed interview was designated with a pseudonym that helped the researcher organize and compare the data, assuring anonymity of the participants.

Data analysis was carried out using thematic analysis, which involved a search for themes and patterns emerging from each qualitative variable on the instrument (Daly, Kellehear, & Gliksman, 1997). This process began while each interview was transcribed, as the researcher began to review the data. After transcription, the researcher identified patterns and themes that emerged from each item or question by thoroughly reviewing and organizing participant

responses. Taylor and Bogdan (1989) defined themes as components obtained from patterns, such as recurring topics, vocabulary, meanings or feelings.

Boyatzis (1998) described themes as patterns that describe and organize observations, or assist in interpreting parts of the overall phenomenon. The researcher utilized the agricultural communications literature to assist in identifying and naming the emergent themes. Themes in the research included repetitive words or topics, as well as recurring feelings or perspectives provided by participants. Each emergent theme was also supported with illustrative quotes from the participants.

For quantitative items, data were entered into SPSS statistical software for descriptive analysis. Means and standard deviations were calculated for scaled items. Principal components analysis was used to look for underlying patterns within the 12 attitudinal statements measuring participant's perceptions of their overall graduate experiences (Dunteman, 1989). A three-variable scale, titled supportive department environment, was developed as a result of this analysis.

Reliability was assessed for two scale measures on the instrument: supportive department environment and perceptions of online degrees. The resulting reliability coefficients for the two scales as measured by Cronbach's alpha were 0.77 and 0.82, respectively. Both coefficients were deemed acceptable.

A written narrative was developed that included a textual report of data, tables with quantitative data, and tables that provided emergent themes and illustrative quotations from participants. To maintain anonymity of the

participants, as well as ensure consistent usage throughout this document, the researcher used feminine pronouns in presenting the data. Results from this analysis are provided in Chapter 4.

3.10 Threats to Validity

Validity of measurement is critical in social science research so that researchers can be confident that an instrument is actually measuring the concept of interest rather than some other phenomenon, and that this concept is being measured as accurately as possible (Babbie, 1982; Bailey, 1987). The researcher identified several potential threats to the validity of this research. When possible, the researcher took actions to address these threats using conventions identified in the social science literature. One such threat, selection error, was impossible to measure due to the procedure used to identify alumni from the various graduate programs. Each graduate studies chair was asked to invite alumni to participate from each institution. This procedure assures anonymity, but removed control from the researcher. It is also possible that some institutions did not have updated e-mail addresses for some eligible alumni or that some alumni did not have access to their e-mail during the recruitment period due to travel, illness or some other reason.

In addition, the researcher may have inadvertently omitted an institution that met the research criteria. There is no universally recognized listing or directory of institutions that offer graduate degrees or specializations in

agricultural communications. To avoid omissions, the researcher used multiple sources and made confirmatory Web site checks and telephone calls to arrive at the final list of institutions.

Another threat to validity is that participants may not recall important information or they may be unable to remember details requested in the interview questions. The challenges posed by recall are common issues in social science research and no solution has proven effective in all cases or for all people. To help minimize difficulties caused by incorrect recall, the researcher sent each participant an e-mail reminder of the upcoming interview, which included a list of possible topics to be addressed during the interview. This measure was undertaken to help participants mentally prepare and perhaps recall details to be addressed in the interview.

Finally, the researcher acknowledges that her own views and perceptions formed through past experiences and personal acquaintances have the potential to influence the interpretation of the data. In accordance with accepted research practices, the researcher took a number of steps throughout the research process to ensure that results were not influenced by the researcher's personally held views. For example, the researcher used a semi-structured questionnaire so that each research participant received a common core of questions with identical phrasing. The questions on the instrument were themselves derived from the agricultural communications and graduate education literature. During the interviews, the researcher withheld her own views of the subject matter and encouraged candid views from the participants. In addition, question prompts

were inserted into the instrument after the completion of field testing for complex questions or those that warranted further clarification. The inclusion of these prompts helped ensure complete responses from the participants and ensured that responses truly reflected participants' perceptions, rather than the researcher's. Field testing provided an opportunity to practice and refine the skills utilized in each interview. In analyzing the data, the researcher categorized participant responses based on their similarities and generated frequencies of these response sets. Direct quotations were then identified by the researcher to illustrate the different views of participants using their own language and examples. The personal views of the researcher had no bearing on final results reported.

3.11 Threats to Reliability

Threats to reliability are a serious concern in social science research, as they can influence the consistency of measurement (Babbie, 1982; Bailey, 1987). In the current study, the researcher established reliability of the instrument through two methods: item analysis was used to assess the internal consistency of variables in two scale items (Supportive Department Environment, and Quality and Prestige of Online Degrees), and test/retest procedures were used to measure the consistency of response for 12 master's experience attribute statements. The resulting alpha coefficients for the two scaled items were 0.77 and 0.82, respectively. Results for the test/retest procedure revealed that field

test participants provided a consistent answer for 91 percent of the attribute statements approximately nine months after the initial field tests. Field test participants provided exactly the same response for 66 percent of the items. Results of the reliability procedures resulted in acceptable levels of reliability for the items measured, as judged by researcher.

CHAPTER 4. RESULTS

4.1 Introduction

This chapter reports the outcomes of data analysis from this research.

Based on analysis of the transcribed participant interview data, the researcher discusses compliance rate, descriptive characteristics of participants, and analysis of the four principal research questions set forth.

4.2 Compliance Rate

On September 8, 2009, the recruitment letter transmittal e-mail, described in the previous chapter, was tailored and sent to institutions identified by the researcher as offering master's degree programs in agricultural communications. In the recruitment letter transmittal e-mail, the researcher attached the recruitment e-mail to be forwarded on by each institution to eligible master's graduates who received their degrees within the study timeframe of 1997 to 2006. On September 29, 2009, the researcher asked each institution to re-send the master's graduate recruitment e-mail to eligible graduates as soon as

possible and no later than October 2, 2009. Six institutions were represented by eligible graduates.

The methodology employed in this study ensured that each of the six institutions was represented by at least one graduate. The total number of master's graduate participants ranged from two to eleven among the six institutions, as shown in Table 1.

Table 1 Response rates and frequencies of usable responses by institution

	Total Number Emails Sent to Eligible Graduates	Total Number Responses Received by Researcher	Total Number Usable Responses (Male/Female)
University of			
Arkansas	9	2	(0/1)
University of Florida	13	6	(0/5)
Oklahoma State University	11	6	(1/5)
Ohio State University	2	2	(0/2)
Texas A&M University	4	4	(0/4)
Texas Tech University	36	11	(2/7)
Total	75	31	27

From the total number of usable responses, the researcher randomly selected one participant from each institution to ensure all institutions were represented in the research. The researcher then randomly eliminated seven

participants from the pool to arrive at 20 participants to complete interviews, as shown in Table 2.

Table 2 Study participants by institution (n=20)

Institution	f	%
University of Arkansas	1	5.0
University of Florida	4	20.0
Oklahoma State University	3	15.0
Ohio State University	2	10.0
Texas A&M University	3	15.0
Texas Tech University	7	35.0
Total	20	100.0

4.3 <u>Descriptive Statistics</u>

The demographic and other descriptive statistics collected during the research interviews serve as a baseline for the study and provide a profile of the 20 master's alumni who participated in the study. Respondents' ages ranged from 26 years to 49 years, as shown in Table 3; however, 75 percent of respondents fell in the age range of 26 to 30 years. This larger number in the younger age range may be due to the more recent growth in numbers of master's degree students in programs and the increased popularity and awareness of the degree.

Table 3 Profile of study participants

Respondent Number	Age	Year Completed	Highest Degrees	Current Occupational Category
		Master's	Completed	
R1	29	2005	Ph.D.	Academia
R2	30	2006	Master's*	Nonprofit
R3	29	2004	Ph.D.	Academia
R4	26	2006	Master's	Academia
R5	29	2005	Master's	Academia
R6	28	2005	Master's	Commodity Organization
R7	28	2005	Master's	Academia
R8	26	2006	J.D.	Law
R9	27	2006	Master's	Commodity Organization
R10	29	2003	Master's*	Government
R11	29	2004	Master's	Ag Banking/Lending
R12	28	2004	Master's	Farm/Ag Insurance
R13	35	1998	Master's*	Academia
R14	36	2005	Ph.D.	Consulting
R15	36	1997	Master's	Nonprofit
R16	49	2000	Master's	Academia
R17	27	2005	Master's	Nonprofit
R18	34	2000	Master's	Nonprofit
R19	29	2006	Master's	Academia
R20	30	2006	Ph.D.	Academia

Note: Participants currently pursuing doctoral degree denoted with *

Sixteen participants reported earning master's degrees in agricultural communications and four participants reported earning master's degrees in agricultural education with a focus or emphasis in agricultural communications. While the study timeframe spanned the years 1997 to 2006, 80 percent of the participants earned their degrees more recently, during the years 2003 to 2006.

Participants were also asked to provide information on other degrees earned. Four of the 20 participants reported having earned doctoral degree, one in agricultural communications, one in agricultural education and communications, and the other two in agricultural education with an emphasis in

communication. One of the four participants who earned a doctoral degree also had another master's degree in animal science alongside the master's degree in agricultural communications. Three participants reported they were currently pursuing a doctoral degree, and another participant had credit hours toward a doctorate, but had not yet begun to pursue the degree. One participant had earned a J.D. (law) degree, the remaining eleven other participants had not earned another graduate degree beyond the master's.

Participants reported holding current positions that could be categorized into seven different occupational categories. Nine participants maintained jobs within the school and university; four participants worked for nonprofit organizations; two participants worked for commodity organizations; two participants were employed by agribusinesses; and one participant each fell into the categories of consulting, government, and law, as displayed previously in Table 3.

The total number of years respondents have been working full time ranged from seven months to 32 years, although full-timework experience for more than half of the respondents was five years or less (Table 4). The number of years each participant reported spending in their current job position ranged from one year to 10 years, with 85 percent of participants having spent less than three years in their current positions (Table 5).

Table 4 Full-time work experience reported by participants (n=20)

Dorticinanto	Years of Full-Time Work Experience				
Participants	0-5	6-10	11-15	16+	Total
f	12	3	4	1	20
%	60.0	15.0	20.0	5.0	100.0

Table 5 Years reported by participants in current position (n=20)

Dortioiponto		Years in Cur	rent Position	Total	
Participants	0-3	4-6	6-9	10+	Total
f	17	1	1	1	20
%	85.0	5.0	5.0	5.0	100.0

Participants were asked the number of years they had worked in or directly related to agricultural communications. Nineteen participants reported holding jobs directly in or related to agricultural communications, with such experience ranging from three months to 14 years. One participant reported never being employed in the field of agricultural communications, but found the skills useful in her current position. Participants were also asked the number of years they had worked in fields unrelated to agricultural communications. Forty percent of participants reported never having worked in a field other than agricultural communications (Table 6).

Table 6 Number of years spent working directly in agricultural communications and unrelated fields

Nature of Reported Professional Experience							
	Directly in	ag comm	In unrelated fields				
	f	%	f	%			
None	1	5.0	8	40.0			
0-5	15	75.0	8	40.0			
6-10	3	15.0	1	5.0			
11-15	1	5.0	3	15.0			
Total	20	100.0	20	100.0			

Ten income categories were used to measure the gross annual income of participants, ranging from less than \$20,000 to more than \$100,000. Incomes range widely, with each of the 10 categories having at least one respondent. The modal category was \$60,001 to \$70,000. Three respondents indicated a gross annual income of \$40,001 to \$50,000 and also \$50,001 to \$60,000.

Regarding the education of participants, 11 reported holding bachelor's degrees in agricultural communications or agricultural journalism (Table 7). One of these participants also reported earning a dual major in agricultural economics. Of the nine participants who received bachelor's degrees in fields other than agricultural communications, six reported having to complete additional requirements in order to earn their master's degrees in agricultural communications. These participants said the additional requirements involved leveling coursework and electives.

Table 7 Bachelor's degrees reported by participants (n=20)

Field	f	%
Agricultural Communications or	11	52.4
Agricultural Journalism		
Communication, English or Journalism	4	19.0
Agribusiness	1	4.8
Agricultural Economics	2	9.5
Animal Science	3	14.3
Total	21	100.0

Note: Total exceeds 20 due to dual major reported by one participant: agricultural economics and agricultural communications.

In terms of years spent completing the master's degree, participants reported taking anywhere from nine months to two and a half years to earn the degree (Table 8). While earning their master's degrees, nine participants held positions as teaching assistants, four as research assistants, and three held "split" positions in which they served as both a research and a teaching assistant. One participant held a half-time assistantship in the dean's office. Three participants worked full time while earning their master's degrees, two of which were full-time students and one who was a part-time student.

Table 8 Number of years to complete master's degree

Number of Years						
Participants	Less than 1 year	1 year	1.5 years	2 years	2.5 years	Total
f	1	4	5	7	3	20
%	5.0	20.00	25.0	35.0	15.0	100.0

Relative to membership in professional organizations, 15 percent of the participants reported they did not belong to any organizations, but 85 percent belonged to one or more organizations across the nation, ranging from academic to professional to interest-specific organizations. As shown in Table 9, the Association for Communication Excellence (ACE) and the Livestock Publications Council (LPC) were the most commonly mentioned organizations amongst participants.

Table 9 Professional organizations in which participants held active memberships

Organization	f
Agricultural Communicators of Tomorrow (ACT)	1
American Association for Agricultural Education (AAAE)	3
American Horse Publications (AHP)	1
American Agricultural Editors Association (AAEA)	1
American Public Health Association (APHA)	1
American Registry of Professional Animal Scientists (ARPAS)	1
Association for Communication Excellence (ACE)	5
Association for International Agricultural & Extension Education (AIAEE)	1
Florida Public Relations Association	1
Livestock Publication Council (LPC)	4
Mid-Western Educational Research Association (MWERA)	1
National Agricultural Alumni and Development Association (NAADA)	2
North American Colleges and Teachers of Agriculture (NACTA)	2
National Association of Environmental Professionals (NAEP)	1
National Association of Farm Broadcasters (NAFB)	1
National Association of Insurance and Financial Advisors (NAIFA)	1
National Agri-Marketing Association (NAMA)	1
National Cattlewomen's Association	1
National Cattleman's Beef Association (NCBA)	1
National College Media Relations	1
Public Relations Society of America (PRSA)	1
Santa Gertrudis Breeders International	1

Participants identified a number of reasons for belonging to these organizations, such as maintaining networks and professional relationships; updating or developing knowledge and skills on the latest research, topics, or trends; and fulfilling personal or career interests.

4.4 Academic Experiences in terms of Career and Professional Preparation

The experience a graduate has in his or her degree program can be compared to the experience a customer has with a product or service. Pleased customers return for business or spread the word of good business to others.

Thus, the first study question in this research asked participants to focus on their master's experiences:

1. How do agricultural communication master's graduates describe their academic experience in terms of career and professional preparation?

When asked their reasoning for pursuing the master's degree in agricultural communications, participants responded with motives that could be grouped into five different categories: (1) steppingstone, (2) career advancement, (3) skills and experience, (4) presented opportunity, and (5) interest in agricultural communications. Participants who earned the master's degree in pursuit of the Ph.D. or another advanced degree felt the degree was a steppingstone along their career path. Participant who pursued the master's

degree for career advancement purposes viewed the degree as added marketability in the workplace and as a credential that would make them look better on paper. Respondent 18 stated:

"I did think that a master's would make me more marketable, and I really liked the idea of filling in some of the blanks that were in the undergraduate education." (R18)

The third group of participants pursued the master's degree to gain more knowledge, skills and experience. These participants wanted an opportunity to do more and see more. A participant in this third group, who was looking for a different perspective at a different university, stated:

"I saw the master's degree program as an opportunity to kind of get new insight...graduate school seemed like another opportunity just to keep learning." (R9)

Participants who were presented the opportunity to pursue the master's degree were encouraged by advisors to pursue the degree. They were either already taking graduate classes and transitioned from the undergraduate degree, or were working for an institution that financially supported the pursuit of a master's degree. Lastly, several participants completed undergraduate degrees in fields of study other than agricultural communications, but found their interests

or the direction they wanted to take their careers aligned more with agricultural communications. Thus, they pursued the master's degree to focus in communications and develop the skills needed within the field. Respondent 5 described this situation as follows:

"I felt like it would be more beneficial long term to have a master's degree as opposed to having two bachelor's degrees." (R5)

It should also be noted that some participants had several reasons for pursuing the master's degree, which locates them in more than one of the five groups described above.

In another set of questions, participants were given the opportunity to describe and give an estimated percentage on the mix of professional skill development or research and theory in their master's degrees. As shown in Table 10, 35 percent of participants felt they received an even mix of both professional skill development and research and theory while earning their master's degrees.

Table 10 Perceived mix of professional skill development and research and theory in master's degrees earned by participants (n=20)

Professional Skill	Research and	Participants		
Development	Theory	f	%	
%	%			
5	95	1		
20	80	2	35.0	
30	70	2	35.0	
40	60	2		
50	50	7	35.0	
60	40	4	30.0	
70	30	2	30.0	
		20	100.0	

One participant who estimated 50 percent professional skill development and 50 percent research and theory stated:

"We had quite a bit of latitude in how we structured our coursework.... I was able to kind of develop the program that fit my interests and what I intended to pursue professionally. We still had to take statistical and research classes and gain the theory behind it..." (R15)

Another participant, who earned a bachelor's degree in a field other than agricultural communications, also described their master's degree as an even 50 percent professional skill development and 50 percent research and theory.

Respondent 20 stated:

"I actually probably got more skill development than some master's students would just because I had to take the leveling electives...but when you add in the research component and the theory classes that were on the graduate level, I think those balanced it out." (R20)

Thirty-five percent of participants estimated the percent of research and theory in their master's degree was heavier, from 60 to 95 percent. These participants reiterated the fact that their degrees were more heavily focused on research and theory because they had gained professional skills from their undergraduate degrees. Classes these participants considered professional were taken as electives, and one participant felt because the master's degree program was still so closely aligned with the agricultural education program there was no attention paid to creating professional courses at the graduate level. One participant voiced the opinion that her master's degree revolved around the thesis:

"More of the classes I had were research focused...take these classes so you could complete a thesis...there were only two classes that I would really consider in that professional development area." (R4)

Another participant felt as though her institution purposefully focused its master's degree on research and theory. Respondent 14 shared her insights as follows:

"Students who come straight out of the bachelor's and go into their master's have had a lot of classes about how to do things, not much on the theory side of things, or on the research side of things...they wanted to give them more of a theoretical background so that they could make smarter decisions." (R14)

Thirty percent of participants estimated their master's degree to focus more heavily on professional skill development, 60 to 70 percent. These participants discussed the flexibility of the programs to tailor the master's degree toward their interests and needs. While these participants recognized the importance of research, they took only the minimum required research and theory classes, as they felt it would be more beneficial to emphasize professionally oriented coursework. Two participants shared their perspectives from their chosen career paths as follows:

"I got some theory and...research, but I had a lot more professional coursework and training. I knew at the time that I was probably not going to go on to my Ph.D., nor was I doing a thesis, so I probably steered clear of the research and theory classes, but there were some that I was required to take." (R13)

"Research is an important part obviously if you are going to go further past your master's...but those practical skills are very important. I still think that the research and theory portion of graduate school was important because it just makes you think in a different way.... It kind of helps you dig deeper into the content." (R9)

The experience graduates receive from their degree programs varies, as do the professional skills and research expertise they receive or choose to focus upon during their studies. Thus, participants were asked what professional skills or research expertise they gained from their master's degree program that are relevant to their current positions. Participant responses are ordered by frequency and presented in Table 11.

Table 11 Professional skills and research expertise gained from master's degree program relevant to current job position

		Illustrative Quotes
Professional Skills	 Writing: press and news releases, writing for Web (7) Web development and design (7) Adobe Creative Suite (6) Advising students (3) Computer and Internet use (3) Magazine production (3) Print layout and design (3) Audience identification (2) Crisis communications (2) Distance education or E-learning (2) Industry contacts and networking (2) Marketing (2) Photography (2) Public relations and campaigns (2) Teaching skills and methods (2) Video: editing and script writing (2) Advertising development (1) Adult education practices (1) Event planning (1) Leadership or management (1) Presenting (1) 	"I also learned by being around my peers and faculty how to advise, how to teach a class" (R3) "I use the things that I learned every day." (R6) "If you haven't set the time aside to research the people you are talking to, then your communication message could be extremely ineffective." (R9) "Those technical side of thingsthat is what my master's degree gave me that I did not get obviously through an ag economics degree." (R11) "I definitely think my writing improved because of my research classes and my research requirements." (R13)
Research Expertise	background work (2) 5. Writing research papers (2) 6. Critical Thinking (1) 7. Evaluation (1)	"The things I learned from the results of my thesis and the contacts that I made completing the research are definitely things that I can use now." (R4) "The thought process is still very prevalentthe way you have to gather information and review it, analyze it, and then come up with conclusionsI think that allows me to make better decisions" (R11) "As we're doing market research, it enables me in a lot of ways to develop my own research instruments and go out and do a lot of our own market research without having to engage an outside firm because of the experiences that I had in my master's work." (R15)

Professional skills were heavily utilized by participants in their current job positions, as participants discussed 21 different professional skill categories versus 11 research expertise categories. Receiving the most mentions were both writing and Web development skills, each utilized by seven participants, with Adobe Creative Suite skills closely following with six mentions. Presentation skills, as well as leadership and management skills, were mentioned by one participant each.

Eleven research expertise categories were utilized by participants.

Research methodology skills were the most mentioned skills utilized currently by eight participants in their current jobs. Finding and reviewing quality literature, as well as theory, ranging from communication theory to adult education theory, were each mentioned by five participants. One participant each mentioned their use of the social science perspective and statistics. Only one participant reported not using any research expertise in her current job.

Not only are the professional skills and research expertise utilized by participants important, but also are the professional skills or research expertise they plan to use in future careers. Participants were asked to discuss the professional skills or research expertise they gained from their master's degree program that are relevant to their future career goals. Participant responses are ordered by frequency and presented in Table 12.

Table 12 Professional skills and research expertise gained from master's degree program relevant to future career goals

		Illustrative Quotes
Professional Skills	 Web development and design (5) Teaching skills and methods (4) Writing: press and news releases, writing for Web (4) Adobe Creative Suite (3) Public relations and campaigns (3) Magazine production and design (2) Adult education practices (2) Distance education or E-learning (2) Leadership and management (2) Photography (2) Print design and layout (2) Advertisement development (1) Advising students (1) Audience identification (1) Computer and Internet use (1) Crisis communications (1) Marketing (1) Presenting (1) 	"It is all cumulativethese are all professional skills that I have to continue to utilize today and tomorrow and many years in the future." (R1) "What I learned I will always use, and if I am not using it now, as I grow into my career, I would hope I would use some of those things." (R6) "You do take the skills that you use while conducting research and apply them to your professional life, it is just not the structured five-chapter thesis." (R11)
Research Expertise	 Conduct, evaluate and improve research (7) Finding and reviewing quality literature or research (4) Theory: adult, e-learning, communication (4) Methodology: basic, survey (2) Audience Identification (1) Critical Thinking (1) Grant writing (1) History (1) Models (1) Programming (1) Social science perspective (1) Writing research papers (1) 	"I plan on completing a doctoral degreebasic research skills are definitely going to help advance my career in those regardsthe same things that I am using now I will continue to use in the future." (R4) "Itequips you to take on lots of different challenges where you are just able to go on and no matter what the specific issue is, you are kind of equipped to tackle it." (R15) "I really just plan on being an instructor the rest of my career. It's what I enjoy doing, and so I would just say those [skills], building upon them more." (R19)

Again, professional skills were discussed most frequently by participants in looking toward their future career goals, as participants discussed 18 different professional skill categories versus 12 research expertise categories. Receiving the most mentions for future career goals were Web development skills, discussed by five participants, with writing and teaching skills closely following with four mentions. Marketing skills, as well as presentation skills, were mentioned by one participant each. Two participants reported they did not know of any professional skills they gained from their master's degree that would be relevant to their future career goals.

Twelve research expertise categories were utilized by participants.

Conducting and evaluating research was mentioned by seven participants considering their future career goals. Finding and reviewing quality literature, as well as theory, were each mentioned again by four participants. One participant each mentioned their use of the critical thinking skills and grant writing skills in future career goals. Two participants said they would not use any research expertise in their future careers.

Participants were asked to describe how their master's degrees compared with or complemented their bachelor's degrees in terms of the educational experience. Seventeen participants felt their master's degree and bachelor's degree were complementary in terms of the education experience. Participants discussing these complements stated:

"What you learn as a bachelor's student you carry that forward.

You have to have that foundation before you move on to your master's." (R9)

"They dovetailed really nicely. I really just saw my master's degree as an extension of my bachelor's." (R15)

"Both complement each other really well...I got a good foundation and was able to take those experiences and move to gain new experiences. They have their differences for sure, but I really feel like one definitely helped me do the other." (R17)

Three participants did not consider the bachelor's and master's degrees complementary. Respondent 2 discussed the degrees as very different:

"They didn't complement each other at all. It is almost like having two different degrees, which is good. I wouldn't have wanted to go get a master's that was basically a repeat of my undergrad." (R2)

Participants were asked to describe how their master's degrees compared with or complemented their bachelor's degrees in terms of career preparation.

Again, seventeen participants felt their master's degree and bachelor's degree were complementary in terms of career preparation. Participants discussing these complements stated:

"My undergraduate program very well prepared me for the basic communication aspects that I now teach about or practice even, but it is the master's degree that pushes those to a new level and integrates theory and research." (R1)

"By having a bachelor's degree in ag economics, it gave me an understanding of the business side of the industry...having the communications degree allows me to talk about those commodities and markets...the two degrees play very well together." (R11)

However, three participants did not find the degrees complementary.

Respondent 6 discussed the degrees' differences in terms of career preparation:

"My master's degree prepared me a whole lot more for my career than my bachelor's did...I don't think I was prepared to do what I wanted to do. It gave me more skills and just made me a more well-rounded person." (R6)

When participants were asked if their master's degree had served its purpose, all participants responded that the degree had indeed served the purposes they intended. Many participants said they needed the master's degree to obtain the job position they are currently in, as well as to fulfill personal goals they set for themselves. Participants also commented on the knowledge and skills gained that have been beneficial. Several respondents expressed their insights about their master's degrees as follows.

"It prepared me to go on to the Ph.D. ...and people view you as more qualified if you have a master's degree." (R2)

"It prepared me in a lot of ways for my career path, and I think it also put me a step ahead of other candidates that would be vying for the same positions." (R8)

"I wouldn't be able to do it now without the master's ... having those skills, both the professional development skills and the research in the master's degree, was the foundation for what I am doing." (R20)

4.5 Perceptions of Degree Program Effectiveness

Of particular interest in this study were participants' perceptions of degree program effectiveness, which aligns with the second research question:

2. What are graduates' perceptions of the effectiveness of the degree program from which they graduated?

Study participants were asked if they wrote a thesis or completed a project to fulfill degree requirements. Fifteen participants reporting writing a thesis, and four participants pursued a non-thesis option that involved a project. One participant did not write a thesis or complete a project. Participants identified 15 different topic areas addressed through their theses and projects. As displayed in Table 13, crisis communication was the most frequent topic area, followed by distance education and student recruitment. Participants pursued a variety of other topics for their theses and projects, including content analysis, marketing, and media research.

Table 13 Thesis or project topic areas pursued by participants (n=19)

Topic areas

- 1. Crisis communications (3)
- 2. Distance education or E-learning (2)
- 3. Student recruitment, retention and career placement (2)
- 4. Ag magazine's uses of the Internet to reach audiences (1)
- 5. Caucasian and Black population's response to the media (1)
- 6. Content analysis with newspapers and biases of writers (1)
- 7. Evaluating the writing competencies of agricultural education doctoral students (1)
- 8. Genetically modified food labels (1)
- 9. Marketing of materials for an organization to assess interests of the target audience (1)
- 10. Perceptions of industry professionals on agricultural communications undergraduate curricula (1)
- 11. Perceptions of organic foods (1)
- 12. Identifying the professional development needs of agricultural communicators (1)
- 13. Use of photography to portray American farmers (1)
- 14. Use of research based information in livestock publications (1)
- 15. Web development (1)

When participants were asked how they settled on the particular topics for their theses and projects, seven participants said the topic was a joint effort between their advisor and themselves; five participants said the topic was a personal interest they chose; five participants said their topic was their advisor's idea; and, two participants said they settled on the topic due to their assistantships or funding.

In terms of sharing their research results, nine participants reported presenting their research at conferences, and six participants said someone else presented their research, usually the advisor. Four participants did not present their research at a conference, and for the one participant who did not complete

a thesis or project requirement, this question was not applicable. Conferences at which participants' research was presented included: Association for Communication Excellence (ACE); the North American Colleges and Teachers of Agriculture; the Southern Association of Agricultural Scientists (SAAS); the Consortium for North American Higher Education Collaboration (CONAHEC); Southern Region of American Association for Agricultural Education; and the Southwestern Research Association. Of the nine participants who presented their research at a conference, only two participants still regularly attend the conference at which they presented their research.

Participants were asked to recall the teaching foci of their major advisors while they were earning their master's degree. All 20 participants could recall the teaching foci of their major advisors, some more specific than others and some advisors with more than one focus. This recollection culminated into 22 different topic areas of their major advisors. Agricultural publications development, introduction to agricultural communications, and writing were most frequently mentioned. Teaching foci such as public speaking, internships, or graphic design were mentioned only once, as displayed in Table 14.

Table 14 Teaching foci of participants' major advisors

	Topic areas
Major Advisor's Teaching Focus	1. Agricultural publication development (4) 2. Introduction to agricultural communications (4) 3. Writing (4) 4. Agricultural education (3) 5. Broadcasting (3) 6. Research methods (3) 7. Crisis or risk communications (2) 8. Photography (2) 9. Public relations (2) 10. Theory (2) 11. Video production (2) 12. Web development and design (2) 13. Agricultural communications for non-majors (1) 14. Agricultural history (1) 15. Agricultural leadership (1) 16. Distance education (1) 17. Graphic design (1) 18. Human resources (1) 19. Interpersonal communication (1) 20. Interpersonal communication (1) 21. Public speaking (1) 22. Web marketing (1)

Participants also were asked to recall the research foci of their major advisors while they were earning their master's degrees. Four participants could not recall this focus but felt they could have answered this question while they were earning their degrees and working more closely with their advisors. Sixteen other participants identified 19 different topic areas in which their major advisors had a research focus or interest, including some advisors with more with more than one area of interest. The research foci or interests of major advisors from the six represented institutions are evenly dispersed, with no more than two

advisors focusing on a specific topic. Crisis or risk communications was most mentioned by three participants, as shown in Table 15.

Table 15 Major advisor's research foci or interests

	Research focuses or interests
Major Advisor's Research Focus or Interests	 Crisis or risk communication (3) Agricultural education (2) Agricultural leadership (2) Audiences responses to different agricultural communication types (2) Video and telecommunications (2) Genetically modified food labels (1) Ag literacy (1) Agri-tourism (1) Agricultural information dissemination (1) Cotton communications (1) Critical thinking (1) Distance education Environmental issues communications (1) Human resources (1) International agriculture (1) Online research methodology (1) Rural sociology (1) Student or writing competencies (1) Web (1)

Several questions on the instruments focused on participants' experiences with and perceptions of online courses and degree programs. Participants were asked if they took any online courses while completing either their bachelor's or master's degrees. Responses revealed that nine participants did not take any online courses while completing either degree; three participants took online courses while completing their bachelor's, but did not take any while completing their masters; six participants did not take any online courses while completing

their bachelor's degree, but did take online courses while completing their master's degrees; and, two participants took online courses while completing both degrees.

The eleven participants who had taken online courses were asked to describe the quality of the educational experience compared to a traditional classroom course. Five of the eleven participants felt the online courses they completed were good courses they learned from. These participants liked the freedom to learn at their own pace. Six of the eleven participants described the quality of the educational experience in the online courses they completed as being below the quality of a traditional classroom course. These participants indicated they did not prefer the self-directed learning style, and also felt they experienced a lack of feedback and interaction. One participant indicated that the online course she took suffered from outdated information. Another participant mentioned taking a course to complete it as fast as possible:

"I did not learn very much from taking it online...I was just trying to get done with the course...it was hard to learn that way." (R6)

After soliciting participants' descriptions of their experiences with online courses, the researcher asked participants if they thought the master's degree in agricultural communications should be offered via distance education. Eight participants felt that the degree should be offered via distance education, while

11 participants said the degree should not be offered via distance education.

One participant indicated she did not know and declined to answer the question.

Participants who agreed the degree should be offered via distance education feel that more people would be able to pursue the degree because the technology would provide easier access. Not only could people keep their jobs and pursue an online master's degree, but they could also spend time with family and find their own time in their busy schedules to do the work. Participants offered the following comments about an online master's degree in agricultural communications.

"Communications, you cannot not [sic] be into technology now.

That is where our field is going." (R3)

"Not everyone is in a position to be able to spend full-time on campus...they can't just quit their job...that online distance education program really gives them an opportunity to still learn and gain a degree while being able to maintain their lifestyle." (R9)

"Today, there are so many non-traditional students. You're really doing people a disservice by not offering it that way...you can give students who want to learn that way the ability to learn that way."

(R10)

The eleven participants who did not feel the master's degree should be offered online reiterated the loss of interaction within the classroom, which they felt was invaluable. These participants felt there were some courses that could be offered via distance education, but felt there should be a component of face-to-face interaction, whether it is courses or projects, in order to take them to the next level of thinking and learning. Participants shared their opinions as follows:

"Part of higher academics is being able to stand up for your opinion and to state it...when you are writing, you can always edit it. There is something about saying it out loud, at that moment." (R2)

"If you listed your professors as references of your character and references of your ability to work with others, I wouldn't be able to trust them as references because they wouldn't have really seen that." (R14)

"You need to be in the classroom...there is so much learned and gained from listening to other students...and being able to learn from an instructor how well...I find it really hard to learn how to be a communicator through the computer." (R17)

Participants were asked to identify the advantages of earning an online master's degree. Participants identified 18 different advantages to earning an online master's degree, as shown in Table 16.

Table 16 Participants' perceived advantages of earning an online master's degree in agricultural communications

Advantages	Illustrative Quotes
 Flexibility of place (9) Flexibility of time and pace (8) Can maintain job (4) Convenience and ease (4) Increased audience of nontraditional and out-of-state students (4) Eases budget and assistantship pressures for departments (2) Encourages independent thinking (2) Increased education and degree (2) Access to other universities (1) Can finish degree more quickly (1) Cheaper for commuting students (1) Cheaper overall (1) Focus on Internet as a medium (1) Great marketing tool for universities and departments (1) Improves on-campus versions of courses (1) 	"It would be a great marketing tool for the university because it is something that very, very few schools could offerit could really give people a favorable opinion of the university." (R8) "You are still gaining those practical experiences by working, but at the same time, you are able to further your education." (R9) "It encourages students to find answers for themselves instead of always asking someone elseto be more independent thinkers." (R14)

Flexibility of place and time were the most mentioned advantages, Also mentioned were the ability to maintain a job, convenience and ease, and the potential for an increased audience of nontraditional and out-of-state students. Three participants indicated they were not sure if there were advantages to an online master's degree.

While participants could identify advantages, they were equally quick to point out the disadvantages of earning an online master's degree. Participants identified 22 disadvantages to pursuing an online master's degree, as displayed in Table 17.

Table 17 Participants' perceived disadvantages of earning an online master's degree in agricultural communications

The perceived lack of opportunities for face-to-face interaction was most frequently mentioned by 14 participants. The perceived lack of potential for conversation or in-class discussion and also the perceived lack of the social aspect and interpersonal relationships follow. Participants pointed out several other disadvantages associated with online master's degree programs, including the lack of an assistantship experience or lack of different perspectives in their education. Along with possible technical difficulties a person may experience while learning online, two participants pointed out that online learners could face additional challenges in completing a thesis or accessing journals and other library resources. Of these disadvantages, study participants said the following:

"People build people, whether it is ethically, personally, morally...we are constantly building each on each other, and if you have an online degree program, you are building on a computer...it is not that in-depth conversation that can happen one-on-one." (R11)

"It's mass production...people just want to get in and get their degree. Universities just want to get people in and get their money." (R12)

"If I haven't seen those students work face-to-face with each other, I have a very hard time saying this student work and plays well with other, so I think it takes away our ability to understand the full person...you don't know whether their character is strong, what their time management is like." (R14)

Of additional interest in this research were participants' perceptions of program effectiveness as measured by perceived rigor and quality of the degree program from which each individual graduated. While discussing the rigor and quality of their respective degree programs, the majority of respondents provided positive comments. Participants who positively discussed rigor and quality frequently cited such aspects as having completed a thesis, having good professors and completing relevant coursework. Sample quotations from participants are as follows.

"I think that the most rigorous part of it was completing a thesis...the graduate-level classes were challenging in the way that they forced me to think in what that I had not thought before...if I hold my master's degree next to any other master's degree, it would be up there with the top quality." (R4)

"I think the courses, particularly those taught within the department, required you to think outside the box." (R5)

"The professors, no matter what course I was in, they looked for ways to challenge you." (R6)

Three participants were split on their perception of program rigor and quality. Each of these participants felt the programs was a high-quality program, however they felt they were not challenged.

"I could've been challenged more because, it came pretty easy for me since I had had the undergrad courses...it was a good mix, the stuff they offered." (R12)

"I got a good mix of theory and professional skills that helped me in my career. As far as rigor was concerned, I wish I would have been pushed more on the research side." (R13)

Only two participants felt the master's degree program they completed was low in rigor in quality.

"They didn't bother setting expectations. Some professors were...wanting to make sure they have the highest reviews in the department...I think that drove a lot of them to be afraid to really hold students to a high level of work." (R14)

"I went through a program that was in flux -- it was not a particularly rigorous program...we were allowed to get away with a lot. The courses offered in the agricultural department were perceptively and discriminately lower in quality and rigor to those that I took in the College of Journalism and Communications." (R18)

Based upon the positive attributes that could help strengthen master's programs and improve the experiences of their graduates (Conrad et al., 1993), study participants were read a series of 12 statements about their perceptions and experiences while completing their master's work. The intent of the items was to help gauge the effectiveness of master's degree programs in agricultural communications. In response to each statement, participants rated each statement on a five-point scale that was weighted from 1 (strongly disagree) to 5 (strongly agree). Results are displayed in Table 18.

Table 18 Participants' perceptions and experiences while completing master's degree (n=20)

		_	artici	Participants Level of	evel o	Ţ		
			Agr	Agreement (F)	t (F)			
(J)	Statement	SA	۷	NS	۵	SD	Mean	SD
ä.	. I had a close working relationship with my academic advisor.	16	4	0	0	0	4.80	0.41
ف	b. Completing my thesis or project requirement was a valuable							
	educational experience. 2	15	4	0	0	0	4.79	0.42
ى	. I received frequent individualized attention from my advisor.	16	-	က	0	0	4.65	0.75
ö	I experienced a supportive learning environment in my home							
	department.	14	2	0	_	0	4.60	0.75
aj	In general, I had a clear understanding of what was expected of me							
	while completing my degree. 3	7	œ	0	_	0	4.45	92.0
ч	l developed a close camaraderie with fellow students. ³	15	2	0	3	0	4.45	1.10
g.	. I was challenged intellectually by my master's degree program.	10	8	1	1	0	4.35	0.81
ح	. Exposure to diversity of backgrounds and opinions was an important							
	part of my master's education.	တ	8	က	0	0	4.30	0.73
·	The agricultural communications master's program was valued in my							
	home department. 3	6	9	4	_	0	4.15	0.93
·÷	In the agricultural communications master's degree program, elective							
	courses could be the most important courses a student takes.	10	3	4	က	0	4.00	1.17
¥	k. I learned from interaction with advanced graduate students in my home							
	dept.	6	2	4	1	1	4.00	1.17
<u>-</u> :	Every agricultural communications master's student should be required							
	to write a thesis.	7	—	7	9	4	2.55	1.19
U	Scale: 5 etronaly agrees 4 agrees 3 not euros 2 disagrees and 4 etronaly disagrees	00100						

¹ Scale: 5, strongly agree; 4, agree; 3, not sure; 2, disagree; and 1, strongly disagree.

² One participant did not complete a thesis or project requirement.

³ Items expressing "supportive department environment" scale (alpha = 0.77).

The statement participants most strongly agreed with was *I had a close* working relationship with my academic advisor. Overall, participants reported having very positive, close working relationships with academic advisors, as sixteen participants strongly agreed with the statement, and four disagreed with the statement. While discussing their working relationships, participants commented on the encouraging and positive demeanors of advisors, as well as the open-door policy advisors provided:

"She was my biggest supporter. She wanted to see me succeed...she has a vested interest in each of her students." (R11)

"He met with me once a week, sent me emails to check on me...always keeping tabs on me, always wanted to know if I was doing okay. He was personable. He was caring. He was supportive, but at the same time, he pushed me." (R13)

"Just a very open-door policy. My advisor was truly a mentor, both on an academic level, as well as a personal level." (R17)

When participants were read the statement *Completing my thesis or* project requirement was a valuable educational experience, participants overwhelmingly agreed, as they felt the thesis or project requirement they completed tied together major concepts learned throughout the master's

program. One participant did not complete a thesis or project requirement, but fifteen other participants strongly agreed and four participants agreed with the statement. These participants felt the thesis or project requirement was an accomplishment of which they were proud. Following are participants' comments on the value this experience provided:

"I learned more from doing the thesis than I did in some of the classes." (R2)

"It really taught me the value of research, and it was something I had a lot of pride in." (R8)

"Until you have the opportunity to conduct an extensive research project, you don't have a clear understanding of a process...the thesis thinking process is extremely important. By writing a thesis, you learn a lot about yourself and what you are capable of." (R11)

Participants were read the statement *I received frequent individualized*attention from my advisor. The majority of participants strongly agreed with
the statement, discussing the weekly meetings they had with their advisors and
the time devoted to their graduate students.

"He was frequently checking up on me and making sure I was on the right track. He was always available if I had questions." (R15)

"He just made it a priority to do that. If he hadn't heard from me, he would always send an email." (R19)

Only three participants were not sure about the statement, because they felt their advisors shared their time fairly amongst all graduates students, not favoring one more than another. Instead, these participants initiated the attention when needed.

"It wouldn't have always stemmed from him...he wasn't a hand holder, but if I went to him, he would make time to meet." (R7)

The next statement the majority of participants agreed with was *I* experienced a supportive learning environment in my home department. Fourteen participants strongly agreed with the statement, and five participants agreed. Only one participant disagreed with the statement because she did not feel that some professors in the department were prepared for the courses they taught and only provided minimal feedback on coursework, if any. However, nineteen other participants praised the support they received from professors, and a few even mentioned the support of department heads and staff.

"We had a good group of grad students there...the faculty was very helpful and friendly, and our department chair really looked out for the grad students." (R1)

"They would bend over backwards to do whatever we needed." (R16)

While one participant agreed she experienced a supportive environment, she felt the agricultural communication program had to contend with other programs in the department. According to the respondent:

"Ag comm is also listed with ag leadership and ag education...there was a bit of competition that I found unhelpful." (R18)

The majority of participants also agreed with the statement *In general, I* had a clear understanding of what was expected of me while completing my degree. One participant did not agree with the statement, as she did not feel she had a clear understanding of the many details that were expected while completing her degree, including the thesis process. Of the eleven participants who strongly agreed, the comments reiterated the fact that the requirements and expectations were clear, and helpful resources were available to them:

"We had a graduate student handbook and pretty much all the answers we needed were in that." (R3)

"Not only my professors, but also the staff that ran it had a great open line of communication, so I always knew what was expected." (R10)

A majority of participants strongly agreed with the statement *I developed* a close camaraderie with fellow students. These participants commented on the strong bond formed with fellow students, many of which indicated they enjoyed these friendships to the current day. These strong bonds were due in part to small departments or a small number of graduates in the program who were going through the same experiences, taking the same classes, and participating in the same activities.

"We were all very close. We did things together. I am still very good friends with all of them today, and we still stay in touch." (R3)

"We all became each other's best friends. You truly became each other's family, and not only did you depend on each other for personal friendships, but you also depended on each other in the classroom." (R17)

"Even with online classes, I was able to still talk to people through message boards, through emails and things like that." (R10)

Three participants disagreed with the statement, as they did not feel they developed a close camaraderie with fellow students. These participants were either generally older than their fellow students or had jobs that consumed their free time.

"I was much older than them and had very different experiences...it just made us very different." (R14)

"There were so few of us, and because I worked full-time...everyone was friendly, but I did not socialize with them outside of class." (R19)

When read the statement *I* was challenged intellectually by my master's degree program, the majority of participants agreed they were intellectually challenged. Of the ten participants who strongly agreed, comments focused on the new information presented to them, such as a theory or different perspective, and also the new way they were challenged to think critically.

"It forced me to think outside of the box...I learned there were other ways to think and other ways to look at problems...the whole process of completing a thesis and working towards that problem definitely stimulated me intellectually." (R4).

However, several of the participants who agreed they were challenged intellectually by their master's degree programs also felt the programs fell short in some areas.

"There were some of the classes that I took that were repetitive to my bachelor's degree." (R16)

"It was challenging, but it wasn't a challenge to me...a lot of master's programs are what you put into them, so you can certainly make it more challenging or less challenging depending on what your goals are in the program." (R19)

Only one participant rated the statement as undecided, because she felt like she could have been challenged more. Another participant disagreed with the statement because she was not challenged by courses within the department.

The majority of participants either strongly agreed with or agreed with the statement *Exposure to diversity of backgrounds and opinions was an important part of my master's education.* Participants reiterated the diversity of backgrounds and opinions provided a mind-expanding experience with new perspectives they had never considered. Respondents stated:

"Just moving out-of-state and moving away from where I've grown up helped me not only realize that there were different ways to do things, but also to appreciate that viewpoint." (R1)

"I had been surrounded by people with similar backgrounds to mine, similar goals...and communication is so broad, you have to be able to consider all of the perspectives." (R20)

However, three respondents indicated being undecided on the statement because they didn't feel that diversity of backgrounds or opinions was a focus of the program. Several respondents who also agreed with the statement also discussed the lack of diversity in their programs. These participants stated:

"For the most part, we all had been somewhat involved in ag, and so I don't know if often we had a huge diversity." (R6)

"That wasn't a focus. If we learned it, we learned it just through natural communication...it just happened, it wasn't forced." (R7)

When read the statement *The agricultural communications master's*program was valued in my home department, 75 percent of the participants either strongly agreed or agreed with the statement. The nine participants who strongly agreed with the statement felt as though the agricultural communications program, along with its students, was highly and equally valued among faculty, staff, and students in the department. Although six of the participants agreed with statement, they also expressed concerns about agricultural communications programs possibly taking a back seat to other programs in the department.

According to two respondents:

"It was valued, it just wasn't valued as much because it was in the Department of Ag Education...the ag education department just seemed to always come first." (R11)

"At that time...their emphasis was education because that was already an established program." (R12)

Four participants were not sure if their master's programs were valued in their home departments, and one participant disagreed with the statement because the program lacked students, faculty, and resources. Participants who were unsure about the perceived value of their master's programs expressed concerns similar to previous participants:

"It was valued by the professors in the ag comm program and the students...it was not valued by the department head and the makeup of the department because they wanted to put all of their attention towards ag leadership." (R7)

Half of the participants strongly agreed with statement *In the agricultural* communications master's degree program, elective courses could be the most important courses a student takes. These participants felt elective coursework was important because students can take courses relevant to their interests and future careers, as well as distinguish their degree from another graduates with the same degree.

"The elective courses were the ones that are now the most beneficial to me and the skills I use the most." (R8)

"Those electives are going to be what allows you to diversify yourself from your peers, and it allowed me to capitalize on areas of interest or areas that I needed to make myself more efficient in...to...make me the best marketable candidate for jobs." (R11)

Four participants were undecided on the value of elective courses, and three participants disagreed with the statement because they felt the core curriculum was an important foundation of courses needed, as well. Another participant expressed concern about students taking electives to fill space in their degree plan instead of selecting meaningful coursework. Two respondents shared these concerns:

"Strengths and weaknesses may differ or specializations may differ, but I still think those core strengths should be the same." (R5)

"They are both equally as important." (R16)

In response to the statement *I learned from interaction with advanced* graduate students in my home department, the majority of participants strongly agreed with or agreed. Participants cited positive experiences with advanced graduate students in their home departments, whether it was in class or receiving advice or help. Sample quotations are as follows:

"In class discussions, they brought a different perspective because they had, in most cases, more work experience." (R5)

"They were useful because they already had those experiences, so they could really help you out and kind of point you in the right direction." (R9)

Four participants were undecided about learning experiences from advanced graduate students, and one student each disagreed and strongly disagreed with the statement. These participants did not have advanced graduate students in the program to interact with, felt as though advanced graduates were too busy to interact, or did not find interaction with some advanced graduate students beneficial. Said one participant:

"There were some that certainly brought valuable experiences to the table, but there were others who were just going straight through...it was much more helpful to hear from those who had the experience rather than those who just kind of were plowing their way through." (R19)

Participants were asked their reaction to the statement *Every agricultural*communications master's student should be required to write a thesis.

Only three participants strongly agreed with or agreed with the statement, as they

felt writing a thesis combined components learned throughout the degree program and served as a self-developing challenge. However, seven participant were undecided as to whether writing a thesis was essential for everyone. These participants felt the thesis would not meet the needs of all students' career goals, although they recognized the value of this activity.

"I wish I had written one...I am now a Ph.D. student, and now I am trying to figure out all this research not having done it before." (R13)

"I think it depends on the individual. For me, it was what I needed to feel like I truly had a master's degree and that I had met all requirements...but to someone else...the thesis component just might not be their thing." (R17)

The other half of participants either disagreed or strongly disagreed that all students should be required to write a thesis. Some participants acknowledged the value of writing a thesis, but most participants largely focused on individual needs and felt that writing a thesis would not benefit the career paths of those with interests outside of academia. Two participants expressed the following sentiments:

"The thesis is geared towards the students that are interested in pursuing a Ph.D. to eventually work in higher ed. Students that want to be practitioners...the thesis will take away [time] to study and actually do the hands-on...it would not be a good use of their time." (R7)

"I don't think that is the right path for everybody, especially if you are not looking at going on and doing a Ph.D." (R15)

Following descriptive analysis of the 12 statements displayed in Table 18, the researcher performed a principal components analysis with orthogonal rotation to look for underlying patterns in the data. A single, three-item scale was developed from this analysis. The three variables were *In general, I had a clear understanding of what was expected of me while completing my degree; I developed a close camaraderie with fellow students;* and, *The ag comm master's program was valued in my home department.* The scale, titled "Supportive Department Environment," produced an acceptable alpha coefficient of 0.77.

The 20 participants were also asked to rate the quality of the master's degree they earned using a scale weighted from one (poor) to five (excellent). The majority of participants rated the quality of their degrees good to excellent, while four participants rated the quality of their degrees in the middle range, as shown in Table 19.

Table 19 Participants' ratings of the quality of their master's degree

		Pe	rceived (Quality		
	Excellent				Poor	Total
	5	4	3	2	1	
N	6	10	4	0	0	20
%	30.0	50.0	20.0	0.0	0.0	100.0

Six participants gave "excellent" ratings to the master's degree they earned. These participants expressed the view that they learned a lot, whether in research, theory, or professional skills. They also commented on the quality of the faculty and advisors. One participant attributed her high rating of the degree to her ability to take the majority of classes online:

"I was able to take my entire degree, other than a few classes, online, so it complemented my learning style." (R10)

Half of the participants rated the quality of their master's degree a four, or good quality. These participants felt the degrees provided them with valuable experiences and knowledge, but some said they wished they would have taken away more from the degree program, whether it was more research knowledge, teaching experience, or Web site development. Some participants also acknowledged the newness of the programs and felt there was room for improvement:

I didn't have teaching experience because I was only a research assistant, and you only stay with one advisor, so you only get to see one thing." (R3)

"There are a lot of things I need to learn about research...I focused on the quantitative side, and I'm kind of interested in the qualitative side." (R4)

I wish I had been pushed a little more to actually do a thesis, and I wish I had been pushed a little more to do some research and theory just because theory is so applicable to practical applications." (R13)

The remaining four participants rated the quality of their master's degree in the middle range, between excellent and poor. Although the participants did find value in their degrees, they were not completely satisfied with the coursework they completed in the programs, nor were they satisfied with the lack of rigor or high expectations within the program.

"There were no ag comm graduate courses for me to take...even now with the Ph.D., I think I have taken one course that was in ag comm, and they expect me to go out and be an ag comm professor." (R2)

"The emerging technology in the communications business, I knew more about that than my instructors did. I felt like I could've gotten more out of it...I took some classes that I knew would have never been relevant to what I wanted to do." (R16)

After rating the quality of the master's degree they earned, participants were asked to rate a hypothetical online master's degree program as compared to the degree that they earned in terms of three factors: (1) convenience, (2) quality, and (3) prestige. Results are displayed in Table 20.

Table 20 Participants' ratings of the online degree as compared to the degree they earned in terms of Convenience, Quality, and Prestige (n=20)

			Particip	Participants expressing (f):	ssing (f):			
တ	Statement	A lot more	A little more	About the same	A little less	A lot less	Mean ¹	SD
ю	. How would you rate earning a degree online as compared to the degree you earned in terms of <i>convenience</i> ?	4	_	4	9	5	2.65	1.46
р.	b. How would you rate earning a degree online as compared to the degree you earned in terms of <i>quality</i>?	0	0	က	6	8	1.75	0.72
ပ်	c. How would you rate earning a degree online as compared to the degree you earned in terms of prestige ?	0	0	7	80	5	2.10	0.79

Scale: 5, a lot more; 4, a little more; 3, about the same; 2, a little less; and 1, a lot less.

When participants were asked to rate the online degree as compared to the degree they earned in terms of convenience, just over half of the participants rated it less positively than the degree they earned; six rated the online degree a little less convenient, and five rated it a lot less convenient to earn than the degree they earned. Of the six participants who rated earning an online degree a little less convenient, two participants felt it would be inconvenient to devote time toward their online coursework as opposed to just attending class. Three of the participants felt nothing prevented them from attending courses, and one participant felt she was not proficient enough with computers to earn an online degree as compared to a traditional degree. Of the five participants who rated the online degree a lot less convenient, three expressed the view that their learning style was not compatible with earning an online degree. These participants also liked the structure of attending traditional classes and the opportunities and experiences presented to them on-campus.

Four participants rated the online degree comparable to the degree they earned in terms of convenience. These four participants felt there were no constraints that kept them from earning a degree through either method, and they also felt both methods would require about the same amount of work.

Five participants rated earning an online degree as more convenient than the degree they earned; one said the online degree would be a little more convenient, and four said it would be a lot more convenient. These participants expressed the view that they would have been able to maintain a job while

earning the degree online, and they also noted that they could have earned the degree from anywhere instead of having to move or commute.

Participants were then asked how they would rate earning a degree online as compared to the degree they earned in terms of quality. A large majority of participants rated earning a degree online as having less quality than the degree they earned; nine participants rated the online degree as having a little less quality, and eight participants rated the online degree as having a lot less quality. These participants indicated that the online degree could lack valuable face-to-face interaction with professors and fellow students during and outside of class. One participant characterized the online degree as having less rigor than the degree she earned, and another participant felt that individuals could not be held accountable for the work they were supposed to put in online. Participants expressed the following views:

"An online degree is just a cop out, an easy way to get master's degrees without actually having to get master's degrees." (R11)

"Part of the quality is the interaction with professors and interaction with other students...that interaction is important." (R14)

"A master of science online is not going to be the same...you don't get the culture of the research end." (R20)

Three participants felt that earning an online degree would offer about the same amount of quality as the degree they earned. These participants felt the degrees would have been similar in scope, each method offering advantages and disadvantages. One of these three participants said she learned equally well via online or traditional methods.

Lastly, participants were asked how they would rate the prestige of earning an online degree compared to the degree they earned. Seven participants rated the prestige of the two degree types to be about the same. Eight participants rated the online degree to be a little less prestigious as compared to the degree they earned, and five participants rated the online degree to be a lot less prestigious than the degree they earned.

Participants who rated the prestige of the degrees to be about the same pointed out that there are challenges in both types of delivery methods. However, one participant pointed out that people do not generally ask questions about specific coursework or specific faculty members -- they just want to know you have the education. Another participant expressed the view that for some people pursuing the degree, it is just a checkmark on the resume. Another participant questioned the prestige of the master's degree:

"I don't know if I consider my master's work necessarily *prestigious*. I think it is so much more common anymore...so, it is largely up to you as to how you use it and what experiences you take from it, whether that is on campus or online." (R15)

Participants who rated the online degree as less prestigious than the degree they earned questioned the potential lack of interactions and experiences that they felt were beneficial in the traditional degree. Several participants voiced concerns about the online degree being easier to complete, offering fewer opportunities to challenge students, less potential for campus involvement, and potentially less program structure to help guide students. Additional opinions expressed by participants about online degrees include the following:

"I just don't think that a completely online degree will ever mirror the kinds of instruction you get by being a traditional college student...you don't have the opportunity for other people to contradict your thoughts or to make you think a different way." (R7)

"An online degree, it is all about your convenience...getting a structured degree on campus, it tells you that you are determined and you can meet deadlines...there is just a level of persistence that comes along with a traditional degree." (R11)

"It isn't as good as the degree I got. I was on the campus, and I was part of the experience. The discipline and the ability to make it in a traditional graduate level program...that speaks better for the degree. Their diplomas should have a little addendum saying 'Got Online.'" (R18)

After having the chance to compare the degree they earned to an online degree, participants were asked if they would have earned their master's degrees online had they been given the opportunity. Eighteen participants responded that they would not have earned their master's degrees online if given the opportunity. Only two participants indicated they would have taken advantage of the online master's degree. These two participants mentioned earning the degree online would have been a match for their learning style and would have allowed them to maintain a higher-paying, full-time job while being in graduate school.

The eighteen participants who would not have utilized the opportunity to earn an online degree indicated not wanting to sacrifice the interaction with professors and fellow students, experience gained by moving away from home, or serving as a research or teaching assistant. Additional concerns about online degrees were expressed as follows:

"The image that is perceived by the professional industry about an online degree...I just would've hated to spend the money on a degree that is solely online and not have it get me as far as a traditional degree." (R11)

"I wanted a well-rounded experience, and I feel like being in the classroom, going to a completely different university with very good faculty sets me apart from any student that would take their entire coursework online." (R17)

"It certainly would not have accomplished my purposes...it wasn't as prestigious. I didn't think you could learn as much or that the quality of what you earned would be as good." (R18)

"The online degree would not have worked for me in terms of making sure that I was able to get into the Ph.D. program I wanted to get into and build up my reputation as a researcher." (R20)

Following descriptive analysis of the three statements displayed in Table 20, the researcher performed an item analysis to assess reliability. Results revealed a high level of inter-correlation between two of the variables: *How would you rate earning a degree online as compared to the degree you earned in terms of quality?*; and, *How would you rate earning a degree online as compared to the degree you earned in terms of prestige?* Cronbach's alpha was used to assess reliability of the two-item scale, resulting in an acceptable alpha coefficient of 0.82.

4.6 Perceptions of Essential Components for the Master's Degree

A major goal identified by the researcher at the outset of the study involved identifying key components of the master's degree in agricultural communications. This research priority led to the following study question:

3. What are graduates' perceptions of the essential components to the master's degree in agricultural communications?

One of the items on the instrument asked participants to comment on whether they had pursued a particular course focus or specialization while completing their master's degrees. Four participants reported no course focus or specialization while completing their master's degrees. Six participants reported their course focus to be in agricultural communications because the degree was offered or housed in an education or other department. The remaining half of the participants indicated having course foci or specializations in the following areas: (1) survey methodology; (2) technology; (3) student services and higher education; (4) public relations and marketing; (5) crisis or risk communications; (6) Web development; (7) photography; and (8) leadership and adult education. These participants reported completing additional coursework within their chosen course focus or specialization.

After discussing their course foci or specializations, participants were asked which coursework they found most valuable while earning their degrees. Participants discussed 38 different courses or coursework areas most beneficial to them. As shown in Table 21, research methods was mentioned most

frequently by eight participants as a valuable course. Writing was the second most frequently mentioned topic (six respondents), followed by crisis and risk communications (four participants). Three participants each also discussed the value in their Adobe Creative Suite courses, the magazine development course, as well as courses in which they had the opportunity to serve as teaching assistants.

Table 21 Participants' perceptions of the most valuable coursework taken while earning their master's degree

Most Valued Coursework	Illustrative Quotes
 Research methods (8) Writing: magazine, news (6) Crisis or risk communication (4) Adobe Creative Suite (3) 	"The theories, I think all of those were
 Magazine development (3) Teaching assistant courses (3) Theory: communication and media (3) Agricultural education core courses (2) Communication core courses (2) Journalism courses (2) 	really interesting, because at that time, I wasn't sure what I would do, and they fit in whatever career path I'd take." (R3)
 11. Leadership (2) 12. Program planning (2) 13. Public relations (2) 14. Statistics (2) 15. Web site development (2) 16. Political science (1) 	"The actual act of TA'inggave me that extra skill. I think having that broad skill set is very important in that you are never limitedyou can do a little bit of everything." (R9)
 17. Adult education (1) 18. Communication campaign course (1) 19. Computer courses (1) 20. E-learning technical course (1) 21. Electronic communication in ag (1) 22. Higher education (1) 23. Interpersonal communications (1) 24. Management (1) 	"Those technical specific types of communication skills that I did not get in my undergraduate degree, those were most important." (R11)
 25. Marketing and advertising (1) 26. Media relations (1) 27. NAMA course (1) 28. Non profit courses (1) 29. Photography (1) 30. Public speaking (1) 	"The ones I found most valuable were the opportunities I had to add to my actual list of skills." (R15)
31. Technology and teaching (1) 32. Theory: agricultural communication (1) 33. Theory: E-learning (1) 34. Theory: adult education (1) 35. Theory: diffusion of innovations (1) 36. Theory of persuasion (1) 37. Thesis hours (1) 38. Video production (1)	"I think all of the classes I took in the College of Journalismthose were very key courses." (R18)

Participants indicated that they valued the advanced skills courses that allowed them to further develop their skill set for the communications workforce, especially those who did not earn their bachelor's degrees in agricultural communications. Participants also valued courses in which they could implement the knowledge and skills they gained throughout their master's coursework. Over half the courses participants found valuable were offered in their home departments. Just under half of the courses mentioned by participants were taken in other departments.

When participants were asked which coursework they found least valuable while earning their degrees, participants discussed a smaller list of 20 different courses or coursework areas they considered less beneficial to them. As shown in Table 22, statistics was mentioned most frequently by four participants as a less valuable course. Advanced computers followed with two participants discussing the classes' repetitive nature of undergraduate computer coursework. One participant completed a research methods course in the College of Journalism and had a bad experience. Another participant taking the international mass communications course did not find the course beneficial because it was offered to both graduates and undergraduates. Other courses mentioned in this category were those that participants perceived as being poorly taught, outdated, or not useful since earning their degrees. Two participants felt that all of their coursework while completing their master's degree was valuable.

Table 22 Participants' perceptions of the least valuable coursework taken while earning their master's degree

Least Valued Coursework	Illustrative Quotes
1. Statistics (4) 2. Advanced computers (2) 3. Leadership (2) 4. Seminar (2) 5. Campaign course (1) 6. Core courses (1) 7. Extension courses (1) 8. Grant writing (1) 9. History of agricultural education (1) 10. International mass communications (1) 11. Innovations of technological change (1) 12. Magazine writing (1) 13. Marketing in the U.S. (1) 14. Research methods, taken in College of Journalism (1) 15. Special problems (1) 16. Teaching in academia (1) 17. Theory, in general (1) 18. Theory: agricultural communication (1) 19. Theory: agricultural education (1) 20. Theory: education (1)	"I think every class we took really had its purpose. I didn't like statistics or research methods, but they were valuable in the end." (R3) "I needed it for my one-time thesisand I've never used statistics again." (R12) "I wasn't going to use themI remember sitting there thinking I am never going to use this." (R13) "Marketing in the U.S. was taught from a [non-U.S. professor]that was pretty uselessbecause he did not know anything about marketing in the United States." (R16) "A lot of the core courses were outdated, and while the department was in the process of updating them, it hadn't been done yet." (R18)

After discussing coursework master's graduates thought most and least valuable, participants were asked if they considered their master's coursework valuable in achieving their career goals. Most participants, 19, felt their master's coursework was valuable in achieving their careers goals. These participants expressed the notion that their master's degree laid the foundation for them to be successful. Several participants currently hold doctoral degrees or are pursuing doctoral degrees and discussed the need for their master's degree coursework

and experiences to make this higher degree a possibility. Likewise, other participants felt they needed the master's degree in order to have the positions they currently hold within the industry, as they still use the knowledge and skills they gained and apply them in their careers:

"It laid the groundwork that helped me excel in my graduate program, in my Ph.D. program." (R1)

"I got everything out of it that I wanted to get, as far as...broadening my scope of knowledge." (R4)

"I had to have a master's to get the job I have now." (R5)

"I couldn't be doing what I'm doing now without it...and just personal fulfillment." (R19)

Only one participant did not feel as though her master's coursework was valuable in achieving her career goals. This participant commented on some coursework presented by professors that she perceived as being poorly taught or made easier for some students who could not meet the expectations set forth for other students. This participant also acknowledged she was pursuing a master's degree in an area that did not fit her actual career goals.

As participants mentioned there was always room for improvement in a master's degree program, the researcher asked participants to identify possible coursework they now wish they would have taken while earning their master's degree. Participants identified 25 different courses or topic areas they would add now, as shown in Table 23.

Table 23 Coursework master's graduates wish they would have taken while earning their master's degree

Additional Coursework Wish List	Illustrative Quotes
Theory: communication (4) agricultural communications (1) marketing (1) public relations (1)	"I think adding a class that was just completely focused on Web sites just because everybody has one." (R8)
 Advanced Web site development (3) Organizational leadership and management (3) Advanced layout and production (2) Business development (2) 	"If more classes would've allowed me to think about how to use media and what theories exist regarding media and its usage, that would have been really great." (R14)
 Professional life course (2) Qualitative research (2) Statistics (2) Advanced campaigns course (1) Advanced photography (1) Advanced research (1) Agricultural communication courses, in general (1) 	"A lot of that kind of assumes unlimited budgetsand then when you get out in the real world, you are struggling withhow many dollars I have to do it with. A little more business background would have been beneficial." (R15)
 13. Crisis and risk communication (1) 14. Different perspective courses (1) 15. Grant writing (1) 16. Higher education courses (1) 17. Verifying facts and fiction (1) 18. International courses (1) 19. Marketing/promotions (1) 20. Natural resources and land 	"You're just thrown in there and learning how to supervise individuals who are older than youthe basics of business management or administrationwould be helpful." (R19)
management courses (1) 21. Professional public speaking (1) 22. Public relations (1) 23. Special problems up-to-date with communications (1) 24. Writing: creative and technical (1) 25. Writing for electronic media (1)	"Something beyond the basic research methods with really having to set up a studygoing a little bit more in-depth and looking at how you do things, or even comparing different types of research." (R20)

Four participants specifically mentioned they wish they would have taken a communication theory course, as well as three other participants each mentioned a different type of theory they wish they had more knowledge in today. Three participants wished they had had more advanced courses in Web development, and three mentioned a course in organizational leadership and management. Two participants would have liked to delve deeper into qualitative research, and several other participants mentioned advanced courses in which they desired more skills, including campaigns, photography, and research. Still other coursework mentioned included "different perspective" courses to gain a perspective outside of agriculture as well as a professional life course focusing on topics often encountered after graduating, such as 401K's, money markets, trading, and insurance.

Of particular interest in this research were participants' perceptions of the amount of online coursework that should be allowed to count toward the master's degree. Participants were asked if they felt that online courses should be allowed to meet none of the course requirements, some of the course requirements, more than half of the course requirements, or all of the course requirements. Results show that four participants felt that all of the required coursework could be taken online; four participants felt that more than half of the required courses could be taken online; and 12 participants felt that some of the require courses could be taken online.

Participants who felt all coursework could be taken online mentioned three reasons for this sentiment. The first reason is that they felt any course taught in

a classroom could be adapted to online education. Second, with good instructors, and a quality, reputable program, they felt that conversion to online delivery should be possible. And last, offering courses online would allow programs to reach a new population of students.

The four participants who felt that more than half of the required courses could be taken online felt there were some courses that would be more valuable in a traditional classroom setting. The remaining half of the participants who felt only some required courses should be offered online did not want students to miss out on the beneficial in-class discussions and face-to-face interactions with professors and fellow students:

"I think you should have to be able to show up. Most jobs...you have to show up to work. I don't see why education should be any different...it is more rigorous with the face-to-face." (R2)

"Interaction with peers, teacher, being in front of people, and having to communicate is extremely important with the degree...you are not going to be able to just sit behind a computer in your professional career." (R11)

"I am just a strong supporter of physically coming together and meeting...it allows for that on-the-spot question and answer, and allows for a lot more flexibility." (R19)

Participants were further asked if they think there should be an underlying structure or core of courses for all master's degrees in agricultural communications. Fifteen participants did think it was a good idea to have an underlying structure or core of courses, and only five participants did not think it necessary to have an underlying structure or core of courses for all master's degree programs in agricultural communications.

The participants who felt there should be an underlying structure or core of courses expressed the view that this arrangement would create a commonality and uniformity among graduates, ensuring employers who hire a graduate with a master's degree in agricultural communications could expect specific knowledge and skills of these graduates. Six of the 15 participants who agreed mentioned the master's degree still needs to have flexibility for students to tailor their degree to their interests after meeting core requirements. Topic areas most commonly recommended for inclusion in the core included: (1) theory; (2) research methods; (3) writing; (4) crisis communication; (5) public speaking, and (6) Web and design skills. According to the participants:

"I can see the benefit of a core...sort of gives them some structure.

But also, I like the flexibility of being able to make it a tailored degree to what your career path is." (R3)

"As an employer, if I am looking at that resume and they say they have a master's in ag communications...I would know exactly that they would have all these classes, and that I could expect that they would learn these certain things." (R4)

"If every university had pretty much a program that was set up along the same lines, people wouldn't be as afraid to move out and go to another college to get their second degree." (R16)

The five participants who did not see the necessity of an underlying structure or core of courses for all master's degrees in agricultural communications thought this initiative may be unrealistic. One participant felt with limited resources and faculty, the university would need to decide on a structure or core on their own, and two other participants commented on the different needs and wants of individuals. Two participants expressed the following views:

"I think all schools can offer a unique aspect to it...I think you'd really miss out on a lot of talents...students would be very limited for what they're coming out of that degree with." (R12)

"Everybody is different...the university and the department needs to decide that on their own because every part of this country, as far as agriculture is concerned, has different needs and wants." (R13)

To further investigate perceptions about the ideal degree, participants were asked to describe the ideal mix of professional skills development versus research and theory that should be required in the master's degree. Results show that half of the participants felt the degree should have a larger focus on professional skill development, as displayed in Table 24.

Table 24 Participants' perceptions of the ideal mix of professional skill development vs. research and theory in the master's degree

Professional Skill	Research and	Participants		
Development	Theory	N	•	
%	%			
20	80	1		
25	75	2		
30	70	1	30.0	
35	65	1		
40	60	1		
50	50	4	20.0	
60	40	3		
65	35	2		
70	30	2	50.0	
75	25	1		
80	20	2		
		20	100.0	

Four participants felt the degree should offer an even mix between professional skills and research and theory, and six participants felt the degree should be more focused on research and theory.

Participants who felt the degree should have a larger focus on professional skill development recognized the importance of theory and research, but were more concerned that individuals pursuing master's degrees had different career goals, and those individuals entering the workforce would benefit more from professional skill development. These participants felt that applying the theories, building a full communications portfolio, and gaining hands-on experience were priorities for agricultural communications master's graduates:

"If you are going to go out in the field and work, you are going to need those professional skills...but I think a good theory base helps you understand and develop those practical applications." (R13)

"While the theory is very important in guiding how you choose to apply your skills, having the skills and the professional knowledge is just crucial in what is a 'doing' profession." (R18)

Participants who felt the degree should offer an even mix of professional skill development and research and theory acknowledged the importance of both aspects. They felt the individual should be left to decide where his or her career path would take them and which aspect would help reach that goal.

Those participants who felt the degree should be focused more on research and theory thought the bachelor's degree should prepare students more on the side of professional skill development. While these participants recognized the importance of professional skill development, they felt the master's degree should take students a step further, whether it is a step up in thinking or a step up in understanding. Two representative opinions are as follows:

"They should leave their bachelor's with skills, and their master's should help implant those more intelligently for a better sense of the grand scheme of things." (R14)

"You really need to be able to think on another level as a graduate student, not just take those basic skills and use them. You need to be able to think ahead on how to use them, how to improve them, and how to train other people to use them." (R20)

When participants were asked what they felt the essential components of an ideal master's degree in agricultural communications should be, responses could be grouped into 20 different essential component areas, as shown in Table 25. Participants mentioned the importance of both advanced skills courses and foundation courses. However, research methods and theory, as well as handson experiences and the thesis were also mentioned often by participants.

Table 25 Essential components of the ideal master's degree

Essential Components

- 1. Advanced skills courses (12)
 - Advertising
 - Audience analysis and adoption
 - · Campaigns and plans
 - Current technology
 - Design and layout
 - Marketing
 - Public relations
 - Photography
 - Social media and networking
 - Web
- 2. Foundation courses (11)
 - Intro to ag comm
 - History of ag comm
 - Ag education and extension
 - · Contemporary ag issues
 - Interpersonal communication
 - · Public health issues
 - Workplace preparation
- 3. Research methods: qualitative and quantitative (7)
- 4. Theory: total (7)
 - agricultural communication
 - communication
 - education
 - persuasiveness and change
- 5. Internship or hands-on experience (6)
- 6. Thesis (6)7. Statistics (5)
- 8. Intensive writing (4)
- 9. Research component and courses (4)
- 10. Business component (3)
- 11. Specialization and interest courses (3)
- 12. Presentation at conference or other (3)
- 13. Project involving research (3)
- 14. Assistantship position (2)
- 15. Out-of-department courses (2)
- 16. Crisis or risk communication (1)
- 17. Industry interactions (1)
- 18. Journal article (1)
- 19. Portfolio (1)
- 20. Work experience required for master's degree program entrance (1)

Illustrative Quotes

"I think doing a thesis is very important because it really differentiated that experience from an undergraduate type of experience because it does require a lot of initiative...requires you to get background on research...it is just a very good overall experience for anyone." (R5)

"Writing a thesis is essential... the thought process behind being a communicator is so important...by writing a thesis, you have to go through a thought process that allows you to become a better thinker and planner." (R11)

"Communication is changing constantly...professors really need to stay on top of what is changing and teach those classes accordingly...keep the courses up-to-date." (R13)

"I can't imagine that we are graduating people who are going to have a masters that can't give a presentation about some research...whether they do a thesis or not, they should be able to present research, answer questions, and be analytical." (R14)

"Any way to give students hands-on learning time in class is valuable...any time they can ask students to draw on their experience or get creative on their own is certainly a good thing." (R19)

"It is a big to at least take a course or two outside the home department so that you really have an understanding of how somebody from another major or another perspective thinks." (R20)

4.7 Participants' Advice and Recommendations for Program Enhancement

One of the goals of the research was to offer advice and suggestions to agricultural communications faculty to help improve master's degree programs in the future. Accordingly, the final research question posed by the research is as follows:

4. What advice or recommendations do graduates have for updating or enhancing the degree?

A final series of in-depth, open-ended questions was posed to study participants to collect important parting thoughts and perceptions about master's degree programs in agricultural communications. Thus, participants were asked if the university or home department could have done anything differently to enhance the educational value of their master's degree. Five participants did not think there was anything their university or home department could do differently to enhance the degree's value. Fifteen participants thought there were things their university or home department could have done differently to enhance the educational value of their master's degree. The five participants who could not think of anything their university or home department could have done differently voiced appreciation for the opportunities they were provided.

Of the fifteen participants who offered suggestions for improvement, three participants suggested that departments offer a degree specifically in agricultural communication instead of offering the degree in agricultural education. Other participants offered the following suggestions for improvement: offering graduate

students different types of experiences across the college and department, as well as extracurricular activities; expanding small instructional staffs with professors who have industry experience; evaluating the tenure policies so professors must remain productive even after receiving tenure; pushing graduate students harder on the research side; offering graduate students a more focused degree plan; and, making the thesis mandatory to benefit everyone involved.

Four participants suggested their departments offer more flexibility for students to pursue interests, offer more courses, and allow for collaboration outside of the department. Sample participant quotations are as follows:

"There was not a lot of staff members...between us and the undergrads, there wasn't enough time for everyone...at times, we kind of got pushed to the back." (R6)

"It could have been perhaps tailored to my particular career path and interests more, to have a little bit more latitude would have been more valuable to me...and there should be the opportunity to get exposure to other departments." (R15)

Follow-up questions were posed to ask participants what things their university or home department did especially well while they were earning their master's degrees. Common themes emerging from responses focus on (1) the positive environment experienced, such as an open-door policy and family-feel of

the department; or, (2) the advisors and faculty members, who were caring, as well as valuable resources throughout the graduate experience. Illustrative quotes from all participants are displayed in Table 26.

Table 26 Illustrative quotes of participants regarding things done especially well by their university or home department when earning their master's degree

	Illustrative Quotes
R1	"My advisor was a wonderful advisor."
R2	"They are definitely there for the studentsand they do a 'research day' in Mayyou get to see what other people are working on in the department."
R3	"Researchvery, very well, and allowing us to sort of find our own path, work on our own research that we want to do."
R4	"I think that the advising was great and the relationships instilled with the faculty were greatthey did a great job in making it seem like one big family where we were all working together."
R5	"I really enjoyed the bulk of the courses I tookthe students interacted with each other very well, and I think my department does a nice job of communicating with alumni. I think they genuinely cared."
R6	"They did a good job of making you feel you were a professional, and that your research and your coursework was going to make a difference, that your research was unique or special, and you could do a great job."
R7	"It was flexible, and it really allowed the student to get out of the program what they put inif you wanted to skate by easy, you could skate by pretty easy."
R8	"We have excellent faculty guidance. Our advisors really got to know us, and they were always there to help. While it was still formal, it was very laid back."
R9	"The people there make you feel so specialduring the recruitment process, I felt like I was the only person on campus, and they really excel at making students feel welcomed, that they are a value to the departmentthey did that throughout my entire master's degree program."

Table 26 (continued)

R10	"No matter what professor I went to ask questions, all of them seemed to have a pretty good working knowledge of each other's research and each other's classes so that they could compare courseworkthey wanted me to be successful."
R11	"They were compassionate people who cared about your futurethey just wanted to see me succeed as much as I did, so I had constant cheerleaders behind me, promoting me, helping meconstantly picking me up when I fell. The relationships were top notch, and while they were very professional, they made my degree plan tailored to fit me."
R12	"There is a very one-on-one aspect that we have."
R13	"They did a very good job of treating us like family and support us to the point that we turned around and treated each other the same waywe were there to help each other."
R14	"They did a wonderful job of creating kind of a home for students, a place where they could feel welcomed and cared about. They did a tremendous job of trying to help students create programs that were individualized for them. They did a good jobcommunicating so that they each knew what the other was teaching and could try to complement each other."
R15	"They are immensely interested in the studentsyou always knew that they had your best interest at heart."
R16	"Complete open-door policyalways supported the students."
R17	"They paid really good attention to their studentstheir academic needs, as well as their personal needs. The faculty was very much connected to the industrythey were very well-known on an academia level."
R18	"They did require a lot of hands-onthey very much encouraged involvement in student organizations like ACT."
R19	"Communicating exactly what needed to be done before you could graduatehere is what you have to accomplish. The home department was very good about getting back quickly with questions."
R20	"The expertise that was available on the skills-side, whether you took a class or just needed help with something elsethat is one of the biggest strengths."

Participants were asked if they thought there was a demand within the industry for people to pursue the master's degree in agricultural communications. Twelve participants felt there was an industry demand; six participants did not think there was a demand; and two participants did not know. The latter two participants explained their response on the basis of unfamiliarity with the industry. However, one of these participants felt there was a demand for trained faculty members; the other participant believed that employers realize that hiring a person with a master's degree does not necessarily make the person more skilled.

Participants who did feel there was an industry demand for agricultural communications master's graduates felt that the degree distinguishes individuals from the competition and makes them more marketable. These participants also felt the degree better prepares individuals to handle a variety of agricultural issues versus a general, liberal arts graduate who would not have the science or agriculture background. Several participants also cited the industry need to handle the wide range of food and agricultural issues that arise constantly. Another participant believed that the industry is beginning to recognize the need for research in the industry, while another participant believed the ability to understand research and process information was valuable when entering the industry. Sample participant responses are as follows:

"Having that master's degree helps set you above the competition.

It demonstrates that you are passionate about agricultural communications, and that you have taken the effort and time to get an advanced degree." (R1)

"Ag comm...can be used in a general communications industry, as well. That just makes you more marketable because you do have that diversity to work in an agricultural field, also...it makes your employer realize that you are that much more dedicated to the task at hand and that you have the ability to handle more difficult workloads." (R10)

"As we become more of a competitive economy, industry, and nation, there is a need for ag communicators. We are now to a point where we have to market what we are selling, what we're servicing, what we're promoting...people have more options than ever, so...having individuals out there that understand agriculture and understand communications is a rare commodity that businesses all across our nation need." (R11)

The six participants who did not think there was an industry demand for master's graduates in agricultural communications felt that the degree may overqualify a person who is not planning to return to academia, hold a government

position, own their own business, or seek a company promotion. While these participants saw value in the master's degree in agricultural communications and feel it is becoming increasingly popular to pursue a master's degree, they perceived that demand for the degree was limited to certain settings, such as teaching. One participant felt that experience with an agricultural company was more valuable than pursuing a graduate degree. Following are sample participant responses:

"There is a demand to have trained faculty members that can teach more students...but I don't necessarily know that you would have to have a master's to work for an industry and just do their communications work." (R5)

"The master's degree is more for individual goal than career goal, unless you want to go into teaching...any time someone wants to further their education, anyone would support that, but they...aren't demanding that, but it is supported and encouraged." (R19)

After discussing industry demand for the master's degree in agricultural communications, participants were asked to comment on whether employers valued employees or potential employees earning the degree. Eighteen participants believed that employers value the master's degree in agricultural communications, while two participants did not think employers valued the

degree. Of these two participants, one did not feel she knew the industry well enough to comment, but questioned whether employers may be disappointed when they find out the person they hired with a master's degree does not necessarily have more communication skills. The other participant did not feel that employers looked at the number of degrees, so having a master's degree on your resume would not ensure a position.

The eighteen participants believed that employers valued the master's degree in agricultural communication said this was because master's graduates are more developed, critical thinkers who have more skill-set knowledge, as well as more knowledge about the industry and agriculture. Several participants felt employers would value the exposure to different perspectives and advanced experiences that master's graduates could bring to the job, and two other participants felt that employers who hired master's graduates were impressed with them for taking the extra step to be trained, skilled, and competent:

"It is an added experience...when I took the job I have now, it wasn't required to have a master's degree, but my employer looked at that as added experience and more things that I could bring to the table." (R6)

"It is not as much about how much you know, but how teachable you are. Having a master's degree proves that you are teachable...open to different ideas...they would really look strongly at that." (R16)

However, several participants who felt that employers valued employees or potential employees with a master's degree in agricultural communications voiced concerns that employers and others within the industry may not know what the degree actually entails. One participant felt like smaller businesses more closely affiliated with the profession would value the degree, but did not think that larger corporations would care that the degree was specialized in agriculture. Several other participants expressed their concerns as follows:

"A lot of times, people don't know what the degree is. It is valued because it is a master's degree. I don't know if it is valued because of what it is." (R2)

I think they may see it on paper and laugh...it is just not common right now, so not everyone may know that the degree even exists."

(R7)

"When they do learn about the program and they do learn what it's about, I think that they value it and understand it and would be very supportive." (R13)

Participants were further asked if they thought the master's degree in agricultural communications was needed for advancement within the field. Half of the participants responded that the master's degree was needed for advancement; five participants did not think the master's degree was needed for advancement; four participants felt that it depended on the field; and one participant did not know.

The ten participants who felt the degree was needed for advancement said that gaining more education would be helpful in moving up and would distinguish a person from others. One participant pointed out that agricultural communicators are essential to educate others, and a master's degree would help them do so. Another participant felt the degree would be viewed very positively unless a person had many years of experience. Said one participant:

"If you want to go up higher into a position, you are probably going to be better off if you have one because the people you are going up against will have one. And it is going to set you apart from somebody who doesn't." (R3)

The five participants who did not feel the master's degree in agricultural communications was needed for advancement within the field acknowledged the value of the degree. However, these participants felt that experience and skills were the key factors in advancement. One participant felt that employers would promote the person who could best perform the job, regardless of whether they hold a graduate degree. According to one participant:

"Degrees get you in the door...once you are in the door, there are very few industries that are built so that you automatically get advancement if you have a certain degree...in most industries, you advance because of what you do, not because of the education that you have." (R14)

The four participants who said it depended on the field as to whether the master's degree was needed for advancement felt that the master's degree would be valuable in advancing in some positions, but in other positions the experiences are more valuable.

Because the participants had all completed master's degrees in agricultural communications, the researcher challenged the participants to define what it means to be a *master* of agricultural communications. Most participants had not been challenged to define their degrees, and some initially found the question humorous. However, all participants ultimately provided a definition of

what it means to be a master of agricultural communications. Results are displayed in Table 27.

Table 27 Illustrative quotes for participants' perceptions of what it means to be a master of agricultural communications

	Illustrative Quotes
R1	"I get the title <i>master</i> . It is a personal accomplishment to have that degree. But beyond that, it demonstrates that you have an increased understanding and appreciation for the issues facing agriculture. That may be understanding that there are communication theories that could be applied to different contextual situations, as well as an appreciation of the research that may be necessary to help solve some of those issues."
R2	"I have no idea. It means that I have a master's in science, and I am really proud that I got the science part of it."
R3	"You have a good grasp of the field of ag communications. You not only understand the skills that are needed to communicate agriculture, but you understand why you do what you do when you do it. You are a step above just knowing those skills. You have the clear ability to freeze and then process every component of your job, every component of communicating."
R4	"It means that you have the basic skills that you need, but then in addition, you might have more advanced skills in a particular area of your specializationyou can use those theories to back up your knowledgeit makes you better able to explain your work and justify it to others."
R5	"It means you have an advanced skill set in that area. it doesn't mean that you are the world-renowned expertbut it does advance your training in that particular area, a notch above where it was for an undergraduate degree."
R6	"You understand communications a little bit better than just a person who would've gotten a bachelor's, whether that is theory or methods of communication."
R7	"It means that you understand everything that goes into the pot to be a good communicator, and that is everything from the technical skills to the theory to the implementation and wrapping it all together. I even think there is an education component to being a masterthrough your communicating, you are somehow educating someone."

Table 27 (continued)

R8	"It means that not only do you have your basic communications and agricultural skills, but you also have a very advanced in-depth knowledge. Having a master's degree, too, also shows that you are not afraid of hard work, and you are willing to take on the challenge."
R9	"It is an ongoing process. I think being a master of ag communications tells you that this person has more information about it and it continuing to learn more about it, because I don't think that the process ever really ends."
R10	"You have the market edge. You have the leading edge. You have the knowledge above and beyond."
R11	"It means that you have the skill set that I know will allow you to get the job done as a communicator. Being a written communicator, a verbal communicator, a creative individualit means that you have the skill set to effectively transfer an image, a persona, of a product or industry for your service that will be effective and efficient and lead to higher profit margins."
R12	"It's that you went above and beyond to study a little bit more about it, and you know how to go that extra mile. You can take it a step further. You can either analyze it, research it, write about it, and talk about it."
R13	"A Master of Agricultural Communications understands the industry that they are in and knows the effective way and had done their research within their industry and within their organization. They are not afraid to get out there and talk to those publicsa jack of all trades. Somebody reliable and is not afraid of hard work."
R14	"It means that you understand the industries of both agriculture and journalistic communication well enough to implement tools smartly. You know how people think, why people think. You know theories around how to persuade people, how to change minds. You understand all of that so you can apply the tools of the trade as a master."
R15	"It is an opportunity to learn and learn how to learnit trained me how to go about finding information and how to go about disseminating that information andapply that to just about any situation. You have a responsibility to help educate our consumers of our agricultural productsand we have a resistibility to communicate to our producers that there is a gap between their viewing of the world and the consumers viewing of the world."
R16	"A master of agricultural communications should be able to model knowledgeably and disseminate information on any agricultural topic asked about."

Table 27 (continued)

R17	"It means that you are an advocate for an industry that is unlike any other. You are a well-rounded individual that can communicate through various mediums. It is someone who is confident and capable and that can teach others about the industry that they are truly passionate about."
R18	"It means that you have completed, ideally, a rigorous and well-rounded program intended to generate well-educated, well-rounded and new professionals with quality thinking."
R19	"It's being able to access and communicate and put into common people terms what's happening in contemporary ag issues. It is being able to stand up for ag issues, to educate people on ag issuesjust having that appreciation for the fundamentals of a food and fiber systemhaving the knowledge of where it all came from, the history of it, then justeducation and communicate: farm gate to dinner plate."
R20	"Having that general skill set and being able to apply itreally thinking ahead on how you can improve that and how you can use that skill set to make a difference in your joball those different skills really play into the face of agricultureand being able to really look at the multiple perspectivesyou have to be able to think beyond your own opinions."

Generally, participants' responses could be grouped into four broad themes that collectively define a master of agricultural communications:

- a person who can properly manage agricultural issues;
 (R1, R3, R16, R17, R19, R20)
- a person who pursued the degree for personal fulfillment or accomplishment beyond the bachelor's degree;

(R2, R4, R5, R6, R9, R10, R12, R18)

- a person who is not afraid of hard work and can get the job done;
 (R8, R11, R13)
- a person who is educating or changing the minds of consumers and other people. (R7, R14, R15)

After defining what it means to be a master of agricultural communications, participants were asked if they in fact considered themselves a master of agricultural communications. Thirteen participants said they did consider themselves masters of agricultural communications, and seven did not.

The thirteen participants who considered themselves masters identified many reasons. Participants indicated considered themselves masters not only because of their advanced skills, knowledge and experience, but they also because they feel they are continuously striving to learn and improve their skills, knowledge, and experiences. Some participants indicated they could answer or find the answer to any agriculture-related question, and also use the research they conducted to apply and justify their work. Three other participants felt they were masters in agricultural communications because they held several degrees in the field and helped future agricultural communicators on a daily basis.

Sample participant quotations are as follows:

"Not only do I have the degree, but I have the experience and the desire more than anything to be in the market and continuously wanting to advance my knowledge." (R10)

"I am constantly learning...I don't know it all, and I never will. I will continue to increase my caliber of mastery. If you enjoy what you do, you can be a master of anything because it comes easy to you...and I can definitely say that I do that." (R17)

"I do have that skill set, and I can help students...grow personally and professionally...I've used every bit of what I have gone through in all my graduate degrees." (R20)

The seven participants who did not consider themselves masters of agricultural communications discussed several reasons. These participants felt their master's degrees have been helpful in helping preparing them for situations they have encountered; however, they felt they were continuously learning and working to become a master. Several participants did not feel they had enough industry or agricultural knowledge to consider themselves masters. One participant had not worked in the field of agricultural communications in nine years and felt disconnected from the industry; another participant did not feel like a master because she lacked coursework in agricultural communications.

According to two participants:

"I would think that I am continuously working to become a master...I would like to say I am at the top of my game right now, so based on the career that I have and the job title...I am probably viewed as a master...however, personally, I hope to continuously learn and build and become a master." (R11)

"I am a practicer of it...I think we are all still learning...we can all be good at some portion of it. It becomes challenging in keeping up with all of the advancements...so I think what keeps you from being a master is that you have to constantly be learning and relearning how to actually execute it." (R15)

Lastly, participants were asked to provide one piece of advice for an advisors or faculty members trying to build or improve their master's degree programs. After compiling responses, 13 different pieces of advice were offered by participants to improve master's degree programs, as illustrated in Table 28.

Table 28 Participants' advice for building or improving master's degree programs

Advice

- 1. Listen to and get to know the students (5)
- 2. Define the program's foundations and reasons to exist (2)
- 3. Provide practical, hands-on experiences (2)
- 4. Utilize industry professionals (2)
- 5. Add a social marketing component
- 6. Be flexible to keep pace with changing times and changing student needs and interests
- 7. Challenge students to be curious
- 8. Maintain classroom coursework
- 9. Avoid over-specialization so the program can offer variety
- 10. Enlist the help of former and prospective students to provide feedback and expectations
- 11. Recruit diverse students into the program
- 12. Stay current with communication trends
- 13. Take stock of program needs and fill the gaps

The most frequently suggested piece of advice among participants involved listening to the students. Two participants suggested master's programs define their foundations and reasons to exist. Other participants felt classroom coursework was beneficial to programs, as well as getting to know the students and keeping current on communications trends. Several illustrative quotes from participants further elaborate on their advice:

"Take a feel of the needs...and by that, talking to people...know what are the demands out there. Where is the gap between what is being offered and what should be offered, and then how can your program fill that gap?" (R1)

"Make sure that the students who are admitted are not all necessarily from the same background or from the same university or from the same degree program...the diversity of the students that are admitted to the program brings a lot of value." (R5)

"Do not stray away from the classroom coursework. While online education is the newest, latest, greatest thing...it means a lot more to know that I am hiring someone who has trained, that they had peer competition, peer evaluation, and one-on-one in the classroom rather than just one-on-one with the computer." (R11)

"Figure out why you need to exist. With so many concerns raised over the past...years that journalism programs already exist, why do we need a program so focused...advisors within the field must be able to answer the question of why it is necessary." (R14)

"Teach your students to be infinitely curious. There is always more to know, and you can continue learning and asking questions well after you receive the degree." (R18)

"Offer a variety of classes focused on the hands on experience and real-world application. That is what students experience once they graduate...they need to see what they're learning in action." (R19)

CHAPTER 5. DISCUSSION AND CONCLUSIONS

5.1 Introduction

An overview of this research endeavor is presented in this chapter.

Topics included within this chapter include a discussion of the study conclusions, research limitations, and implications for future research endeavors.

More than a decade ago, concerns were voiced over the lack of research on graduate programs in agricultural communications and, specifically, whether various stakeholder groups felt the master's degree was essential to prepare individuals for employment in this specialized field (Boone, Paulson & Barrick, 1993). It is necessary for agricultural communications faculty to understand more about the views, preferences and experiences of stakeholders who will hire program graduates. Program stakeholders play a potentially pivotal role in agricultural communications education if they are willing to collaborate with universities to help strengthen curricula as well as recommend the degree to others. This research effort assessed the perceived value and effectiveness of a master's degree in agricultural communications as expressed by individuals who earned the degree since 1997.

The results identify the perceptions and expectations of this stakeholder group to help assess and develop curricula that meet the needs of students and

industry. As a part of the study, master's graduates from six institutions were asked to reflect upon their graduate experience, causing them to consider the effectiveness of the various graduate programs in preparing individuals for their career goals. Through this process, the study participants were also asked to recommend potential areas for program improvement. Results from this research provide needed information to faculty members in the field of agricultural communications as the study participants collectively represent all of the key stakeholder groups in agricultural communications: industry, academia, students, and alumni.

This study was designed to answer the following research questions:

- 1. How do agricultural communications master's graduates describe their academic experience in terms of career and professional preparation?
- 2. What are graduates' perceptions of the effectiveness of the degree program from which they graduated?
- 3. What are graduates' perceptions of the essential components of the master's degree in agricultural communications?
- 4. What advice or recommendations do graduates have for updating or enhancing the degree?

5.2 Summary of Findings

The results of twenty in-depth participant interviews are discussed in this section. The summary of participants' demographic and occupational characteristics is provided, followed by a summary of results for each guiding research question.

In-depth interviews were conducted with 20 individuals who received a master's degree in agricultural communications or in agricultural education with an emphasis or specialization in agricultural communications from the years 1997 to 2006. This particular population was chosen due to its experiences gained after completing the degree. In addition, the sampling time frame of ten years allowed for a widened selection of master's graduates, as the field remains rather small. The six institutions represented in this study currently offer a master's degree in Agricultural Communications or a master's degree in Agricultural Education with an emphasis or specialization in agricultural communications.

The majority of participants earned their degrees in more recent years of the study period. For over half of the participants, the master's degree was pursued as a terminal degree, while a significant minority had completed or indicated plans to complete the doctoral degree. The large majority of participants has spent only a few years in their current job positions. Collectively, the group maintains membership in a wide variety of professional communications organizations.

Research question one asked: How do agricultural communications master's graduates describe their academic experience in terms of career and professional preparation? Findings from this study suggest that participants were very positive overall about their academic experience in terms of preparation for careers. About one-third of the participants felt they had received an even mix of professional skill development and research and theory in their degree programs, and one-third of the participants felt their degrees were more research-oriented. The professional skills utilized by participants in their current job positions far outweighed the research expertise utilized. Professional skills that were heavily utilized by participants included writing, Web site development, and use of Adobe Creative Suite graphic design software. Research expertise utilized most frequently among participants included research methodology, use of literature reviews, and application of theory. Responses from the majority of participants suggest their master's degrees and bachelor's degrees were complementary in terms of the education experience and career preparation. Overall, participants felt their master's degrees had indeed served the purposes they intended.

Research question two asked: What are graduates' perceptions of the effectiveness of the degree program from which they graduated? The results from participants' responses indicate that most participants felt they had completed a rigorous, quality program. Participants who positively discussed rigor and quality frequently cited such aspects as having good professors, completing relevant coursework, and completing a thesis. Seventy-five percent

of the participants indicated having written a thesis, and they spoke highly of the experience. The topics addressed in participants' theses tended to reflect the research foci of participants' major advisors and included a wide range of topics in agriculture and mass communications. Despite the positive sentiments expressed about the thesis experience, half of the participants did not feel that all master's students in agricultural communications should be required to write a thesis.

Overall, graduates also spoke highly of their graduate experiences outside of the classroom. Responses from the positive attribute statements indicate that participants enjoyed a supportive department environment in which they received clear expectations of what was expected, developed close camaraderie with fellow students, and felt that significant value was placed on the degree program in the home department.

Research question three asked: What are graduates' perceptions of the essential components of the master's degree in agricultural communications? Responses indicate that participants generally felt their coursework was valuable in achieving their career goals. Participants valued advanced skills courses that allowed them to further develop their skill set, as well as courses in which they could implement the knowledge and skills gained. Coursework most valued by participants included research methods and writing, followed by crisis communications and use of the Adobe Creative Suite software. Participants indicated a desire to have taken more theory courses while earning

their master's degree, along with more advanced courses in Web site development.

A majority of participants recognized the importance of core coursework, or an underlying structure in the master's degree, across programs. However, they cautioned that such a degree structure must still allow flexibility to allow individuals to tailor the degree to their interests after meeting core requirements. Participants felt such a structure would create a commonality and uniformity among graduates.

When considering a distance education degree, a little more than half of the participants felt that some of the required courses for a master's degree could be taken online. However, regarding online delivery of coursework, slightly more than half of participants did not feel the master's degree in agricultural communications should be offered solely via distance education. Participants cited a number of disadvantages of earning an online master's degree; the perceived lack of opportunities for face-to-face interaction was seen as the biggest disadvantage. Just over half of the participants rated the online degree less positively than the degree they earned in terms of convenience. For these participants, online delivery methods were not compatible with or did not fit their learning style, were considered more inconvenient than simply attending class, or lacked structure desired by students as compared to a traditional degree. A large majority of participants also rated earning a degree online as having less quality than the degree they earned because the online degree could lack valuable face-to-face interaction. Slightly more than half of participants rated the

online degree to be less prestigious as compared to the degree they earned.

Participants again cited a potential lack of beneficial interaction, reduced potential for campus involvement, and potentially less program structure to help guide students, for example.

Half of the participants felt the *ideal* master's degree should have a larger focus on professional skill development than theory and research. While participants recognized the importance of theory and research, they felt individuals entering the workforce would benefit more from development of practical skills and expertise needed in the professional communications workplace. Nonetheless, about one-third of the participants included research methods and theory, as well as hands-on experiences and the thesis, as essential components of the ideal master's degree.

The final research questions asked: What advice or recommendations do graduates have for updating or enhancing the degree? While participants generally felt their home departments provided a positive learning environment, seventy-five percent of participants offered suggestions for improvement.

Thirteen different areas of advice were recommended by participants for enhancement of the degree, such as listening to and getting to know the students and keeping faculty current with communication trends. Several participants also suggested expanding the currently small instructional staffs devoted to agricultural communications and offering a degree specifically in agricultural communications rather than as a track or emphasis of the agricultural education degree.

Just over half of participants felt there was a demand within the industry for individuals to pursue the master's degree in agricultural communications because it distinguishes individuals from the competition. These participants believed employers valued the master's degree in agricultural communications because master's graduates were more well-rounded individuals as a result of having completed the degree. Half of the participants also felt the degree was needed for advancement within the field, particularly for those with fewer years of experience. The minority of participants who felt there was little if any industry demand still saw value in the master's degree, but felt this demand was limited to certain specialized settings, such as academia.

Generally, participants defined a *master* of agricultural communications as a person who can properly mange agricultural issues, is always learning, not afraid of hard work, and who is in the business of educating consumers and others. Just over half of the participants considered themselves masters of agricultural communications because of their advanced skills, specialized knowledge and experience, and also because of their ongoing commitment to learn and improve their communications craft.

5.3 Discussion and Recommendations

Findings from this study will be instrumental for faculty members at institutions to evaluate and enhance master's education in the specialized field of agricultural communications. An implied goal of this research was to provide key

input from alumni stakeholders who are intimately familiar with this degree and the institutions that offer it. While this work does not by itself provide adequate information to develop curricula in this field, it does provide an empirical foundation and platform for future discussion among academicians and other key stakeholders.

The methodology utilized in this study proved useful in soliciting candid perceptions of the participants. If participants were asked a question to which they had a controversial opinion, they had an opportunity to request reassurance of their anonymity with the researcher before proceeding with their statements. Many of the participants took advantage of this opportunity. The researcher's impression was that participants did feel comfortable in discussing the subject matter, providing their opinions and offering candid criticism when they felt it was warranted.

The interview methodology employed in this research also allowed participants to request clarification of questionnaire items and terms, when necessary. Finally, the methodology allowed the researcher to ask follow-up questions, when appropriate, and to request clarification and elaboration as needed. The researcher found that the order in which questions were asked was indeed important. After certain terms were used by the interviewer, participants tended to use the terms in their responses throughout the remainder of the interviews.

An observation that emerges from the review of literature guiding this research is that the master's degree dates back to well before the 20th century.

While the volume of literature is challenging to analyze, it offers much valuable knowledge to current faculty who offer graduate programs. Agricultural communications faculty can learn much about the special issues facing master's education by surveying the classic and current higher education literature. Much of this literature tends to receive little or no attention in most analyses and published research on master's education in agricultural communications and should be utilized in subsequent research.

In terms of institutional participation, only six universities could be identified as offering a master's degree option in agricultural communications during the specified study period of 1997 to 2006. This number is well below half of the number of undergraduate agricultural communications programs offered by institutions across the nation. This seems a surprisingly low number of graduate-degree-granting institutions, even for a relatively small field such as agricultural communications.

In the course of this study, the researcher found that graduate studies chairs at each institution were more than willing to help recruit their alumni to participate in the study. However, some universities appeared to have difficulty in identifying their own master's graduates in agricultural communications and often appeared not to keep organized records of their graduates. Such difficulties may result from the overall small number of faculty associated with the programs, or from the fact that many of the master's programs are actually tracks or emphasis areas within larger degrees, which can complicate identification of particular

graduates. In any case, it appears that agricultural communications programs would benefit from more careful recordkeeping and tracking of alumni.

In identifying potential institutions offering master's degree options in agricultural communications, the researcher found little uniformity in degree terminology or home department names among institutions. While study participants sometimes reported earning a master's degree in "agricultural communications," very few institutions offer such a specific degree title. It is not clear whether participants know the actual name of the degree they earned or the actual name of their home department. Most institutions offer coursework for this degree in combined departments with various names; most do not offer a degree specifically in agricultural communications. It should be noted that agricultural communications programs are small and relatively new and do not have departmental or degree status. While perhaps unavoidable, the situation poses challenges in program visibility for prospective students, and some measures might be taken to help ameliorate the situation. Institutions offering master's education in agricultural communications should consider updating their Web sites so that programs are more visible and there is no confusion as to the degree offered. Those institutions that offer master's education in agricultural communications should also encourage faculty to become active members of academic and scholarly organizations that support this fledgling field, such as the American Association for Agricultural Education (AAAE) or the Association for Communication Excellence (ACE).

While study participants provided many suggestions that should be considered in enhancing master's programs nationally, they represent but one important stakeholder group. Because agricultural communications programs are often located in departments of agricultural education or alongside other larger programs (Tucker, Whaley, & Cano, 2003; Lockaby & Vernon, 1998), colleagues from other fields must be involved in strategic planning for graduate education in agricultural communications. Such collaborations hold the potential to strengthen curricula and research programs in agricultural communications, provided that agricultural communications faculty can identify and maintain an academic niche and continue to provide specialized instruction in some of the key areas and fields identified in the current research.

In terms of degree content, results reported in this study revealed that the master's degree served as the terminal degree for over half of the research participants, although a significant minority expressed intentions to pursue doctoral degrees or reported already having done so. This finding illustrates the different needs and expectations of individuals who pursue master's degrees in agricultural communications. While some may characterize the degree as a "steppingstone" for additional graduate work, others cite the need for practical experiences and professional skills needed in the communication workplace. Not surprisingly, participants held widely different views on the ideal mix of professional skill development and research and theory to be included in the master's degree. When describing the mix in their master's degree, slightly less than half of the participants felt they had an even mix of both, and slightly less

than half of the participants felt their master's degree was more research oriented. While they recognized the importance of research, they recommended an *ideal* master's degree involve more professional skills than research. The finding is not surprising considering the heavy traditional emphasis on communication skills training that typifies the agricultural communications bachelor's degree. However, it is important to note that participants acknowledged the value of research skills, and felt they benefited from exposure to them. This finding supports the argument found in the literature that research skills impart essential critical thinking and problem-solving skills needed as much by master's students as by those seeking doctoral degrees (Huber & Savage, 2009; Rikli, 2009).

The majority of participants felt they completed a rigorous, quality graduate program, especially after experiences such as completing a thesis.

This finding is supported by previous research (Shelton, Ahern, Piirto, & England, 2006), which also concluded that respondents felt the educational value and challenge of writing a thesis was significantly greater than for those who completed projects or internships. Half of the participants rated the quality of their master's degree as being high in quality, but expressed regret at not having taken away more from the degree program. While half of the participants did not feel all master's students in agricultural communications should be required to write a thesis, the experience was highly valued, which possibly could have filled the void where participants felt they wanted more. The current literature suggests that thesis requirements vary by institution and there is no uniform standard that

governs such requirements. Graduate faculty need to engage in more discussion about the thesis and its place in the graduate curriculum. While some institutions might choose to require this experience, others may prefer more flexibility to allow students to pursue advanced skills or other creative projects. Professional organizations such as ACE represent an ideal forum to discuss the role of the thesis in agricultural communications master's degrees, including common characteristics, needed research areas, and alternatives to the thesis that still allow for rigor and the completion of creative scholarly work.

While study participants described their degree programs in different ways and voiced different expectations for the degree, results from the positive attributes statements show overwhelming positive feedback about their graduate experiences. A little more than half of participants emphasized the importance of elective coursework, allowing students to tailor programs to meet their needs and interests. However, graduates pursuing master's degrees consider factors other than their courses, resulting in high expectations of degree programs. In considering the totality of the graduate experience, individuals were shown to consider such aspects as departmental environment, interaction with fellow students, and relationships with faculty advisors. Future measures of program quality should take all these factors into account.

In terms of program delivery methods, slightly more than half of participants did not feel the master's degree in agricultural communications should be offered via distance education. While participants recognize the rapidly emerging technology trend in higher education, they did not view the

online degree as equivalent to the traditional degree they earned. Participants rated the online degree as being of lower quality and lower prestige than a traditional degree. Such perceptions suggest a relatively unfavorable view of online courses to the extent that they limit opportunities for beneficial interaction with faculty and other graduate students. While there are clear and important reasons to continue investigation of online methods of course delivery, agricultural communications faculty and administrators should consider that these perceptions may be present among potential graduate students. These and other issues identified in this research should be taken into account when designing and marketing online agricultural communications courses.

Participants appeared to find humorous the effort to describe what it means to be a "master" of agricultural communications. While all participants provided a definition, several struggled to do so confidently. Some participants also found it humorous in describing whether they considered *themselves* masters of agricultural communications, and several also struggled to consider themselves master's. Many participants provided modest opinions while others were strong in their convictions.

Participants also offered a number of recommendations for enhancing master's degree programs. One particular piece of advice stood out: defining the program foundations and reasons to exist. While suggested by two participants, the recommendation seems like an appropriate starting point in eventually addressing all other recommendations offered. Once faculty and other stakeholders have a clearer image of a program's foundations, they will be

in a better position to enhance and improve the programs by building on current strengths and shoring up weaknesses.

A critical part of this process involves identification of the needs and goals of both professional degrees and research degrees for master's education in agricultural communications. Questions to be addressed include the following: What are the purposes and essential course work and experiences that should be required for the two degrees? What, if any, core course work or experiences should be required of *all* master's students? What opportunities do distance technologies hold for sharing of graduate courses among institutions nationally or even internationally? And, importantly, what are the limits of technology for advancing graduate education in agricultural communications?

Collective results of this research confirm the utility of the theoretical components used to guide the study: human capital theory, meritocracy and credentialism, and the sociology of education. In considering human capital theory in the context of adult education, the participants repeatedly affirmed that they considered their master's education as an investment in their futures. Though they did not specifically discuss the societal benefits of their education, participants acknowledged becoming more fulfilled persons through the attainment of advanced skills, knowledge and experience within the field of agricultural communications.

Half of participants recognized an industry demand for a master's degree, and value placed upon the degree by employers, which supported the theoretical element of credentialism. Individuals indicated being motivated to pursue

master's degrees because they perceived the credential would help them meet industry demands and expectations. They further acknowledged their expectation that attainment of the master's degree would give them a competitive "edge" over others seeking similar positions. Consistent with the meritocracy theme, participants expressed the view that those who completed the degree would be more likely to realize intrinsic or monetary rewards than those who had not completed the degree.

Lastly, the perspective from the sociology of education literature is consistent with study findings, as it is evident that incentives and barriers within the university influence development of master's degree programs. Participants recommend a degree specifically in agricultural communications be offered, and voice concerns about the small size of programs and minimal faculty members present in each program. However, the literature shows that agricultural communications programs have historically been small, understaffed, and offered under the umbrella of larger, more established disciplines, such as agricultural education. Decisions to increase the number of faculty or to establish agricultural communications master's degree programs must be made within the university setting and are subject to approvals at the department, college and university levels. Such approvals depend not only on university budgets and strategic goals, but also on institutional culture and traditions.

5.4 Research Limitations

While this study was purposefully designed to address the guiding research questions, the effort was limited in some capacities, as with all research endeavors. Factors limiting this study include the population and the research methodology.

In identifying potential participants, the researcher found that no database or directory exists that lists names of master's alumni in agricultural communications. While most individual institutions maintain a list of their own alumni, the researcher was unable to request such lists due to privacy concerns. Thus, the task of compiling the list of confirmed master's graduates from the years 1997 to 2006 was assigned to the graduate chair in the department at each institution voluntarily participating. Therefore, the researcher could not control for error in this process.

Allowing master's graduates to respond to an e-mail appeal sent by the graduate studies chair at each institution assured participants' anonymity but the arrangement made it impossible for the researcher to assure accuracy of the list. Indeed, the researcher found that some respondents did not meet selection criteria set forth by the researcher. Some respondents who received the research recruitment e-mails either did not study or focus on agricultural communications in their master's degree, or they did not graduate in the specified time period of 1997 to 2006.

In terms of external validity, limiting the number of participants to 20 also does not provide findings that can be generalized to a larger population of master's graduates in agricultural communications.

Several institutions offer or previously offered master's degrees in agricultural education with an emphasis or specialization in agricultural communications. The variety of configurations present across institutions was a source of confusion for some of the graduate studies chairs contacted by the researcher. Because recordkeeping practices differed widely among institutions, it was sometimes challenging for graduate studies chairs to identify eligible alumni. While one institution had meticulous, up-to-date records of all master's graduates, another institution included only its master's alumni who received the master's degree in Agricultural Communications, eliminating those master's alumni who received master's degrees in agricultural education with an emphasis in agricultural communications. The task of searching through years of records to create a more-detailed database was too daunting for some participants and represents a source of uncontrollable error in the present research.

5.5 <u>Implications for Future Research</u>

Based on the findings from this research, a number of recommendations can be made for future research concerning graduate curricula and programs in agricultural communications.

It may be beneficial for the faculty members at institutions offering master's education in agricultural communications to replicate this study in five years, serving as a checkpoint for programs to ensure they are addressing the expectations and perceived needs of students and alumni. Additional studies are periodically needed with all key stakeholder groups, including industry leaders and faculty.

As recommended by participants, the foundations and purposes for the existence of master's degree programs in agricultural communications should be explored, defined, and made more explicit in the literature. Such research would be beneficial before further researching the curriculum and before making additional curricular changes, as a clear foundation and purpose are essential to guide this endeavor.

Further research also should be conducted to identify the needs and goals of both professional degrees and research degrees for master's education in agricultural communications, along with the purposes and essential course work and experiences that should be required for the two degrees. It is evident from the current research endeavor that the master's degree serves different purposes for different individuals. In order to ensure the highest quality experience for these individuals, needs and goals must be clearly defined. While it may not be possible or even advisable to meet the perceived needs of all stakeholders, all parties are served by identifying and discussing these needs.

In addition, as online education continues becomes more prevalent within higher education, additional studies should be conducted to explore the

opportunities distance technologies hold for master's education in agricultural communications. While participants of this research do not favor the entire master's degree being offered via distance education, there are clearly opportunities to offer new and needed course work via distance methods that would be otherwise impossible for some institutions to offer. Identifying what coursework could be successfully implemented online as well as the particular delivery methods most suited to particular content would be beneficial. Such research could further explore the opportunities distance education holds for sharing of graduate courses among institutions nationally or even internationally, as well as identify the limits of technology for advancing graduate education in agricultural communications.

Future work needs to encompass higher education literature that has been largely overlooked in much of agricultural communications graduate curriculum research. Agricultural communications faculty can benefit greatly from insights and experiences documented in different disciplines dating back several hundred years. Future work should also be guided by a theoretical framework that takes into account the complex interactions and decision making associated with offering and earning the master's degree.



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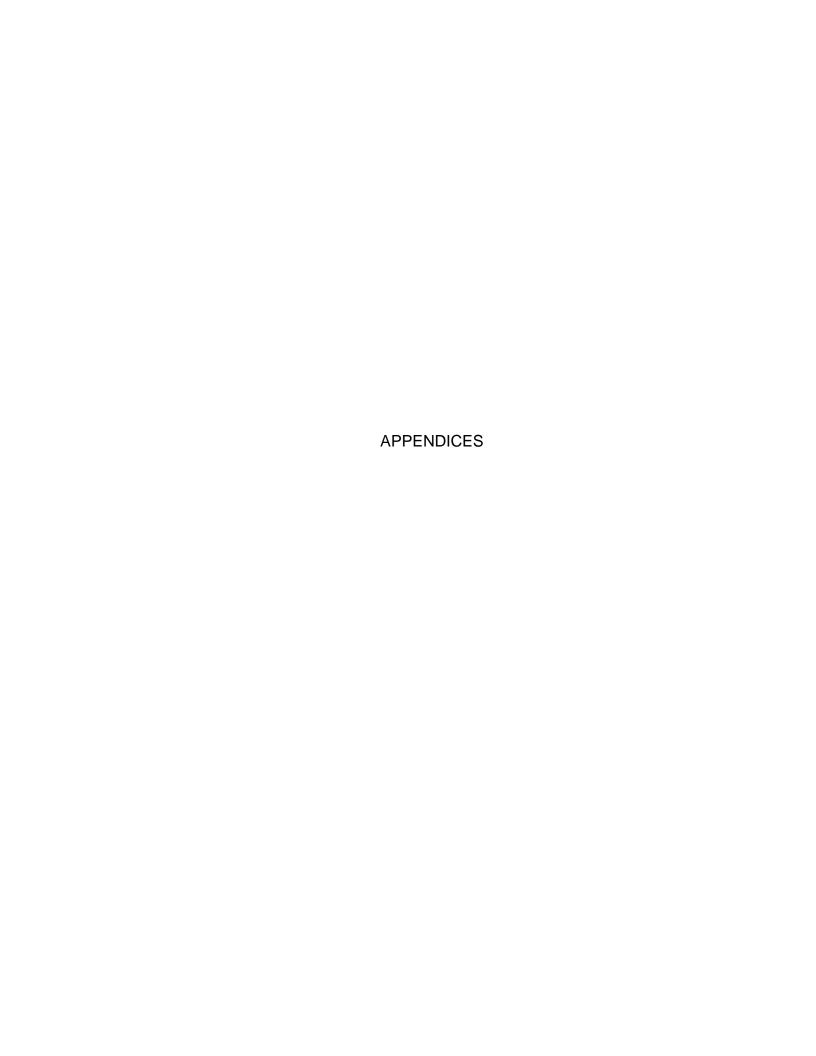
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Appendix A. Graduate Interview Instrument

<u>Graduate Perceptions of Master's Degree Programs in</u> <u>Agricultural Communications</u>

Hi, this is Whitney Siegfried calling from Purdue University. Thanks again for setting aside this time to participate in an interview. Is this still a good time to complete the interview? Great. As we discussed, the interview will take approximately one hour and be recorded for transcription. I want to assure your confidentiality, as no names or information will be used in the research to identify any possible participant from the interviews conducted. All answers you provide in the interview are your personal opinion and will be confidential. There will be no way anything you say will get back to your university or identify you in any way. Do you have any questions before we get started? If not, I'm going to start out asking you some general questions about your current job and education. If you are ready, let's begin.

	hat is your job title?	
a)	How long have you been in your current	nt position?
b)	Without identifying your organization, would you agree that your job falls within theorganizational category?	
	 i) Agribusiness Firm ii) General Firm/Org iii) Broadcasting Firm iv) Commodity Organization v) School/University vi) Newspaper or Magazine 	vii) Government Organization viii) Communication Agency (PR, Adv) ix) Nonprofit Organization x) Self-employed xi) Retired xii) Other
c)	Overall, how many total years have yo	u been working full time?
	(NOT including graduate school, UNLESS they	y worked full time during.)
d)	(NOT including graduate school, UNLESS they How many years would consider worki communications?	
d)	How many years would consider worki communications?	
	How many years would consider worki communications?	ng in or directly related to agricultural

2)	Are there any agricultural communication graduates on your staff or in your company/organization?
3)	In what field did you earn your bachelor's degree?
	a) If different from agricultural communications, were you required to complete any additional coursework or additional requirements for admission into your masters?
	i.e. admitget into the program
	i) If so, what?
	b) At what college or university was your bachelor's degree earned?
4)	From what college or university did you earn your master's degree in agricultural communications?
	a) Year master's degree completed
5)	While earning your master's degree, did you hold a research assistant (RA) or teaching appointment (TA)? a) If noDid you work while earning your master's degree? Full or part time?
	b) While working, were you a full or part time student?
	c) How long did it take you to complete your master's degree?
6)	Do you hold any other graduate degrees? Y or N a) If yes, in what?
	b) Why did you pursue the degree(s)?
7)	Did you know your major advisor's research focus or interest? a) If yes, what was it?
	b) If no, did you never know? Used to know, but can't recall now?
	c) Teaching focus? SPECIFIC: d) If yes, what was it?
	e) If no, did you never know? Used to know, but can't recall now?

8)	Did you have a particular course focus or specialization as a part of your master's degree? Y or N
	a) If yes, what was the focus or specialization?
9)	Did you write a thesis or complete a project requirement for your master's degree? a) If yesthesis or project?
	b) If no, was any research required to complete your degree?
	c) What was the general topic area addressed?i) How did you settle on that topic?
	i.e. topic given, dept. specified, found yourself
10)Did you present your master's research at any professional conferences? a) Y or N
	b) Do you attend these conferences still today?
No	ow, please think specifically about <i>your</i> master's degree when answering the following questions.
1)	Why did you pursue the master's degree?
	WHY?
2)	How would you describe the mix of professional skill development or research and theory in <i>your</i> master's degree?
	Professional Skills: applied, hands on comm. courses such as feature writing or Web design Research & Theory: communication theory, statistics, research methods
	a) Are you comfortable offering a % of professional vs. theory, like 50/50?

3)	Are there any professional skills or research expertise you gained from your master's degree program that are relevant to your current position? a) If yes, describe these skills or expertise?	
	b) Any relevant to your <i>future</i> career goal?	
4)	How does your master's degree compare with or complement your bachelor's degree in terms of the educational experience? i.e. not only courses, but the overall experience	n
	a) In terms of preparation for your career?	
5)	Do you think your master's degree has served its purpose? a) Why or why not?	
6)	On a scale from one to five, one being poor and five being excellenthow would you rate the quality of the master's degree you earned? a) Why do give this rating?	
	e are making great progress! When answering this next set of questions, please think ecifically about the coursework you completed while earning your master's degree.	
1)	While earning your master's, what kinds of coursework did you find most valuable?	
	Was it offered in your home department? Y or N	
	Note: Clarify WHICH courses in which dept.	
	a) Least valuable?b) Why?	
	c) Overall, do you consider your master's course work valuable in achieving your career goals?	4

2)	What coursework(s) would you add now that you wish you would have received while earning your master's degree? a) Why? PROBE! i.e. "Master's is focused on research." Do you mean it's a research degree?	
3)	What do you think are the essential components of the ideal master's degree? For example: all undergraduates at some schools should complete certain coursework or perform community service?	
	SPECIFIC: What kind of Theory course?	
4)	In your opinion, what would be the ideal mix of professional skill development versus theory and philosophy in the master's degree? a) Explain, and why?	
	Professional Skills: applied, hands on comm. courses such as feature writing or Web design Research & Theory: communication theory, statistics, research methods	
	b) Are you comfortable offering a % of professional skill development vs. theory and philosophy, like 50/50?	
	% Professional% Theory	
qu	any of us might like to change certain aspects of our education. With that said, the following estions will ask for your recommendations to help update or enhance the master's degree in ricultural communications for future students.	
1)	Please discuss the <u>rigor</u> and <u>quality</u> of the master's degree program you completed?	
	Explain Conflictswas it both rigorous and high in quality?	
	What are your perceptions of the programwas it a challenging program in a good way in terms of the education value provided?	nal
2)	Could your university or home department have done anything differently to enhance the educational value of your master's degree?	
	a) What did they do especially well?	5

- 3) Do you think there should be an underlying structure or core of courses for all master's degrees in agricultural communications?
 - a) Why or why not?
- 4) Did you take any online courses while completing your...
 - a) Bachelor's Degree: Y or N
 - b) Master's Degree: Y or N
 - c) If yes, describe the quality of the educational experience compared to a traditional classroom course?

There are several universities that are offering online courses and degrees via technologies such as video conferencing or Adobe Connect.

- 5) Do you think the master's degree in agricultural communications should be offered through distance education?
 - a) Which of the following statements regarding online coursework would you agree with:

No courses should be allowed to be taken online. Some required courses can be taken online. More than half of required courses can be taken online. All of the required coursework can be taken online.

- b) Why?
- 6) What are the advantages of earning an online master's degree in agricultural communications?
 - a) What are the disadvantages?
- 7) How would you rate earning a degree online as compared to the degree you earned in terms of <u>convenience for you</u>?
 - a) Would earning the degree online be: A lot less convenient for you

A little less convenient for you

About the same in terms of convenience

A little more convenient for you A lot more convenient for you

Discuss.

Convenience: personal convenience in earning the same degree

8) How would you rate an online degree as compared to the degree you earned in terms of quality?

a) The online degree has: A lot less quality

A little less quality

About the same in terms of quality

A little more quality A lot more quality

Discuss. Why?

Quality: how "good" the degree is, how much it's worth

9) How would you rate an online degree as compared to the degree you earned in terms of <u>prestige</u>?

a) The online degree is: A lot less prestigious

A little less prestigious

About the same in terms of prestige

A little more prestigious A lot more prestigious

Discuss.

Prestige: honor in holding the degree

Online degree: from same university, entire degree earned online.

10)If you would have had the opportunity to earn your master's of agricultural communications degree online, would you have?

a) Explain.

Online degree: from same university, entire degree earned online.

In this next section, we'd like to ask you about your perceptions and experiences while completing your master's work. Please give your response to the following statements on a 5-point scale where 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree. The higher the number the greater the agreement with the statement. After each item, I'll invite you to provide an optional, brief explanation of your rating.

1) In general, I had a clear understanding of what was expected of me while completing my degree.

1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Comment:

I was challenged intellectually by my master's degree program.
 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

How were/weren't you challenged?

 In the Agricultural Communications master's degree program, elective courses can be the most important courses a student takes.

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1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.
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Explain your rating:

4) Completing my thesis or project requirement was a valuable educational experience. 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Why was it valuable/ not valuable?

5) Every Agricultural Communications master's student should be required to write a thesis.

1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Why should/shouldn't they?

6) I developed a close camaraderie with fellow students.

1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Explain your rating:

7) I learned from interaction with advanced graduate students in my home department.

1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Comment:

8) Exposure to diversity of backgrounds and opinions was an important part of my master's

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1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.
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Why was it so important/not important?

9) I had a close working relationship with my academic adviser.
 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.

Explain why your relationship was so strong/poor:

10) I received frequent individualized attention from my adviser.

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1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree.
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Comment:

11) I experienced a supportive learning environment in my home department 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree. Describe the poor/good environment: 12) The agricultural communications master's program was valued in my home department. 1 = strongly disagree; 2 = disagree; 3 = not sure; 4 = agree; and 5 = strongly agree. Comment: We are almost done with the interview. Just a few more questions! 1) Do you think there is a demand within the industry for people to pursue the master's degree in agricultural communications? a) Why or why not? 2) Do you think employers value employees with or potential employees earning a master's degree in Agricultural Communications? a) Please explain. 3) Do you think the master's degree in agricultural communications is needed for advancement within the field? a) Why or why not? i.e. Will it help you or other graduates advance? 4) What does it mean to be a master of agricultural communications? a) Do you consider yourself a "master" of agricultural communications? Discuss.

Point: You hold a master's degree in Ag Comm....so what does it mean to be a master?

- 5) If you could give one piece of advice to an advisor or faculty who are trying to build or improve their master's degree program, what would it be?
- i.e. If they give more than one, WHICH ONE was the most important of the ones listed?

As we conclude this interview, I want to ask a few simple questions about you. Remember your answers are strictly confidential and you do not have to answer any questions you do not want to.

- 1) Do you currently belong to any professional organizations? Y or N
 - a) If yes, which ones and why?
 - b) Is there any particular reason?
- 2) Sex: researcher make note of male or female
- 3) May I ask your age? ___
- 4) Current Job Location (or Home Office): City State

OR: Suburb Small Town Country City

- 5) Gross Annual Income for yourself, not combined income:
 - a) Less than \$20,000
 - b) \$20,001 to \$30,000
 - c) \$30,001 to \$40,000
 - d) \$40,001 to \$50,000
 - e) \$50,001 to \$60,000

 - f) \$60,001 to \$70,000

- g) \$70,001 to \$80,000
- h) \$80,001 to \$90,000
- i) \$90,001 to \$100,000
- j) More than \$100,000
- k) Unsure or No Answer

That concludes the interview! Again, I just want to thank you again for taking time out of your day to help us with this project. The results will be very helpful in improving the quality of master's programs in agricultural communications.

Do you have any questions of me or any final advice before we wrap this up?

If not, thanks again and enjoy the rest of your day/evening!

Appendix B. Institution Recruitment E-mail

Dear <Faculty Member>,

This is Whitney Siegfried from Purdue University, and I am a graduate student here working on research in the agricultural communications field. I have contacted you because your university is one of the institutions we have identified that offer a master's degree in agricultural communications. Although the literature contains a number of studies focusing on undergraduate curricula, there is much less published information on the ideal curriculum for master's instruction in the field. There is no core curriculum or documentation that specifies the intent or philosophy of the master's degree in this specialized area.

The purpose of this research is to examine the perceptions of those who hold a master's degree in agricultural communications. The study will identify how graduates are using these degrees and whether they feel the degree has served its purpose.

Your institution's participation in this research is voluntary. But since the field of agricultural communications is relatively small and specialized, we would greatly appreciate including your graduates in our pool to increase the validity of our findings.

By volunteering, you will be asked to contact by email your confirmed graduates with a master's degree in agricultural communication or master's degree in agriculture education with an emphasis in agricultural communications from the years 1997-2006. In this communication, we ask that you forward a recruitment e-mail we provide asking for your alumni's voluntary participation in the study. This recruit method assures anonymity of your graduates, as we will not know their identities until they voluntarily reply to our e-mail invitation to participate that you forward.

From the list of graduates who respond to our invitations from different universities, we will select 20 individuals for telephone interviews. No names or identifying information will be used in the research. In addition, we will use the names only for this purpose and will not share them with anyone else for any purpose.

If you are willing to participate in this research, please e-mail me at wsiegfri@purdue.edu so that we may send you our recruitment e-mail to forward to your alumni. We have designed this methodology to assure your student's confidentiality while making this as simple for you as possible. I would be happy to discuss these details with you by phone, or to answer any questions you may have about this project.

Please let us know if you have any questions. Thank you in advance for your consideration of participating in research to help improve graduate education in our field. I look forward to hearing from you soon.

Sincerely,

Appendix C. Recruitment Letter Transmittal E-mail

Dear <Faculty Member>,

Thank you again for your willingness to participate in this study aimed at strengthening graduate education in agricultural communications.

Attached is the recruitment script we would like you to provide to your Agricultural Communication master's alumni who graduated during the period 1997-2006. You will see we have also provided a short introduction at the top of this attachment to explain its purpose. Feel free to add any additional motivation to the introduction to encourage the participation of your master's alumni.

We would like to request that you forward the recruitment e-mail to your master's alumni at your earliest convenience, but no later than *Friday*, *September 18, 2009*. However, we realize you are busy, and it may take time to verify the list of graduates. When the invitation to participate in this research has been forwarded to your master's alumni, please send an e-mail to me at wsiegfri@purdue.edu to confirm you have sent this e-mail.

Please let us know if you have any questions. Thank you again for your help with this research. I look forward to hearing from your master's alumni in the coming weeks so that your university can be included in this project.

Sincerely,

Appendix D. Eligible Master's Graduate Recruitment Invitation E-mail

Please copy and paste the following introduction and e-mail to forward to your Agricultural Communication master's alumni who graduated during the period 1997-2006.

Note from <Institution Name>: This e-mail is being forwarded to you on behalf of Whitney Siegfried, an agricultural communications graduate student at Purdue University conducting research focused on the master's degree in agricultural communications. Please direct any questions to the researcher at her e-mail address provided below.

Dear <Institution Name> graduate,

My name is Whitney Siegfried, and I am a graduate student at Purdue University, focusing my research on the perceptions of those who hold a master's degree in agricultural communications. You are receiving this e-mail because I have contacted **Faculty Member name>** at **Institution name>** to request **his/her>** help in contacting confirmed graduates with a master's degree in agricultural communication from the years 1997-2006. Your university is one of a limited number of institutions we have identified that offers this degree. Because the field of agricultural communications is relatively small and specialized, we are hopeful you will agree to participate in a research project to help improve graduate education in this area.

The study will identify how graduates are using these degrees and whether they feel the degree has served its purpose. Studying graduates' perceptions will provide direct insight to the degree, allowing for a snapshot from the eyes of the beholder.

If you agree to help us, you will be asked participate in a one-hour phone interview with me about your experience and perceptions regarding your master's degree. We will record the interview for transcription. No names or information will be used in the research to identify any possible participant from the interviews conducted.

Your anonymity is assured, as you are receiving this e-mail from your home institution. The researchers will not know your identity until you reply to us and agree to voluntarily participate.

If you are interested and agree to participate, we will contact you at your convenience to set up the one-hour phone interview. If you are willing to help us, please send an e-mail directly to me at wsiegfri@purdue.edu. In your e-mail, please include your contact information, including a home or business phone number, your e-mail address and a preferred time to contact you to schedule our interview.

Thank you in advance for your consideration of participating in research to help improve graduate education in our field. I look forward to hearing from you.

Sincerely,

Appendix E. Graduate Recruitment Phone Script

Recruitment Phone Script: Randomly selected graduate

Researcher: Good afternoon! This is Whitney Siegfried calling from Purdue University, in regards to the e-mail you sent me agreeing to voluntarily participate in a one-hour phone interview for my research on the perceptions of those who hold a master's degree in agricultural communications. Is this an OK time to schedule the interview with you?

1. Participant Response: NO

Researcher: Is there a better time I can call back to schedule with you?

1a. Participant Response: YES, record time for further follow-up.

1b. Participant Response: NO

Researcher: Thank you anyway for your time. Goodbye.

2. Participant Response: YES

Researcher:

I have several optional times for you to choose from to complete the interview. <List options and ask which they prefer.> Record time for interview.

Thank you again for volunteering to participate, as your interview responses are very important and will be a beneficial to the agricultural communications industry. I really appreciate it and will call back to begin the interview "Interview Time Here". Thanks again. Goodbye.

Appendix F. Institutional Review Board Approval of Research

IRB Approval 0907008261 "Graduate Perceptions of Master's Degree..."

Berry, Erica L

Sent: Mon 8/10/2009 7:59 AM

To: Tucker, Mark A Cc Siegfried, Whitney C

The IRB has reviewed your Research Exemption Request titled, "Graduate Perceptions of Master's Degree..", Ref. #0907008261 and deem it to be exempt. A copy of the approved letter will be forthcoming via campus mail. Good luck on your research.

Erica L. Berry

Human Research Protection Program
Purdue University
Ernest C. Young Hall
10th Floor, Room 1032
155 S. Grant Street
West Lafayette, IN 47907-2114
2 765.494.7090/direct

765.494.9911/fox http://www.irb.purdue.edu

Appendix G. Institution Thank You E-mail

Dear Faculty Member in Agricultural Communications:

Thank you again for your willingness to participate in my research aimed at strengthening graduate education in agricultural communications, as it wouldn't be possible without you.

Responses from several of your master's alumni have began to trickle in, and I will begin scheduling interviews soon. I realize some of you are still contacting your alumni, and I appreciate your efforts. I look forward to hearing from as many alumni as possible in the coming weeks so that we can ensure all your universities are included in this research.

Again, I want to thank you for your help, and please don't hesitate to contact me with questions at any time.

Sincerely,

Appendix H. Institution Reminder Request E-mail

Dear Faculty Member in Agricultural Communications:

I am pleased to inform you that I have been receiving responses from several of your master's alumni who have agreed to participate in my research aimed at strengthening graduate education in agricultural communications.

We would like to request that you forward the recruitment e-mail to your master's alumni one last time to encourage and remind any alumni who haven't responded to do so. Please re-send the e-mail at your earliest convenience, but no later than *Friday, October 2, 2009*. I will begin scheduling interviews next week, and want to ensure that each university is well represented by their master's alumni.

I really appreciate your efforts, as I realize this is a busy time of year. Again, I want to thank you for your help, and please don't hesitate to contact me with questions at any time.

Sincerely,

Appendix I. Participant Interview Reminder E-mail

Hi <Participant Name>,

I'm sending an e-mail to remind you of your upcoming research interview **<Day of Week>, <Month and Date> at <Time and Time Zone>**. Most of the questions I will be asking are specifically what your opinions and perceptions are about certain aspects of your masters degree. Here are some topics you might want to think about:

- Master's Degree Requirements
- Master's Degree Coursework
- Master's Degree Advisor
- Department offering Master's Degree
- Importance of the Master's Degree
- Using your Master's Degree

Feel free to call or e-mail me if you have any other questions before the interview. I appreciate your help with my research project and look forward to visiting with you soon!

Thanks,