Developing Public Relations Curricula in Agricultural Communications

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Abstract

Agricultural public relations professionals were surveyed to determine the proficiencies in public relations that they perceive to be most important in an agricultural communications curriculum. They also were asked how frequently they used those proficiencies and how best to integrate the proficiencies in the agricultural communications curriculum. The population for the study consisted of public relations professionals who were members of the Agricultural Relations Council and the Cooperative Communicators Association. Most respondents perceived agricultural proficiencies to be less important than general communications or public relations proficiencies. Proficiencies related to use of the computer skills, human relations skills, time management, writing, and editing were among the most frequently used proficiencies by public relations professionals. Based on these results, it is recommended that university faculty consider focusing public relations curriculum toward writing, editing, presentations, time management, conflict resolution, and teamwork. It also is recommended that students take coursework in agricultural policy and government programs and finance/business principles. Finally, it is recommended that faculty stress the importance of meeting deadlines to prepare students for the public relations profession.

Introduction

Curriculum study emerged from a growing need to organize and rationalize the changing forms of American education (Wiles & Bondi, 1998). Studies of agricultural communications curricula indicate the need for a wide variety of courses, especially in agricultural disciplines (Evans & Bolick, 1982; Kroupa & Evans, 1976); however, more recent surveys (Cooper & Bowen, 1989; Sprecker & Rudd, 1998) have found agricultural communications graduates and agricultural professionals indicate communications and journalism courses are most important. Sprecker and Rudd (1998) concluded writing was the most important competency for a graduate.

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Research

To reinvent curriculum, an educator must answer a primary set of questions about what students should learn and a secondary set of questions about how decisions about a particular program should be made and then implemented (Reid, 1999). Employers can be helpful by sharing their perceptions of the society where graduates will work and can provide information about the skills graduates need to lead a fulfilling life (Erven, 1987). According to Lunde (1995), changes in curriculum must come from agreement that new directions in society require students to master new skills or gain new knowledge. The agricultural communications curriculum should be updated regularly to reflect technological advancements (Bailey-Evans, 1994).

Purpose and Objectives

Since 1994, no comprehensive study of agricultural communications proficiencies has been conducted nor has any recent researcher investigated beyond a "laundry list" of proficiencies. The purpose of this study was to determine the public relations proficiencies in an agricultural communications curriculum as perceived by agricultural public relations professionals, as well as to determine their perceptions regarding how frequently they used those proficiencies and how best to integrate the proficiencies into an agricultural communications curriculum. The following objectives guided this study:

1. To describe the demographic attributes of public relations professionals in agricultural communications.
2. To determine technical agricultural proficiencies as perceived by public relations professionals, how frequently professionals use those proficiencies, and how those proficiencies should be taught in an undergraduate agricultural communications curriculum.
3. To determine general communications proficiencies as perceived by public relations professionals, how frequently professionals use those proficiencies, and how those proficiencies should be taught in an undergraduate agricultural communications curriculum.
4. To determine public relations proficiencies as perceived by public relations professionals, how frequently professionals use those proficiencies, and how those proficiencies should be taught in an undergraduate agricultural communications curriculum.

Methodology

The researchers purposely selected the population for the study to represent agricultural communications public relations professionals throughout

the United States by choosing the members of the Agricultural Relations Council (N = 85) and the Cooperative Communicators Association (N = 288). After pilot testing and elimination of bad e-mail addresses, 243 individuals were targeted for this study.

As a starting point for the instrument, the researchers used the agricultural communications competencies developed by Terry, et al. (1994). These competencies were reviewed by a panel of experts in agricultural communications and public relations for content validity, and then a three-part, Web-based instrument was developed. Questions in Part I of the instrument asked professionals if proficiencies were important (indicated by a Yes or No response). In Part II of the instrument, professionals were asked to indicate how often they used the proficiency: daily, weekly, monthly, annually, or never. In Part III, professionals were asked to indicate how the proficiency should be implemented in a university curriculum: required, elective, workshop, internship, or not at all.

Because of the length of the instrument, a partial matrix-sampling technique was used, as matrix sampling is commonly used to control survey length and decrease the time required for individuals to respond (Ary, Jacobs & Razavieh, 2001).

The proficiencies were organized into three subject-area sections: technical agriculture (57 proficiencies), general communications (67 proficiencies), and public relations (45 proficiencies). Each participant was asked to complete a subset of five purposely selected items from two of the sections, as well as the third section in its entirety. Since the items were grouped into subject areas, the items from the matrixed proficiency areas were conceptualized to the entire population (Edwards & Briars, 1999).

A pilot test was conducted for face validity and reliability, after which structural changes to the instrument were incorporated to improve readability.

Using Dillman's (2000) method for Web-based, dual-method data collection, the researchers sent an introductory message and a series of four electronic mail messages with the URL for the Web-based instrument. During the 30-day data collection process, participants had difficulty accessing the instrument through the provided URL due to server problems; therefore, those who were unable to access the online instrument could request a faxed version of the instrument. Instruments completed by fax were entered online by the researchers and were not distinguishable from those completed online.

A Cronbach's alpha was calculated on the scaled items in each section of the instrument following data collection. The reliability coefficient for items

in the technical agriculture section was 0.9354; the reliability coefficient for the general communications and public relations sections were 0.9633 and 0.9012, respectively.

Nonresponse error was accounted for by comparing selected instrument items from early (first week) and late (last week) respondents. As no differences were found, the researchers concluded the results of all matrix-sampled items could be generalized to the population.

Findings

Data collection occurred from February 13, 2004, to March 14, 2004. The online instrument was sent to 279 members of the Agricultural Relations Council and the Cooperative Communicators Association. Thirty-six electronic mail messages were returned for bad addresses, reducing the number of possible respondents to 243. The researchers collected 70 responses for a 29% response rate. The researchers recognize the response rate is lower than desirable. The primary factor resulting in this low response rate was problems with the server where the instrument was located. All responses were useable and included in the study.

Forty-five respondents (64.3%) were female. Twenty-five respondents (35.7%) were in the 46 to 55 age range, while 20 respondents (28.6%) were in the 36 to 45 age range. Sixty-three respondents (90%) indicated they held at least a bachelor's degree, of which 17 (34%) had earned a master's degree and one (1.43%) had earned a doctoral degree. Forty-one respondents (58.6%) have worked for 13 or more years in the public relations field with 38 respondents (54.3%) having held two or three public relations jobs (Figure 1.).

When the public relations professionals were asked about their level of agricultural knowledge, 53 (75.7%) indicated a somewhat high or high knowledge level. However, the number of courses these professionals had completed was polarized; 29 (41.4%) had completed 10 or more agricultural courses and 26 (37.1%) had not completed an agricultural course. The public relations professionals' experience in agriculture varied, including working for an agribusiness (67.1%) or living in a rural area and/or on a farm (65.7%); only 14 (20%) owned a farm or agribusiness.

Technical Agriculture Proficiencies Perceived as Important

Table 1 provides a list of the technical agriculture proficiencies perceived as important by public relations professionals.

Table 1. *Technical agriculture proficiencies perceived as important by 50% or more of respondents*

Discuss the impact of government and legislative policy upon agriculture.*
Interpret charts, graphs and maps to make specific decisions related to business.*
Define conservation.*
Identify governmental regulatory agencies related to agribusiness.*
Identify current government programs that support agricultural business.*
Summarize the economic and management roles of producing agricultural animals.
Describe the effects of agriculture upon erosion and the introduction of chemical compounds in the environment.
Prepare a budget.
Report on the impact of biotechnology in agricultural animals.
List the purposes of governmental farm agencies.
Describe the purpose of and rationale for farm programs.
Discuss the factors that stimulate and inhibit economic growth.
Describe major world food and fiber crops including where they were produced geographically and explain their intended uses.
Discuss the characteristics unique to animal products and their related industries.
Analyze the public perception of plant and animal issues.
Determine the impact of biotechnology on the world food production systems.
Explain the impact of governmental policy on the production and marketing of various commodities.
Identify career opportunities in production agriculture.
Analyze the economic impact of production agriculture on the economy.
Discuss the definition and types of agribusiness marketing.
Evaluate the effectiveness of U.S. agricultural policy in foreign markets.
Define and compare the sources of credit for agricultural institutions.
Demonstrate an understanding of plant growth and development.
Describe soil principles including fertility and water management.
Discuss the ways that humans impact the ecosystem and methods of making it stable.
Discuss environmental/global issues such a global warming and desertification and the relationship of agriculture with those issues.
Define ecology and related terms.
Describe the basics of food classification, modern processing and quality/safety control.
Define and explain budget, cost, credit and tax and how they relate to agribusiness.
Identify the types of tillage methods used in crop production.
Explain the ethical and cultural concerns of biotechnology in agricultural processing.
Recognize what DNA and clones mean.
Define precision farming.
Know water issues.
Understand urban agriculture.
Understand the impacts and controversies surrounding genetically modified organisms.

*Proficiencies perceived as important by more than 75% of respondents

In the technical agriculture section of the instrument, five proficiencies of the 57 presented were categorized as important by 75% or more of the public relations professionals: (1) discuss the impact of government and legislative policy upon agriculture; (2) interpret charts, graphs, and maps to make specific decisions related to business; (3) define conservation; (4) identify governmental regulatory agencies related to agribusiness; and (5) identify current government programs that support agricultural business. As Table 1 illustrates, 36 proficiencies were categorized as important by 50% to 74.9% of respondents, while 21 proficiencies were perceived as not important by at least 50% of respondents (Table 2).

Table 2. *Proficiencies perceived as not important by 50% or more of respondents*

Technical agriculture proficiencies
Describe marketing theories related to price, grading, elasticity, etc.
Apply the concept of indifference curves, supply/demand, and production functions.
Explain opportunity cost.
Demonstrate the proper procedures for administering animal health products.
Evaluate livestock for profitable production traits.
Identify the types of wholesale and retail cuts of beef.
Explain the methods for proper disposal and handling of animal waste.
Explain how the selection of hybrid and certified seed affects performance and profitability.
Identify major genetic characteristics of animal breeds and examine their uses in the animal's breeding systems and scientific principles.
Demonstrate safe and humane animal handling techniques.
Identify and compare the operation of equipment and facilities involved with livestock for optimum production efficiency.
Use observational techniques to identify healthy, quality plants.
Explain photosynthesis.
Explain lawn and turf maintenance.
Know specific insect pests.
Identify fruits and nuts by common name.
Identify vegetables by common herd name.
Identify floriculture crops including houseplants by common name.
Explain the importance of quality assurance of food and fiber products.
Explain the concepts of food sanitation and safety.
Define phenotype and genotype.
Public relations-specific proficiencies
Apply the case method of problem solving.
Understand state grant guidelines for program services.

Frequency of Use

Nearly 20% of the public relations professionals indicated they used five of the technical agriculture proficiencies on a daily basis: (1) discuss the impact of government and legislative policy upon agriculture; (2) prepare a budget; (3) report on the impact of biotechnology in agricultural animals; (4) explain the impact of governmental policy on the production and marketing of various commodities; and (5) discuss the definition and types of agribusiness marketing. Although 36 technical agriculture competencies were deemed important, 26% or more of the public relations professionals indicated they do not use 11 of these proficiencies at all. The remaining proficiencies were used at least annually by 61.9% or more of the respondents.

Type of Implementation

Three technical agriculture proficiencies were perceived by more than 50% of the public relations professionals as being "required" subject matter for agricultural communications undergraduate students: (1) interpret charts, graphs, and maps to make specific decisions related to business; (2) prepare a budget; and (3) list the purposes of governmental farm agencies.

Fourteen technical agriculture proficiencies were perceived by more than 50% of respondents as being "elective" subject matter for agricultural communications undergraduate students: (1) discuss the impact of government and legislative policy upon agriculture; (2) describe the purpose and rationale for farm programs; (3) evaluate the effectiveness of U.S. agricultural policy in foreign markets; (4) discuss the factors that stimulate and inhibit economic growth; (5) define and compare the sources of credit for agricultural institutions; (6) demonstrate an understanding of plant growth and development; (7) describe soil principles including fertility and water management; (8) discuss the characteristics unique to animal products and their related industries; (9) report on the impact of biotechnology in agricultural animals; (10) summarize the economic and management roles of producing agricultural animals; (11) describe the basics of food classification, modern processing, and quality/safety control; (12) identify the types of tillage methods used in crop production; (13) explain the impact of governmental policy on the production and marketing of various commodities; and (14) understand urban agriculture.

Respondents indicated that one technical agriculture proficiency should be taught through an internship experience: Identify governmental regulatory agencies related to agribusiness.

General Communications Proficiencies

Table 3 provides a list of the general communications proficiencies perceived as important by public relations professionals.

Table 3. *General communications proficiencies perceived as important by 50% or more of respondents*

Write using appropriate style (i.e. AP, UPI).*
Describe the principles of journalism clearly and concisely.*
Apply writing and reporting skills in a "real world" situation.*
Interview a source of information for a news article.*
Edit the work of others; accurately proofread a document.*
Use correct editing marks and symbols.*
Critique and correct layout and design of publications.*
Discuss ethical standards existing in the field of journalism.*
Determine ethical solutions to problems.*
Describe the ways in which news and other information is disseminated to the public.*
Compare the effectiveness of various dissemination systems for different messages and audiences.*
Customize a speech for a specific audience.*
Apply effective speaking techniques.*
Use the voice to maintain the interest of the audience.*
Use a variety of inflection, tone and volume.*
Use appropriate hand and facial expressions.*
Describe the impact of agriculture upon all Americans.*
Describe the agricultural community in the United States.*
Use a variety of means including print, radio and video to inform the public.*
Write features about agricultural topics.*
Describe the purpose of agricultural communications.*
Apply agricultural communications techniques and skills.*
Gain experience in the applications of agricultural communications theories in the workplace.*
Demonstrate the characteristics of responsibility and credibility.*
Write speeches using effective formats and formulas.*
Model proficiency in time management and organization.*
Navigate Internet; send and receive e-mail.*
Transfer and download information through a network.*
Use graphics effectively to increase understanding.*
Apply human relations skills.*
Resolve conflicts.*
Write a quality thank you note.*
Identify and fix barriers to effective communication.*
Interview for employment.*
Work in a team activity.*
Work under pressure.*

Correctly report facts.*
Understand government systems and how they affect agriculture.*
Cite sources.*
Gather and synthesize information.*
Perform basic word processing.*
Converse knowledgeably on different areas in agriculture.*
Determine whether a topic would be best covered in a news article or a feature article.*
Create a résumé.*
Identify bias in media stories.*
Write for Internet.*
Discuss the importance of belonging to a professional organization.*
Interpret statistics.*
Use an Associated Press Stylebook.*
Apply common sense logic to an economic trend analysis.*
Analyze and interpret technical data.*
Describe ethical challenges faced by reporters.
Describe common dilemmas faced by journalists.
Discuss legal problems facing journalists, broadcasters and advertisers.
Discuss and define communications regulations, fairness doctrine, libel, privacy and commercial speech.
Select appropriate topics in speech writing.
Use creative skills to develop introductions to effectively engage an audience in a speech.
Assess the level of agricultural literacy in the United States.
Describe the role agriculture plays in international relations.
Discuss the cultural impact of agricultural trade.
List the barriers that exist when communicating agricultural information in international situations.
Contrast the uniqueness of agricultural communications to other disciplines.
Create media program formats.
Evaluate the performance of co-workers.
Discuss the Freedom of Information Act.
Demonstrate sales skills.
Interpret the basics of the commodities market.

*Proficiencies perceived as important by more than 75% of respondents

Perceived as Important

In the general communications section of the instrument, 51 proficiencies of the 67 presented were perceived to be important by 75% or more of respondents (Table 3). The remaining 16 proficiencies were categorized as important by 50% to 74.9% of respondents.

Frequency of Use

More than 75% of the public relations professionals indicated they used eight of the general communications proficiencies on a daily basis: (1) demonstrate the characteristics of responsibility and credibility; (2) model proficiency in time management and organization; (3) navigate the Internet [and] send and receive e-mail; (4) transfer and download information through a network; (5) apply human relations skills; (6) work under pressure; (7) correctly report facts; and (8) perform basic word processing.

An additional nine proficiencies were identified as being used on a daily basis by 50% or more of the respondents: (1) write using appropriate style (i.e., AP, UPI); (2) apply writing and reporting skills in a real-world situation; (3) edit the work of others [and] accurately proofread a document; (4) use correct editing marks and symbols; (5) apply agricultural communications techniques and skills; (6) use graphics effectively to increase understanding; (7) resolve conflicts; (8) work in a team activity; and (9) gather and synthesize information. The remaining proficiencies were used at least annually by 75% or more of the respondents.

Type of Implementation

Three general communications proficiencies were perceived by more than 75% of the public relations professionals as being "required" subject matter for agricultural communications undergraduate students: (1) write using appropriate style (i.e., AP, UPI); (2) cite sources; and (3) correctly report facts. An additional 21 proficiencies (see Table 3) were perceived by more than 50% of the public relations professionals as being "required" subject matter for agricultural communications undergraduates. More than 50% of respondents indicated three general communications proficiencies should be taught as "elective" subject matter: (1) write speeches using effective formats and formulas; (2) customize a speech for a specific audience; and (3) use creative skills to develop introductions to effectively engage an audience in a speech.

Public Relations-specific Proficiencies

Table 4 provides a list of the public relations-specific proficiencies perceived as important by public relations professionals.

Table 4. *Public relations-specific proficiencies perceived as important by 50% or more of respondents*

Apply effective writing techniques.*
Determine problems and methods used to solve them.*
Possess business knowledge related to operations and finance.*
Design and communicate a marketing plan.*
Publicize events.*

Understanding of barriers to communication.*
Ability to manage finances.*
Apply strategic thinking skills.*
Provide effective PR counsel to CEO.*
Apply basic PR principles.*
Work individually and in groups to solve PR problems.*
Work with others in a team.*
Develop presentations.*
Identify target markets.*
Know multimedia alternatives.*
Design promotional materials.*
Promote programs.*
Review communication prepared by others.*
Design and publish a newsletter.*
Meet deadlines, handle multiple priorities simultaneously, and work under pressure.*
Ability to listen to others and understand others' points of view in an unbiased manner.*
Apply analytical skills.*
Apply creative conceptualization.*
Know program evaluation skills.*
Demonstrate news sensibility.*
Ability to successfully "pitch" a news story.*
Maintain knowledge of current events.*
Knowledge and understanding of corporate policies.*
Ability to manage stakeholders.*
Counsel, coach and supervise team of employees.*
Conduct benchmarking for marketing activities.*
Prepare others for media interviews and presentations.*
Demonstrate crisis communication skills and understanding of crisis phases.*
Use consulting and negotiation skills.*
Solve PR problems from practical case studies.*
Coordinate requests for speakers and trainers.*
Understand and apply research methods.*
Knowledge of communication models.*
Create flyers.
Develop internal communications plans regarding policies, promotions and assignments.
Develop recruitment materials.
Write policy papers.
Apply administrative theory to personnel decisions.

*Proficiencies perceived as important by more than 75% of respondents

Perceived As Important

In the public relations-specific section of the instrument, 38 proficiencies of the 45 presented were perceived as important by 75% or more of the public relations professionals (Table 4). Five proficiencies were categorized as important by 50% to 74.9% of respondents, while two proficiencies were perceived as not important by at least 50% of respondents (Table 2): (1) apply the case-study method of problem solving and (2) understand state grant guidelines for program services.

Frequency of Use

More than 75% of the public relations professionals indicated they used five of the public relations-specific proficiencies on a daily basis: (1) apply effective writing techniques; (2) develop presentations; (3) identify target markets; (4) meet deadlines, handle multiple priorities simultaneously, and work under pressure; and (5) maintain knowledge of current events. An additional 12 proficiencies were identified as being used on a daily basis by 50% or more of the respondents: (1) determine problems and methods used to solve them; (2) possess business knowledge related to operations and finance; (3) understanding barriers to communication; (4) apply strategic thinking skills; (5) apply basic public relations principles; (6) work with others in a team; (7) ability to listen to others and understand others' points of view in an unbiased manner; (8) apply analytical skills; (9) apply creative conceptualization; (10) demonstrate news sensibility; (11) ability to manage stakeholders; and (12) use consulting and negotiation skills.

More than 65% of the respondents indicated they used the following public relations-specific proficiency on a monthly basis: Design and publish a newsletter.

Type of Implementation

Four public relations-specific proficiencies were perceived by more than 75% of the public relations professionals as being "required" subject matter for agricultural communications undergraduate students: (1) apply effective writing techniques; (2) apply basic public relations principles; (3) work individually and in groups to solve public relations problems; and (4) work with others in a team. An additional 13 proficiencies (see Table 4) were perceived by more than 50% of the public relations professionals as being "required" subject matter for agricultural communications undergraduates. More than 50% of respondents indicated three public relations-specific proficiencies should be taught as "elective" subject matter: (1) develop internal communications plans regarding policies, promotions and assignments; (2) develop recruitment materials; and (3) apply administrative theories to personnel decisions.

Conclusions and Recommendations

Based on the results of this study, the typical agricultural communications public relations professional is a 35- to 55-year-old female who has worked for 13 or more years in public relations in two or more jobs. She perceives her knowledge of agriculture to be high, has worked for an agricultural business, and has lived on a farm or in a rural area.

In terms of technical agriculture proficiencies, public relations professionals who responded to the survey perceived them to be less important than general communications or public relations-specific proficiencies, as 21 technical agriculture proficiencies were eliminated from the list of important proficiencies, most were reported to be used at least annually (rather than daily, weekly, or monthly), and were suggested for material in elective courses for agricultural communications undergraduate students. The remaining technical agriculture proficiencies (those perceived as important and used most frequently by public relations professionals who completed the survey) encompass broad issues related to government and legislative policies.

The respondents indicated all of the general communications proficiencies were important to the public relations field and were used on either a daily or weekly basis. These public relations professionals also indicated general communications proficiencies used on a daily or weekly basis should be included in a required course for agricultural communications undergraduate students. Proficiencies related to computer skills, human relations skills, time management skills, and writing and editing skills were among the most frequently used proficiencies by the public relations professionals. Although perceived as important, the majority of respondents indicated they never use proficiencies dealing with international communications.

Of the 43 public relations-specific proficiencies perceived as important by the respondents, nearly 40% were used on a daily or weekly basis and recommended for inclusion in a required course of agricultural communications undergraduates. The most frequently used proficiencies were related to writing, presentations, deadlines, and identification of audiences and markets. Proficiencies related to speech writing were identified for elective subject matter.

The researchers recommend agricultural communications faculty members consider focusing the curriculum for students interested in public relations toward writing, editing, and presentations, as well as toward personal development including time management, conflict resolution and teamworking skills. Undergraduate students also should have an understanding

of agricultural issues, especially related to agricultural policy and government programs. A significant finding from the study is that faculty should prepare students for the deadline pressures they will face as public relations professionals; faculty should maintain strict deadlines for academic assignments. Coursework in finance and basic business principles, including budget preparation, should be included in an agricultural communications curriculum for students interested in public relations.

Findings from this study can provide information to agricultural communications faculty and administrators for developing or reorganizing agricultural communications curriculum. Research accumulated from this study should be used to begin to develop a model for the public relations area of the agricultural communications undergraduate curriculum.

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