

What Skills and Experiences Get Agricultural Communications Students Hired: An Industry Perspective



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Abstract

Preparing students for career success is a common goal across higher education. Yet, despite this long-standing goal, many recent graduates, including graduates from agricultural communications and journalism degree programs, are ill-prepared for career success. Thus, we surveyed agricultural communications and journalism employers ($n = 45$) to identify what skills and characteristics presented on students' résumés are most influential when employers make hiring decisions for entry-level agricultural communications positions. We found that students pursuing a career in agricultural communications and journalism should prioritize experiences (e.g., courses, paid positions, extracurricular experiences, professional development activities) that directly impact their ability to develop strong communication skills (specifically developing skills in critical listening and creating accurate and concise content), make decisions based on evidence, and solve complex problems facing the communication profession. Additionally, to increase potential earnings, students should ensure that their communication and decision making/problem solving

skills are above average and that they emphasize learning how to communicate accurately and concisely.

Keywords: soft skills, agricultural communications, résumés, salary

The role of an agricultural communicator has changed since the grassroots beginnings of Cooperative Extension. A discipline that began as providing predominantly rural audiences with information about farming, gardening, and home making has evolved into the complex storytelling of agriculture to worldwide audiences (Irani & Doerfert, 2013). In the last 100 years, communicating scientific-based facts about politically charged, controversial issues has become increasingly critical to sustaining the nation's food supply (Baker et al., 2021). Thus, as agricultural science discoveries have become more complex and innovative, the demands of cutting-edge communication about scientific discoveries and the scientists behind the discoveries have also become complex (Burns et al., 2003). As a result, students studying agricultural communications and journalism are expected

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to gain technical, psychological, and behavioral skills that prepare them to meet the needs of a rapidly changing industry surrounded by skeptics, naysayers, and wary consumers.

Although numerous context- and geographic-specific studies have been conducted related to agricultural communications programming and the skills graduates need to be prepared for the workforce, Cannon et al. (2016) noted a nationwide study had not been conducted in more than two decades. Thus, to address a gap in the literature related to curriculum content, Cannon et al. (2016) applied Finch and Crunkilton's (1984) program system model to agricultural communications, added an emphasis on curriculum content to the model, and asked what agricultural communications focused courses are offered in undergraduate programs in the United States. They found a wide variety of courses exist for students in agricultural communications programs, ranging from writing to international relations. Their study laid the foundation for continual guidance in developing a quality curriculum within agricultural communications and journalism programs nationwide.

In 2020, Leal et al. expanded Cannon's work and further modified the model to establish the *agricultural communication program system model*. The Leal et al. (2020) model incorporates findings from four major programmatic studies in the agricultural communications discipline—Cannon et al. (2016); Morgan (2010); Morgan (2012); Morgan and Rucker (2013)—and identifies variables important to preparing career-ready graduates in agricultural communications. The model included two distinct groups—students (input) and career-ready graduates (output). Students develop into career-ready graduates through stakeholders (communication industry professionals) and transformation (academic program, including curriculum and resources), which relies on intercommunication between the two. Thus, Leal et al. (2020) noted that transformation could

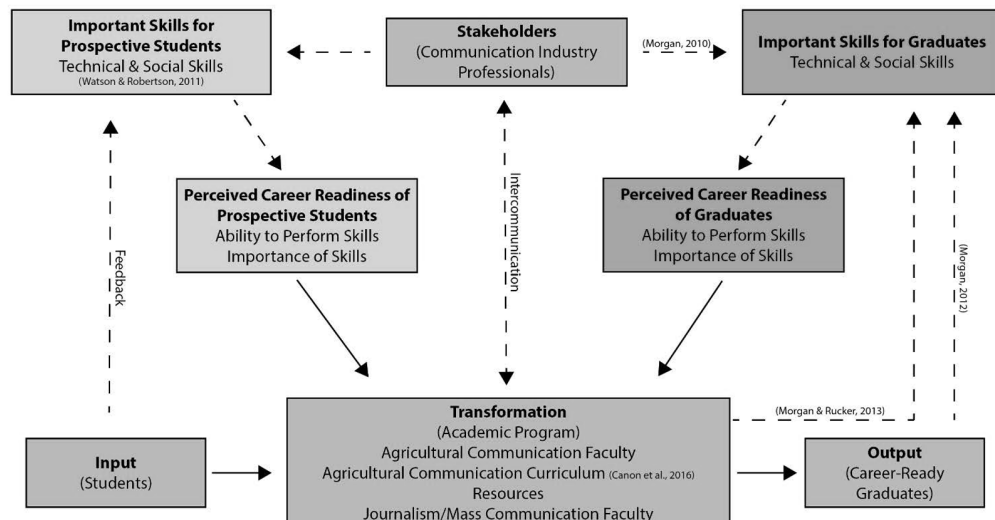
not occur without intercommunication with communication industry professionals (Figure 1).

Furthermore, for students to grow and transform into agricultural communicators (Leal et al., 2020) and meet the demands of an increasingly controversial industry, curriculum design and delivery should incorporate feedback from across stakeholder groups, including faculty, students, administrators, employers, and industry professionals. Crawford et al.'s 2011 study implied that communication among groups is important as they surveyed stakeholders across four unique groups—students, faculty, alumni, and employers—when seeking to understand the soft skills employers seek in new graduates from across disciplines in the agricultural and natural resources. Before the two studies noted above, Morgan (2010) studied the importance of including the voices of communication industry professionals as stakeholders in preparing career-ready graduates in agricultural communications. Morgan and Rucker conducted a follow-up study in 2013 and found that faculty members and industry professionals often have similar views about necessary skills and competencies needed by recent graduates of agricultural communications programs. Thus, we recognize that communication industry stakeholders are not the only stakeholder in preparing career-ready graduates, but they are important stakeholders because they provide a unique perspective of the rapidly changing landscape of communications and the target audiences that the agricultural industry serves. Furthermore, we recognize anecdotally that the consumer and producer are changing, and one way to understand this in real-time is through the voice of the professional working in communications and journalism.

One way faculty members in agricultural communications have incorporated stakeholder input into students' transformational experiences has been to align course expectations, outcomes, and assignments with the

Figure 1.

Agricultural Communication Program System Model (Leal, A., Telg, R. W., Rumble, J. N., Stedman, N. L. P., & Treise, D. M. (2019). Exploring beyond the obvious: Social skills needed for agricultural communication baccalaureate graduates. Journal of Applied Communications, 103(2), 1–20. <https://doi.org/10.4148/1051-0834.2188>)



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current and future needs of the industry, especially in terms of technology. This can be done through quantitative and qualitative studies with industry professionals that focus on course content, concepts, and real-world assignments. An example of this is Whitaker and Leggette's (2016) study of digital media strategists to determine the most important concepts to be taught in a newly designed social media course. To create real-world experiences for students, Whitaker and Leggette (2016) sought to understand the digital media concepts that professionals used daily in their careers. The concepts would then be delivered using evidence-based andragogy practices (e.g., reflection exercises; Leggette et al., 2020) to provide students with real-world skills that they could apply as industry professionals. As a result, they designed a social media course based on industry feedback related to course content, exercises, and assignments to prepare students for the advanced positions they will start after graduation while delivering the content using teaching methods that transform students' understanding of digital media. Thus, we believe to remain on the forefront of preparing today's students for tomorrow's careers, faculty members should incorporate content, exercises, and assignment feedback from stakeholders (e.g., industry leaders, practitioners) into their courses (Hurst et al., 2015; Maiga et al., 2013) and deliver the content using evidence-based teaching methods.

Using Leal et al.'s (2020) agricultural communications program system model as the foundation, we focused our research on the concept of important skills for graduates with a specific focus on social skills, or soft skills as reported by Crawford et al. in 2011. According to Leal et al. (2020), intercommunication with stakeholders (communication industry professionals) is critical to understanding the important skills for career-ready graduates and, we believe, to understanding the characteristics that make agricultural communications graduates more competitive on the job market. Yet, we could not find studies that investigated specific skills in the context of a résumé or studies that placed a monetary value on the soft skills and communications skills that other studies have identified as important. Therefore, we chose to identify what skills and characteristics presented on students' résumés were most influential when employers make hiring decisions for entry-level agricultural communications positions.

Because we were interested specifically in soft skills noted by Leal et al. (2020) as important skills for career-ready graduates, we chose to apply Crawford et al.'s 2011 study of what soft skills are important for new college graduates in agriculture, and specifically in agricultural communications. In a nationwide study, Crawford et al. (2011) identified seven clusters of soft skills they found to be important in a competitive agricultural workforce: experiences, communication skills, team skills, leadership skills, decision making skills, self-management skills, and professionalism skills. Experiences, often the most included items on résumés, include leadership, work, or international experiences. Faculty recognize the need to incorporate such experiences into curriculum because they allow students to apply soft skills (Morgan & Rucker, 2013). One opportunity for soft skill application is high

impact educational practices because they often prepare students to meet the demands of the global market. Desired learning outcomes of high impact educational practices include global knowledge, self-direction, writing, critical thinking, adaptability, self-knowledge, oral communication, quantitative reasoning, social responsibility, intercultural skills, ethical judgement, and teamwork (Schneider, 2008). Furthermore, communication skills are often a primary soft skill that agricultural communications and journalism students refine through experiences and extra-curricular activities. Crawford et al. (2011) characterized communication skills as including effective oral and written communication; effective listening; and accurate, concise, professional, and pleasant communication.

In addition, Crawford et al. (2011) described students who possess decision making skills as students who can develop creative solutions, transfer knowledge, continue to learn across situations and contexts, think abstractly, and analyze problems. Those who have teamwork skills have a positive attitude when working with others, are inclusive and aware of diversity, are open and honest, and actively participate in idea sharing and generating. Leaders in the workplace motivate others, lead change, and deal with conflict effectively while also managing themselves through adaption, seeking professional development opportunities, and establishing and refining their work habits. Last, Crawford et al. (2011) found that students who have professionalism skills can build impactful relationships with stakeholders, have developed mentoring relationships, and accept and use constructive criticism.

Of the seven skill areas, students, employers, faculty, and alumni ranked *communication skills* and *decision-making skills* as the two most important skills for new employees, and students ranked experiences higher than other groups surveyed (Crawford et al., 2011). The communication skill area has seven defining characteristics—"listening effectively, communicate accurately and concisely, effective oral communication, communicate pleasantly and professionally, effective written communication, ask good questions and communicate appropriately and professionally using social media" (Crawford et al., 2011, p. 9). Of the seven, employers identified listening effectively and communicating accurately and concisely as being the most important.

Furthermore, Crawford and Fink (2019) expanded the original report and divided employability skills into three levels: foundational skills (i.e., communication and decision making), intermediate skills (i.e., teamwork and self-management), and advanced skills (i.e., leadership and professionalism). Within their 2019 work, Crawford and Fink labeled 11 skills as areas for significant growth. They concluded that, for the most part, students did not learn the 11 skills in college and, therefore, presented the largest gaps between importance of skill and preparedness to perform the skill. The 11 skills are a) build professional relationships, b) deal constructively with criticism, c) communicate accurately and concisely, d) accept and apply critique and direction in the workplace, e) ask good questions, f) realize the effect of decisions, g) identify and analyze problems, h) transfer knowledge from one situation to another, i) listen effectively,

j) understand role/structure in the workplace and realistic career expectations, and k) navigate change and ambiguity (Crawford & Fink, 2019, p. 133–135). Three of the 11 were directly related to communication skills development with communication being an important component of many of the 11 skill areas.

Crawford et al.'s (2011) soft skills framework has been applied across disciplines. In 2016, Wesley et al. evaluated perceived importance of soft skills amongst students, faculty, and industry leaders in retail and tourism management. Wesley et al. (2016) found that communication was ranked highest among industry professionals, faculty, and students, followed by decision making (ranked second by industry and faculty) and teamwork (ranked second by students). Similarly, Bolton et al. (2015) used Crawford et al.'s (2011) skill clusters to evaluate career and interpersonal skills gained from participating in collegiate livestock judging. Their findings show that participating in a collegiate livestock judging team had perceived benefits related to interpersonal skills, like communication. In a 2018 study, Murray et al. used Crawford et al.'s (2011) definitions of key constructs to conduct a scoping review and systematic map of soft skill assessment instruments. Using descriptions of Crawford et al.'s (2011) soft skills, researchers identified and recommended instruments to measure leadership, communication, and employability. Most recently, Norris et al. (2019) and Parrella et al. (2023) found that agricultural students' self-perceptions of communication skills improved after college engagement experiences (e.g., writing-intensive course).

In the current study, we used the Crawford et al. (2011) framework to identify the soft skill areas and corresponding characteristics that could be situated within the important skills for graduates (social) concept of Leal et al.'s (2020) agricultural communication program system model as well as to develop the data collection instrument. Many studies have identified the need for soft skills but have not investigated the application of those skills and how employers value them in the workplace. Therefore, we applied Crawford et al.'s (2011) framework, which previously assessed all agricultural disciplines, to employers specifically within agricultural communications. We sought to begin answering broad employability questions that often guide conversations about agricultural communications and journalism programing across universities. Such questions often include a) Are students graduating from college prepared for their career?; b) Do they possess key characteristics on their résumés that make them competitive against other students who might have different experience levels or fields of study?; and c) Are employers willing to offer more to students who have years of work experience, internship experience, or extra-curricular activities? Answering broad questions like these will help faculty members across agricultural and life science disciplines better prepare students for the global, competitive workforce.

Purpose and Objectives

The purpose of our study was to investigate the broad "Question C" above more specifically within agricultural communications by identifying what skills and characteristics presented on students' résumés are most influential when employers make hiring decisions for entry-level agricultural communications positions. Three research questions guided the study.

1. RQ1: What key characteristics do employers look for when reviewing résumés for entry-level positions in agricultural communications?
2. RQ2: How do employers rank Crawford et al.'s (2011) soft skills, specifically communication skills, when hiring new employees for entry-level positions?
3. RQ3: What résumé characteristics and soft skills do employers believe have a higher monetary value?

Methods

We used quantitative survey methodology (Fraenkel & Wallen, 2009) to conduct the study and obtained permission to conduct the study from Texas A&M University Institutional Review Board.

Sample

We used the membership database for the American Agricultural Editors' Association, the Connectiv Ag Media Committee, and the Livestock Publications Council to identify the sample for our study. The three membership databases combined yielded the potential for 603 participants. The American Agricultural Editors' Association includes editors, photojournalists, designers, and other professionals within agricultural communications, and the Connectiv Ag Media Committee (name changed to Connectiv Ag Media Council in 2020) includes upper-level executives from top agricultural media companies across the United States. The Livestock Publications Council is an international organization designed to serve the publications and services sector of livestock communications. Individuals involved in these organizations are industry professionals in agricultural communications who strive to improve the crop and livestock media industry. If an individual member of the Livestock Publications Council was not listed in the publication database, then we used the individual who served as the editor of the publication or the individual who most likely hired new employees for the company. We used the director or manager to determine position at the company. If we could not find contact information or if the membership listing included a general company email, we removed it from the study.

Of the 249 individuals who received the survey, 45 individuals provided usable responses by responding to at least one question in the survey for an 18% response rate. Differences in response rates across questions are the result of participants choosing not to answer some questions. Of the 45 participants, 40% ($n = 18$) were male and 55.6% ($n = 25$) were female with 37.8% ($n = 17$) ranging from 55 to 64

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years old. Twelve participants (26.7%) had been employed as a professional in agricultural communications for one to five years and 11 participants (24.4%) had been employed as a professional in agricultural communications for 31 or more years. Additionally, 31.1% of participants ($n = 14$) worked at organizations with 100 or more employees and 24.4% of participants ($n = 11$) worked at organizations with 10 to 24 employees (Table 1).

Instrumentation

We developed the instrument to better understand the characteristics employers seek in new employees, the monetary values of characteristics presented on students' résumés, and characteristics employers seek when reviewing résumés and making hiring decisions. We asked participants about their gender, age, level of education, employer, numbers of employees at their organization, involvement in hiring decisions, average salary for entry-level positions at their organization, and sector of agricultural communications that best described their expertise (Table 1). Then, based on participants' answer to *sector of agricultural communications that describes their area of expertise*, they were assigned résumés within that focus. We designed the résumés based on the Crawford et al. (2011) framework and examples of recent graduates' résumés as well as input from communication industry professionals and professors in agricultural communications and journalism. All four résumés represented a student applying for an entry-level agricultural communications position within the participant's area of expertise. Participants ranked the résumés based on first impression with 1 being most employable to 4 being least employable. Table 2 provides the description of résumés by sectors of agricultural communications. Participants also provided qualitative descriptions as to why they found a résumé most employable.

Additionally, participants ranked soft skill areas (communication skills, decision making skills, self-management skills, teamwork skills, professionalism skills, experiences, leadership skills) by order of most desirable with 1 being most desirable to 7 being least desirable (Crawford et al., 2011). Participants also ranked the seven characteristics that Crawford et al. (2011) included in the communication skills area (listening effectively, communicating accurately and concisely, communicating orally, communicating pleasantly and professionally, communicating in writing, asking effective questions, and communicating appropriately and professionally using social media). They ranked them in order of most desirable with 1 being most desirable to 7 being least desirable. Additionally, participants placed a monetary value on each soft skill area and each communication skills characteristic with 1 being \$1,000 to 20 being \$20,000.

Data Collection

We conducted a pilot study to assess the instrument's face validity and the data collection process. Using the population database, we drew a random sample using Microsoft Excel's RAND function. The first 60 individuals

who appeared in the spreadsheet after conducting the RAND function were sent the survey for the pilot study. We sent them the questionnaire using a modified Dillman et al.'s (2011) data collection method and collected pilot study data until we received at least 30 responses, which are not included in the study's sample. We did not run reliability statistics using pilot study data because none of the questions contained more than one item that formed a scale. Following the pilot study, we made minor changes to the data collection process and to the instrument wording.

After the pilot study, we collected the final study data following Dillman et al.'s (2011) recommended data collection methods. To increase personalization and eliminate ethical concerns, we sent individual emails, not in bulk, to each one of the potential participants. The email included an invitation to complete the study and a link to the Qualtrics questionnaire. We sent three reminder emails after sending the initial email. We kept the questionnaire and all emails short to increase the likelihood of completion and sent the emails in the morning per Dillman et al.'s (2011) recommendations.

Data Analysis

We analyzed the data using Statistical Package for the Social Sciences, Version 24.0 (SPSS). We ran descriptive statistics (measures of central tendency, measures of variability, and frequency distribution) on the demographic questions and on all questions involving ranking of soft skills, communication skills, and résumés. Additionally, we ran descriptive statistics on questions involving monetary value of soft skill areas and communication skill characteristics and descriptive statistics on average salary for entry-level positions at place of employment.

Limitations

Our study has three limitations. First, we developed the résumés and tested their validity among agricultural communications and journalism faculty members based on the Crawford et al. (2011) framework and examples of recent graduates' applications. However, we recognize that they may not be representative of all skills and experiences within agricultural communications and journalism and bias could exist based on our own personal experiences and lens in which we view skills and experiences. Second, the response rates are low, so the results cannot be generalized. Third, the participants in the study might not always be the ones reviewing employment applications for the represented organizations, and results would most likely vary by participant within the organization.

Results

Research Question 1

Participants were asked to rank four résumés, based on their first impression, from most employable (1) to least employable (4), and we analyzed the data using descriptive statistics (measures of central tendency and

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Table 1.

Demographic Characteristics of Study Participants

Demographic Characteristics	<i>f</i>	%
Gender (N = 43)		
Male	18	40.0
Female	25	55.6
Age (N = 44)		
18-24	3	6.7
25-34	8	17.8
35-44	10	22.2
45-54	6	13.3
55-64	17	37.8
Highest level of education (N = 44)		
High school graduate	1	2.2
Bachelor's degree	31	68.9
Graduate or professional degree	12	26.7
Length of employment in agricultural communications (N = 45)		
1 – 5 years	12	26.7
6 – 10 years	6	13.3
11 – 15 years	5	11.1
16 – 20 years	2	4.4
21 – 35 years	7	15.6
26 – 30 years	2	4.4
31+ years	11	24.4
Total number of persons at place of employment (N = 43)		
2 to 9	6	13.3
10 to 24	11	24.4
25 to 49	8	17.8
50 to 99	4	8.9
100 or more	14	31.1
Involved in hiring decisions? (N = 44)		
Yes	26	57.8
No	6	13.3
Sometimes	12	26.7
Sector of agricultural communications (N = 39)		
Digital Media	3	6.7
Graphic Design	1	2.2
Journalism	7	15.6
Public Relations	9	20.0
All of the Above	19	42.2

Note. None of the participants represented the following demographics: 65 & above; completed some high school; completed some college; had an associate's degree; had a Ph.D.; were the only employee at the company; or worked in television, radio or audio.

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Table 2.

Description of Résumés by Sectors of Agricultural Communications

Résumé	Description
DM1	Agricultural communications degree; Several work experiences; Officer in degree-specific organization; Proficient in Adobe suite
DM2	Agricultural communications degree; Several field-specific work experiences; Active in extra-curricular activities; Skilled in Adobe suite
DM3	Communication degree; Some work experiences; Active in extra-curricular activities
DM4	Agricultural leadership degree; Some experiences, like a study abroad and an internship; Skilled in Microsoft products
GD1	Agricultural communications degree; Several applicable work experiences; Involved in degree and industry-specific organizations; Advanced knowledge of Adobe suite
GD2	Agricultural communications degree, minor in art; No applicable work experiences; Active in extra-curricular activities
GD3	Visualization degree; Some work experiences; Active in extra-curricular activities; Skills in Adobe suite
GD4	Animal science degree; Several work experiences but only one applicable experience; Very active in extra-curricular activities; Some experience with Adobe suite
J1	Agricultural communications degree; Several internships at newspapers; Very active in extra-curricular activities
J2	Agricultural communications degree with English minor; One field-specific job; Active in extra-curricular activities
J3	Journalism degree; Several internships at newspapers and radio stations; Active in extra-curricular activities
J4	Animal science degree; No work experience in field; Active in extra-curricular activities
PR1	Agricultural communications degree, certificate in event management; Numerous work experiences in event management and media; Active in extra-curricular activities; Several applicable skills (e.g., Adobe, SEO, videography)
PR2	Agricultural communications degree; Several student worker positions; Several applicable skills (e.g., Adobe, SEO, videography)
PR3	Communications degree; Internships at media agency and television news station; Active in extra-curricular activities
PR4	Animal science degree; Several experiences, including congressional internship, study abroad and part-time work; Active in extra-curricular activities
AA1	Agricultural communications degree with event management certificate; Several internships in event management and media; Proficient in Adobe suite; Very active in extra-curricular activities
AA2	Agricultural communications degree; Participated in a study abroad; Work experience in media and sales; Experience with DSLR camera
AA3	Animal science degree; Experience as a media intern for livestock show; Participation in degree-specific organization
AA4	Communication degree; Work experience as a server and as a media intern; Active in extra-curricular activities

Note. DM = Digital Media, GD = Graphic Design, J = Journalism, PR = Public Relations, AA = All of the Above; The television, radio, and audio sector was not included in the description table because none of the participants identified with that sector, and as a result, the study does not include data from that sector.

variability). Description of résumés by sectors of agricultural communications are provided in Table 2. Participants who identified as digital media professionals ranked résumé one as the most employable ($M = 1.33$; $SD = 0.58$) and ranked résumé four as least employable ($M = 3.33$; $SD = 0.58$). The student in résumé one had a wide array of experiences (from a sales position in retail to a media internship with a livestock show), was involved at the department level, was bilingual, and had experience with videography and photography. One participant said résumé one had the “most overall experience and had real world life skills” (Table 3).

Participants who identified as graphic designers ranked résumé one as the most employable ($M = 1.00$; $SD = 0.00$) and résumé two as the least employable ($M = 4.00$;

$SD = 0.00$). The student in résumé one had a variety of experiences, including a study abroad, an internship with a marketing firm, and an internship as a graphic designer. The student was involved throughout the university and had a diverse list of skills. One participant described the résumé as “excellent” because the student had the “most practical ‘real world’ experience.” Furthermore, the participant appreciated the student’s study abroad experience, photography experience, and “essential experience in social media communications.” Being “active in [a] student design association indicates a passion for graphic design” (Table 3).

Participants who identified as journalists ranked résumé three as the most employable ($M = 1.43$; $SD = 0.54$) and résumé four as the least employable ($M = 3.29$; $SD = 0.95$).

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Table 3.

Résumés Ranking of Most Employable to Least Employable by Participants Across Industry Sectors within Communications

Sector	M	SD
Digital Media (n = 3)		
Résumé 1	1.33	0.58
Résumé 2	2.67	1.16
Résumé 3	2.67	1.53
Résumé 4	3.33	0.58
Graphic Design (n = 1)		
Résumé 1	1.00	0.00
Résumé 3	2.00	0.00
Résumé 4	3.00	0.00
Résumé 2	4.00	0.00
Journalism (n = 7)		
Résumé 3	1.43	0.54
Résumé 1	1.71	0.76
Résumé 2	3.29	0.49
Résumé 4	3.29	0.95
Public Relations (n = 9)		
Résumé 1	1.22	0.44
Résumé 3	2.56	1.13
Résumé 2	3.11	0.60
Résumé 4	3.11	1.05
All of the Above (n = 17)		
Résumé 1	1.29	0.47
Résumé 2	2.06	0.83
Résumé 4	3.24	0.90
Résumé 3	3.35	0.79

Note. *n* = no. of participants who self-identified according to their specific area of communications; Scale was a 4-point scale with 1 being most employable and 4 being least employable.

Résumé three represented a student who had experience with radio stations and newspapers and was involved across the university. One participant appreciated the “the variety of pertinent experiences [because] today’s journalists need a variety of skills including videography, photography, writing and broadcast experience to produce multi-faceted story packages for today’s publications” (Table 3).

Participants who identified as public relations professionals ranked résumé one as most employable ($M = 1.22$; $SD = 0.44$) and résumé four as least employable

($M = 3.11$; $SD = 1.05$). The student represented in résumé one had event management, media agency, and livestock show experiences. The student was involved in collegiate activities and had an impressive set of skills. One participant said the student had a “great balance of experiences—academic, intern/job experiences, extracurricular activities, and marketable skills.” The participant “prefer[red] experiences that give students exposure to real job tasks (writing, planning, creating content) [over] office assistance, customer service, or mere coordination” (Table 3).

Last, participants working in all areas of communications and journalism ranked résumé one as the most employable ($M = 1.29$; $SD = 0.47$) and ranked résumé three as the least employable ($M = 3.35$; $SD = 0.79$). The student represented in résumé one had completed an internship with an event management company, a media agency and a livestock show and was involved with judging teams and departmental organizations. The student had experience with a DLSR camera and social media analytic software. One participant noted “[the résumé] showed the most relevant experience to communication, management, and organization” (Table 3).

Research Question 2

We first asked participants to rank Crawford et al.’s (2011) seven soft skill clusters from most important to least important, and we analyzed the data using descriptive statistics (frequencies and percentages). We did not provide Crawford et al.’s (2011) definitions for the seven soft skills to the study participants because Crawford et al. (2011) only provided characteristics of each soft skill and not definitions. Participants ranked communication skills as the most important soft skill cluster ($f = 23$; 51.1%) and decision-making skills as the second most important soft skill cluster ($f = 10$; 22.2%), which aligned with the opinions of those employers who participated in the Crawford et al. 2022 study. None of the participants ranked leadership skills as a top soft skill cluster (Figure 2).

In addition to ranking soft skill clusters, participants ranked the seven communication skills, as defined by Crawford et al. (2011). Almost 38% ($f = 17$) of participants ranked listening effectively as the most important communication skill and 20% ($f = 9$) ranked communicating accurately and concisely as the second most important communication skill, which also aligned with Crawford et al. (2011). None of the participants ranked asking effective questions and communicating appropriately and professionally using social media as the most important communication skill (Figure 3).

Research Question 3

On a 20-point scale (1 = \$1,000 to 20 = \$20,000), participants placed a monetary value on the seven soft skill clusters that Crawford et al. identified in 2011, and we analyzed the data using descriptive statistics (measures of central tendency and variability). Participants identified the communication skills cluster as having the highest monetary value ($M = 13.71$; $SD = 6.420$) when hiring

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entry-level agricultural communications professionals with decision making/problem solving skills having the second highest monetary value ($M = 13.31$; $SD = 5.810$). They identified the experiences cluster as having the lowest monetary value ($M = 8.74$; $SD = 5.617$) when hiring entry-level agricultural communications professionals (Table 4). This is an interesting finding of RQ3 because employers reported that they look for experiences when reviewing résumés but place a low monetary value on experiences. Perhaps, this is because employers value and are willing to pay for the outcome of experiences, which is often improved communication skills, decision-making skills, or self-management skills, but they do not value the simplicity of just having experience. Thus, they see experiences as a pathway to the end but not the end.

On a 20-point scale (1 = \$1,000 to 20 = \$20,000), participants placed a monetary value on the seven communication skills characteristics that Crawford et al. identified in 2011. Participants identified the communicating

accurately and concisely characteristic as having the highest monetary value ($M = 15.40$; $SD = 4.526$) when hiring entry-level agricultural communications professionals with communicating appropriately and professionally using social media characteristic as having the lowest monetary value ($M = 11.57$; $SD = 6.127$) when hiring entry-level agricultural communications professionals (Table 5).

Conclusions

Although our results cannot be generalized beyond our sample, we believe our study presents three important conclusions. First, students pursuing a career in agricultural communications and journalism need to prioritize experiences (e.g., courses, paid positions, extracurricular experiences, professional development activities) that directly impact their ability to develop strong communication skills, make decisions based on evidence, and solve

Figure 2.

Participants' Ranking of Crawford et al.'s (2011) Seven Soft Skill Clusters

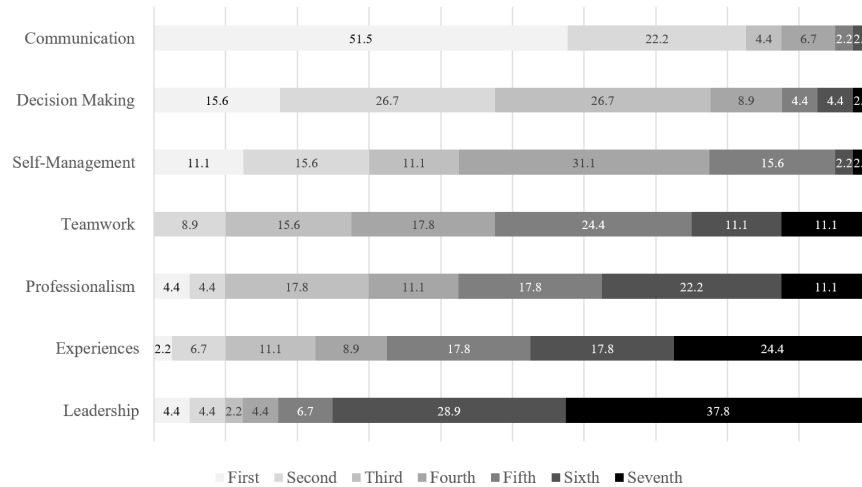
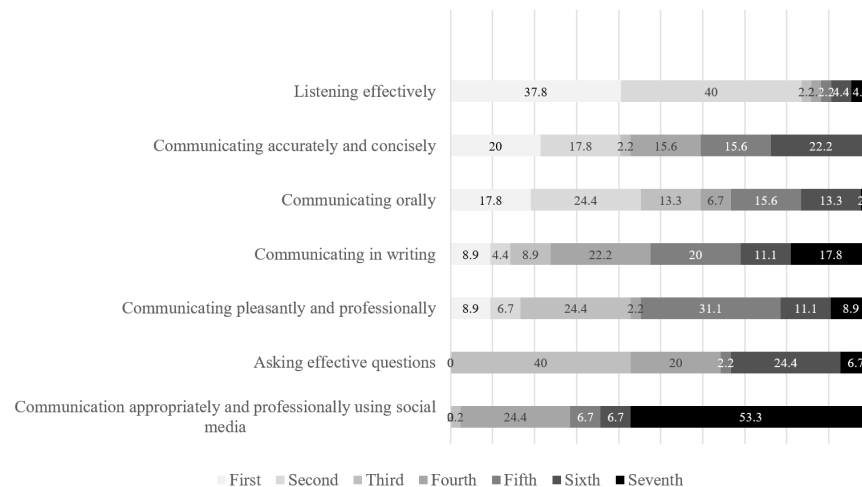


Figure 3.

Participants' Ranking of Crawford et al.'s (2011) Seven Communications Skill Characteristics within the Communication Skills Cluster



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Table 4.

Means and Standard Deviations for the Monetary Value of Crawford et al.'s (2011) Soft Skill Clusters when Hiring Entry-level Agricultural Communications Professionals

Soft Skill Cluster	<i>n</i>	<i>M</i>	<i>SD</i>
Communication skills	35	13.71	6.42
Decision making/problem solving skills	35	13.31	5.81
Self-management skills	35	11.51	5.29
Teamwork skills	35	10.60	5.87
Professionalism skills	35	10.40	5.49
Leadership skills	35	9.80	6.06
Experiences	35	8.74	5.62

Note. *n* = no. of participants who responded to the question; Measured on a 20-point scale with 1 = \$1,000 to 20 = \$20,000.

complex problems facing the communication profession. We recognize that employers did not value experiences in terms of financial reward, but experiences do provide a gateway for students to develop the skills that employers do reward through financial compensation (e.g., decision making, communication, problem solving). Participating in experiences is the gateway to soft skill development and the testing of those soft skills in real-world scenarios. Without experience, students cannot develop their soft skills or test their application of soft skills. Therefore, the results imply that employers value the outcomes of experiences, but they do not necessarily value the experiences themselves. Perhaps, then, faculty should encourage students to participate in experiences that expand the skills that employers value and encourage students not to participate in experiences that do not provide specific skill development.

Second, based on our study, students in agricultural communications and journalism programs need to focus on developing their critical listening skills and the skills to create accurate and concise content. The amount of information available to consumers is vast, and it is rapidly increasing. As the amount of information increases, the amount of misinformation also increases. Thus, the need for communicators who can listen critically to scientific information and communicate it in an accurate and concise manner is great. Anecdotally, we hear agricultural communicators refer to themselves as advocates for the agricultural industry. There is no doubt that some communicators work in positions where advocating is essential, but agricultural communications and journalism graduates should remember that their first obligation is to communicate the truth, which might not always be positive. Making decisions about how and when to communicate is critical to maintaining trust in the agricultural industry, and this need to maintain trust reinforces the need for students to focus on listening critically and developing critical thinking skills.

Third, to increase their potential earnings as entry-level agricultural communications professionals, students should

Table 5.

Means and Standard Deviations for the Monetary Value of Crawford et al.'s (2011) Seven Communication Skill Characteristics within the Communication Skills Cluster when Hiring Entry-level Agricultural Communications Professionals

Communication Skill Characteristics	<i>n</i>	<i>M</i>	<i>SD</i>
Communicating accurately and concisely	35	15.40	4.526
Listening effectively	35	14.57	5.653
Communicating in writing	35	14.23	5.236
Asking effective questions	35	13.89	5.098
Communicating orally	35	12.03	5.453
Communicating pleasantly and professionally	34	11.94	5.438
Communicating appropriately and professionally using social media	35	11.57	6.127

Note. *n* = no. of participants who responded to the question; Measured on a 20-point scale with 1 = \$1,000 to 20 = \$20,000.

ensure their communication and decision making/problem solving skills are above average and that they emphasize learning how to communicate accurately and concisely. As noted above, the dissemination of misinformation is on the rise, and new graduates will be on the front lines of combatting misinformation across the agricultural sciences. Our results show that employers will pay more for new graduates with communication and decision-making skills, which could be because employers see the dangers of misinformation lurking and realize the need to hire career-ready students who can lead the mitigation of such information.

Discussion

Leal et al. (2020) noted that curriculum, including course content, exercises, assignments, and experiences, is an important component of students' transformation into career-ready graduates. Experiences where students applied soft skills, specifically communication and decision-making skills, were key characteristics on résumés that employers in agricultural communications and journalism ranked as most employable. Like Crawford et al. (2011) and Wesley et al. (2016), we found communication and decision-making skills were the most important soft skills, so faculty should develop course content and assignments that challenge students to use their communication and decision-making skills. One way faculty could do this is through project-based learning opportunities related to journalism, graphic design, digital marketing, and general communication, which aligns with Whitaker and Leggette's (2016) study in digital media. Based on our results, specific to agricultural communications and journalism, course assignments should emphasize the need to communicate information that is accurate and concise. In addition to course content and assignments, faculty could use exercises that allow

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students to reflect on the communication and decision-making skills they used to complete the assignment and on how they could improve their application of such skills. Leggette et al. (2020), in their quasi-experiment study, found that students who participated in metacognitive reflection exercises after each major writing assignment had higher writing self-efficacy scores and overall higher media writing self-perception scores. Thus, reflection was one way the students in the Leggette et al. (2020) study transformed into career-ready professionals.

Additionally, encouraging networking opportunities can also give students opportunities to learn more about career options and ways to grow as a professional. If students cannot obtain “real-world” experience in agricultural communications, they need to seek out opportunities for exposure to communication and decision-making scenarios in their courses. Outside of the classroom, opportunities like high-impact learning experiences (i.e., judging teams; Bolton et al., 2015) could provide beneficial learning activities of skills like communication and decision-making. Encouraging experiences like these early in students’ college careers can help them be more prepared for their entry-level positions and give them the experiences to highlight themselves as well-rounded professionals in agricultural communications and journalism.

Furthermore, faculty could use our results to advise students on how to improve their personal marketing materials (e.g., cover letters, résumés, online portfolios, LinkedIn profiles) to gain maximum exposure and stand out among their peers. Faculty could focus on teaching students how to highlight soft skills, especially communication skills, in their résumés and cover letters. As such, students could highlight internships, organizations, and paid and unpaid positions that relate directly to the career they are pursuing while focusing specifically on skills learned and the developed in the experience. For example, students could highlight the career-specific social (e.g., communication, decision-making, listening) and technical skills (e.g., knowledge of AP style, experience with Adobe programs) that they learned as part of the experience to communicate to employers the value of the experience in an effort to earn a higher salary if chosen for the position. If students have agricultural experiences, they could include those experiences in their résumés to show involvement and understanding of the agricultural industry. Understanding the agricultural industry is important when hiring entry-level professionals in agricultural communications and journalism. Employers expect students to be well-versed in the agricultural industry and be aware of the current practices in agriculture because of its critical role to society’s livelihood. Faculty can encourage students to explore the agricultural industry and find their passions and interests within the industry by facilitating discussions about current topics and having guest speakers from across agricultural fields.

Future research could explore this topic more in agricultural communications and journalism and/or extend it into other agricultural and life sciences disciplines. In agricultural communications and journalism, scholars could conduct an eye-tracking study to identify the résumé

components that employers focus on when making hiring decisions, conduct a similar study with a larger sample size to allow for generalization, or explore the findings of this particular study through focus groups or interviews with the study’s population. Disciplines across the agricultural and life sciences could benefit from similar studies as this one (i.e., identifying what skills and characteristics presented on students’ résumés are most influential when employers are making hiring decisions for entry-level agricultural communications positions) or future studies proposed as a continuation of the current study. Such studies would provide evidence on how employers use résumés to make hiring decisions.

Despite many scholars (e.g., Crawford & Fink, 2019) noting a gap between employers’ expectations and students’ career preparedness and universities continual efforts to address these gaps, gaps in expected knowledge and preparedness are still present. There are many ways to study these gaps (e.g., surveys, focus groups, interviews), but one way that has not been studied extensively is how students present information on résumés and how employers prioritize that information when making hiring decisions. Thus, as a first step to understanding hiring decisions in agricultural communications and journalism, we believed it was necessary to understand the key characteristics of a résumé, how employers prioritize soft skills and communication skills, and how much value they place on such skills. Understanding these ideas will help agricultural communications and journalism faculty make recommendations to students on how to prepare themselves to be career-ready graduates and how choose important positions, experiences, and professional development activities that will stand out to potential employers.

As faculty continue to mirror professional agricultural communications and journalism experiences in their courses and students find ways to gain experience and improve their soft skills, it is important to have a system of checks and balances. Students will not know how to prepare for their careers without the input from the industry, and faculty cannot prepare students for their future careers without industry input even though we recognize that industry input is not the only important input. Thus, faculty, students, and industry leaders must work together to ensure that students graduating with a degree in agricultural communications and journalism are prepared to meet the demands of an ever-changing profession that disseminates controversial information to broad audiences.

Summary

Participants indicated they seek potential employees who have relevant experiences that emphasize soft skill development, are involved in extra-curricular activities, and have a variety of applicable skills. Participants ranked communication skills as the most important soft skill cluster and decision-making skills as the second most important, which aligns with Crawford et al.’s 2011 study. Furthermore, within the communication skills cluster, participants ranked listening effectively and communicating accurately and concisely as the top communication skills characteristics.

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Furthermore, participants identified communication skills and decision making/problem solving skill clusters as having the highest monetary value when hiring entry-level agricultural communications professionals and identified the communicating accurately and concisely communication characteristic as having the highest monetary value. Conducting similar research across agricultural and life sciences disciplines would provide college faculty and administrators with a roadmap for preparing students for industry careers and a clear indication of what employers value when reviewing résumés of potential employees. The specific findings of our study can be used to develop and improve curriculum in agricultural communications and journalism.

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