

Exploring Perspectives of the Student Competencies Needed to Advocate for Agriculture

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Abstract

The agricultural and natural resources industries are increasingly faced with remarks and skepticism from consumers and activists alike. Equipping those in industry as well as college graduates with skills to effectively share agriculture's story through a variety of mediums continues to increase in importance. This qualitative study sought to explore learning objectives and curriculum goals that agricultural advocates have for an undergraduate agricultural advocacy course. Phone interviews with individuals involved in agricultural advocacy revealed two-way communication skills were important when communicating with the public. Active listening, communicating with an open mind, communicating at a level of understanding, and equipping oneself with an arsenal of industry knowledge and contacts were found to be key learning outcomes for a course such as this. Further, role-playing activities, professional experiences, and online media communication abilities were also found to be important class assignments, activities, and skills that would allow students to perfect these two-way communication skills. From the findings of this study, undergraduate educators may have a better understanding of the importance of incorporating two-way communications into their curriculum as well as have a guideline for developing a course for agricultural advocacy within their agricultural education, communications, and leadership programs. The findings of this study may also help communications practitioners and Extension personnel as they prepare for agricultural advocacy efforts within their organizations.

Keywords

Advocacy, Curriculum, Changing Public Perception, Two-way Symmetrical Model of Communication

RESEARCH

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ABSTRACT

The agricultural and natural resources industries are increasingly faced with remarks and skepticism from consumers and activists alike. Equipping those in industry as well as college graduates with skills to effectively share agriculture's story through a variety of mediums continues to increase in importance. This qualitative study sought to explore learning objectives and curriculum goals that agricultural advocates have for an undergraduate agricultural advocacy course. Phone interviews with individuals involved in agricultural advocacy revealed two-way communication skills were important when communicating with the public. Active listening, communicating with an open mind, communicating at a level of understanding, and equipping oneself with an arsenal of industry knowledge and contacts were found to be key learning outcomes for a course such as this. Further, role-playing activities, professional experiences, and online media communication abilities were also found to be important class assignments, activities, and skills that would allow students to perfect these two-way communication skills. From the findings of this study, undergraduate educators may have a better understanding of the importance of incorporating two-way communications into their curriculum as well as have a guideline for developing a course for agricultural advocacy within their agricultural education, communications, and leadership programs. The findings of this study may also help communications practitioners and Extension personnel as they prepare for agricultural advocacy efforts within their organizations.

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INTRODUCTION

According to a study completed by the Pew Research Center in 2015, a large gap exists between public perceptions and knowledge of science and scientists' opinions (Funk & Raine, 2015). Funk and Raine (2015) found gaps exist in 13 different areas of scientific enterprise, ranging from climate change, energy, space-exploration, and agricultural processes. In one example, Funk and Raine's (2015) findings suggested 57% of the general public believed genetically modified organisms were unsafe for consumption; whereas, 88% of scientists affiliated with the American Association for the Advancement of Science (AAAS) believed genetically modified organisms were safe for consumption. Previous researchers within the agricultural community have also found consumers do not accept what scientists say as truth (Center for Food Integrity, 2014; Ruth, Gay, Rumble, & Rodriguez, 2015). Researchers have also reported an increasing level of skepticism when it comes to processes and procedures within the agricultural industry (Weatherel, Tregear, & Allinson, 2003; Zimbelman, Wilson, Bennett, & Curtis, 1995). At the same time, an increasing number of consumers want to know about their food, how it is produced, and where it is grown (Smith, 2014).

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In this quest for information, consumers are frequently misinformed about food production (Ruth et al., 2015). Previous researchers found scientists have had trouble communicating with the general public as the public has difficulties seeing differences between their attitude toward an agricultural company or industry and the scientific information being delivered by these same companies (Folta, 2012; Ruth et al., 2015). Further, anti-agricultural activists have also been known to disseminate a wide variety of information that can portray agriculture and natural resources in a negative light (Cooper, 2009). Due to large gaps in perceptions, knowledge, and experiences between these multiple parties and the difficulties of these agricultural organizations to communicate about science, Telg and Irani (2012) recommended a higher level of effective communication is needed between agriculturalists and consumers. Students realize the need to be trained in this form of communication as well. McLerran (2015) found students requested a course in agricultural advocacy to help equip them with skills needed to intelligently communicate with an audience that may not understand the agricultural sciences.

To communicate more effectively, conversations are being created by individuals, organizations, and companies involved in agriculture to ensure accurate information is being disseminated to the public to counteract the communication of inaccurate information (Moore, Meyers, Irlbeck, & Burris, 2015; Fraser, 2001). Through social media and other online platforms, individuals have taken it upon themselves to disseminate information and answer questions about agriculture creating an online, two-way communication channel between agriculturalists and consumers (Agriculture Proud, 2015; Blythe, 2015).

Agricultural blog sites have allowed for those involved within the industry to share particular stories about agriculture (Moore et al., 2015). Whether these sites promote the entire industry such as Agriculture Proud, or a specific industry such as Kids, Cows and Grass: Life on a Kansas Cattle Ranch (2015), bloggers have been able to discuss multiple stories associated with the industry. At the same time, organizations and companies, such as the National FFA Organization and the United Soybean Checkoff, have also participated in agricultural outreach. In Texas FFA's agricultural advocacy contest, students have been prepared to advocate for the industry by promoting local, state, and national agricultural programs and by learning how to educate the consumer and general public about the importance and value of the industry (Texas FFA Association, 2015). The United Soybean Checkoff has created a campaign, Find your Common Ground, where volunteer, female farmers have conversations through online tools and word-of-mouth about their personal experiences in growing and producing food (Common Ground, 2015). Additionally, organizations have also used videos to provide transparency and distribute information about their organizations and agricultural producers such as The Udder Truth campaign from Dairy Management Inc. (The Udder Truth, 2016).

Academic programs must be structured to prepare students to communicate in a variety of ways (Corder & Irlbeck, 2016). Current agricultural communications programs have emphasized a variety of skills to include advertising, journalism, photography, public relations, and public speaking; however, there is a need for programs to ensure students are well versed in public speaking, conflict resolution, as well as two-way communication (Corder & Irlbeck, 2016). Previous researchers have described the need for academics to keep up with the needs and recommendations of agricultural communications professionals to produce graduates prepared to enter the workforce (Doerfert & Miller, 2006; Terry, Vaughn, Vernon, Locaby, Bailey-Evans, & Rehman, 1994). Additionally, Corder and Irlbeck (2016) explained, "cooperation between faculty and industry can continually ensure students are learning the skills necessary to be a desired job candidate and then succeed in the workplace" (p. 16). In the past, the purpose of the agricultural communications academic discipline was to teach students how to inform rural audiences about agricultural sciences; however, as the field has evolved, the need for distributing information to an urban audience arose (Tucker, Whaley, & Cano, 2003). Large (2014) explained the need for agricultural communications courses to "strive to educate students to effectively communicate the message of agriculture to multiple audiences through various media" (Large, 2014, p. 8). For the purposes of this study, the researchers sought to understand the need for developing a course to strengthen the distribution of information about agriculture through two-way communication between agriculturalists and agricultural consumers.

THEORETICAL FRAMEWORK

Grunig and Hunt (1984) introduced the two-way symmetrical model of communication as a public relations model. The model focuses on developing mutual respect through negotiation to achieve a mutual understanding between message sender and receiver (Grunig & Hunt, 1984). Grunig and Hunt's (1984) model was based upon the diachronic model developed by Thayer in 1968 (Culbertson, 1989; Thayer, 1968). The model incorporated similarities including the exchange of knowledge, opinions, and willingness to adjust objectives, beliefs, and behaviors on account of the parties' opinions and situations (Grunig & Hunt, 1984; Thayer, 1968). Further, the two-way symmetrical model allows communicators to adjust the way they communicate their information based on the needs and behavior of the receiver (Grunig & Hunt, 1984).

The two-way symmetrical model of communication differs from one-way persuasive communications that deliver specific framed messages to change opinion (Grunig & Hunt, 1984). In a two-way model of communication, the message sender attempts to engage stakeholders by making the information relevant and necessary (Morsing & Schultz, 2006). In this engagement, the "primary aim is to bring about mutual understanding, rational agreement, or consent" (Morsing & Schultz, 2006, p. 328). In agricultural sciences and natural resources industries, the model has been known as the "best strategy when dealing with activists" (Cooper, 2009, p. 23). For example, Cooper (2009) found a win-win situation arose when using two-way communication to respond to activists about environmental issues. The opportunity to communicate allowed activists to voice their criticism and misunderstanding and afterward the communicator responded with feedback, ultimately, supporting an attitude change.

Duncan and Moriarty (1998) indicated a conversation and a relationship could be built using three components: informing, listening, and answering. Information must be sent from sender to the receiver. Typically, information may be sent via Lasswell's (1948) traditional communication model where the source develops the message, the source distributes the message via a communication channel, and the receiver accepts the information. However, in a two-way communication format, after the receiver decodes the information, the receiver has the opportunity to provide feedback to the message. Two-way communication may arise in face-to-face situations such as public hearings (Greer & Bruno, 1996). Other places to facilitate two-way communication may include social media outlets and interactive online websites (Qu et al., 2015). Listening before responding has also been proven to increase the value of a product in the marketing world; for example, Duncan and Moriarty (1998) explained "when communication is foremost and listening is given as much importance as saying, interactive relationships become the focus" (p. 2). In the third stage, the communicator provides a response to the message receiver or a "reversal of the flow, an opportunity for communicators to react quickly to signs resulting from the signs they have put out" (Schramm, 1973, p. 51). The message sender's answer allows for the communicator to provide an appropriate response to the receiver's attitude, behavior, and informational needs (Duncan & Moriarty, 1998; Qu et al., 2015).

As agricultural organizations continue to see the need for hiring agricultural communicators, it is important that graduates are prepared to meet the needs and expectations of these organizations (Morgan, 2010). Previous researchers suggested a higher level of communication needs to be formed between agriculturalists and consumers (Ruth et al., 2015; Telg & Irani, 2012). Further, current communication strategies to advocate for agriculture have been developed through online media such as social media, blog sites, and interactive websites (Moore et al., 2015). As noted by previous literature, clear communication strategies are needed to form conversations about agriculture between consumers and agriculturalists. Blackshaw and Nazzaro (2004) have discussed how conversations can be formed in a variety of ways from face-to-face communication to conversations through online media. To promote a conversation between two parties, the theoretical framework of the two-way symmetrical model of communication was used to guide this study.

PURPOSE AND RESEARCH QUESTIONS

The purpose of this qualitative study was to understand undergraduate students' needed knowledge and experiences when advocating for agriculture from the perspective of agricultural advocates. The results of this study will be used to design undergraduate curriculum for a course focusing on developing communication strategies that help narrow the

gap between public perceptions and reported scientific findings. The following research questions were used to achieve this purpose:

1. What are the participants' experiences with advocating for agriculture?
2. Based on the participants' experiences, what skills are needed for new college graduates in regard to their ability to advocate for agriculture?
3. What activities and/or assignments can be implemented in a course targeted at developing agricultural advocates?

METHODS

Qualitative research was chosen due to its ability to deeply understand how perceptions and experiences relate to one another (Ary, Jacobs, & Sorenson, 2010; Denzin & Lincoln, 2011). In this study, semi-structured one-on-one interviews were chosen to interview seven individuals who were identified as influential contributors to agricultural advocacy. To gain information about agricultural advocacy, purposive sampling was used for this qualitative study. To meet the needs of the research questions, participants were identified as influential contributors to agricultural advocacy (Dooley, 2007). The researchers collaboratively made a list of individuals who regularly speak about agricultural advocacy strategies at various agricultural conferences. These individuals are also active through the AgChat Foundation. Telephone interviews were selected for this study as the targeted individuals were dispersed throughout the United States. Telephone interviews allow researchers to gather information rapidly from participants despite any geographical limitations or barriers (Janesick, 1998). Additionally, studies have shown that telephone interviews compare fairly positively with face-to-face interviews (Janesick, 1998). Of the 10 individuals who received recruitment emails, seven agreed to participate in the study.

The interview guide was developed based on recommendations from the literature (Birks, Chapman, & Francis, 2007; Erlandson et al., 1993; Gaskell & Bauer, 2000). A semi-structured interview protocol was selected as it gave the researcher the freedom to move away from the question guide to form a conversation with the participant (Erlandson et al., 1993). In order to build rapport with participants, the researchers asked the participants questions about their occupation and their experiences with agriculture (Birks et al., 2007). After the researcher built rapport with the participants, the remaining questions of the interview guide were aimed at gathering information needed to meet the research questions (Gaskell & Bauer, 2000). To meet the first research question, the interviewees were asked to discuss their experiences advocating for agriculture. For research questions two and three, the researchers focused on developing questions regarding the objectives and outcome goals for an agricultural advocacy course, and the methods for achieving these goals in a classroom setting. According to recommendations by Guion, Diehl, and McDonald (2011), environmental triangulation was ensured by interviewing multiple people from varying locations around the United States to minimize any effect location might have on the findings.

All data were collected in November 2015 to minimize the history effect (Ary et al., 2010). All interviews were completed by one researcher and recorded for accuracy (Guest, Bonce, & Johnson, 2006). The primary researcher, a doctoral student studying agricultural communications, created transcripts of the interviews. Transcripts of the interviews and field notes were used in data analysis (Krueger & Casey, 2000). To ensure credibility, member checks were used as after the interview, the participants' conversation with the interviewer was summarized, and the participant had the opportunity to verify, add, or subtract information (Krueger & Casey, 2000). The researcher assigned pseudonyms to each participant, transcribed the interviews, and analyzed data for each participant using the constant comparative method (Glaser & Strauss, 1967).

To ensure trustworthiness during the data analysis process, the primary researcher created an audit trail detailing the theme formation thus increasing the confirmability and dependability of the results (MacQueen et al., 1998). Further, the researchers conducted data analysis debriefing sessions to reduce bias (Guba, 1981). Transferability was established through the use of long detailed quotations in the findings. Lincoln and Guba (1985) explained transferability as the degree of how well findings can be transferred to other settings, situations, or participants. “The ‘thick description’ that has been generated, however, enables observers of other contexts to make tentative judgments about applicability of certain observations for their contexts and to form ‘working hypotheses’ to guide empirical inquiry in those contexts” (Erlandson et al., 1993, p. 33). After the primary theme formation, the co-researchers confirmed the final themes for accuracy and trustworthiness (Erlandson et al., 1993). These findings are limited to the questions asked and how the discussions were interpreted, which are common limitations in qualitative research (Pauly, 1991).

FINDINGS

In order to fulfill the purpose, seven individuals were interviewed to understand their perceptions of an undergraduate student’s needed knowledge to advocate for agriculture.

RQ1: What are the participant’s experiences with advocating for agriculture?

The first research question aimed to explain the participant’s experiences with advocating for agriculture. Seven individuals from across the United States participated in the study. Three of the participants were from a non-agricultural background. Agricultural experiences ranged from livestock operations to row crop farms. The participants were involved in large corporations, non-profits, and entrepreneurial enterprises where they were active in blogging and social media. The participants explained how agricultural advocacy can be in multiple forms. Below, a description of the participant’s experiences with agricultural advocacy is explained. The participants described 1) how they became involved in agricultural advocacy, and 2) their current agricultural advocacy efforts.

Involvement in agricultural advocacy. During their introduction, the participants explained how they began advocating for agriculture. Elizabeth explained how her lack of an agricultural background helped her to spread the word about agriculture to those not from an agricultural background,

I was actually a city kid growing up...had no connection to agriculture and then ended up marrying the son of dairy farmers. Being the city kid, I understood a lot of the questions that people had about food and farming and about what we do, because I was that person not that long ago. I started using social media just like anybody does...just to keep in touch with friends and things like that and the agvocacy part grew from just being online and talking about my life to where it is today.

Becky described how her agricultural advocacy efforts arose from her professional work as an agricultural communicator,

I have worked professionally in the ag social and digital media space. I work very specifically with consumer outreach in social media as well as influential programs. As far as agvocacy for me, I kind of am more of the neutral party. I am no longer on the farm, so as odd as it may seem, I have more of a natural connection with consumers, as I am not on the farm every day.

Matt’s roots in agricultural advocacy began as a want to communicate about agriculture with a public audience. He explained,

It was six or seven years ago now when I met on Twitter, three other individuals. The four of us had a shared vision of the opportunity social media presented for the agricultural community to be able to reach out to our consumers and our customers in a way that we had never had available before that carried real time, real con-

versations, and the ability to answer questions one-on-one with the opportunity for tens of thousands of others to also see the conversation at the same time...

Current agricultural advocacy efforts. The participants were asked to describe their agricultural advocacy efforts. The majority of the participants indicated social media was a main component of their agricultural advocacy efforts. For example, Kirstin explained, "I run our Facebook account, Twitter account, and Instagram account." Sam explained, "I blog, Twitter, all that I've been doing for a few years." Anna explained how her agricultural advocacy efforts included farm tours. She explained how she, "Worked on a farm through grad[uate] school that has a lot of visitors, so we are constantly doing [farm] tours. I worked with a breakfast on the farm committee, so 600 people visited a farm and had breakfast." Kirsten also explained how her agricultural advocacy efforts included teaching others how to communicate when she said, "I am trying to teach these up and coming professionals, farmers, and ranchers on how to better communicate."

RQ2: Based on the participants' experiences, what skills are needed for new college graduates in regard to their ability to advocate for agriculture?

Research question two sought to determine the skills needed for new college graduates to advocate for agriculture. Genuine conversation and listening skills, an open mind, industry knowledge and connections, and the ability to communicate at a level of understanding were identified as common themes.

Genuine Conversation and Listening Skills. The ability to have genuine conversations while truly listening to the concerns and questions of others arose as a common theme throughout the interview process. Matt discussed the importance of truly listening during a conversation,

Be able to have a genuine conversation where you are more concerned about listening to understand the other person's perspective than concern for getting your point across...once the opposition or the individual who has a different opinion feels that they are being heard and understood and you can successfully relay back to them, the battle is won. You may still have a war on your hands, but that battle has been won. It's when the rest of the audience can see that you are able to have those conversations with people of different views, that's where the value is, that's when you win...conversations are going to take place. It's agriculture's choice whether you want to be part of the conversation or watch from the sidelines.

Matt later went on to say,

Simply impressing upon all of them the importance of what makes a good conversation. And number one you have got to learn to listen and listen for meaning. You can't be thinking about what it is you want to say next while they're talking to you. You need to devote your attention... I want to get the information from them first so they feel like I am truly listening for understanding.

Elizabeth described the importance of listening and conversation skills,

...Teaching the students how to really listen. The key components or the outline is kind of a lot of focus on active listening, debates, and learning opportunities to talk to people and the people in the middle, our customers, the vast majority of the people you know, again people in the middle.

Open Mind. An open mind also arose as a common theme among the participants. Becky described what she feels can be one of the pitfalls for many agricultural advocates when they are trying to tell agriculture's story to someone who might oppose conventional agricultural practices,

[Agriculturalists] are so passionate about agriculture that they are almost defensive of agriculture but to be a truly compelling advocate you have to be able to see reason and see both sides of the story and that there is no I'm right, they're wrong. There is we are both trying to pursue what's best for both of us.

Matt described an open mind as one of the most important attributes of an agricultural advocate,

Number one: An open mind and the ability to respect differing opinions. You don't have to agree, but respect is crucial... Because if you are not able to respect differing views, you will be unable to have a conversation that is genuine and have any type of a positive outcome. The most successful advocacy that occurs is more often than not between two individuals who have very different opinions on one or more subjects but are able to discuss the topic rationally, logically, and objectively, and at the end neither may have changed their mind, but the audience has had the opportunity to at the same time, consider both points of view and make up their own mind. If you are not able to have a mutual respect for one another it turns into an argument and nothing is gained.

Matt additionally discussed the importance of an open mind and mutual respect within differing segments of the agricultural industry,

Being able to appreciate variety and diversity within agriculture amongst ourselves that is probably one of the biggest stumbling blocks that we ourselves face... A division becomes public, then the public also becomes divided. A little splinter becomes a major abscess and pretty soon you have a big problem. I think until we, in our own house, can respect one another for the diversity that we have, that's a big concept that's really tough for our own industry.

Industry Knowledge and Connections. Knowledge of the different agricultural industries along with contacts from differing industries arose as a common theme throughout the interview process. Kirsten described the importance of having agricultural knowledge, the ability to find information, and knowing when to say, "I don't know:"

They also need to have a wide knowledge of different agricultural enterprises. I mean from corn and row crops to beef cattle and other livestock species; I have to work a little harder when it comes to row crops because I didn't grow up on a row crop operation. So I have to be able to do a little research and you have to have certain sites I know I can count on for certain information or certain people. Another thing along those lines is making sure that you don't try to be a know-it-all. If you know you don't know the answer be okay with admitting that because people will respect you more knowing, you are trying to help them and learn at the same time then just sounding off facts that you don't know.

Sam described the importance of having industry connections in other fields of agriculture,

You do find once you put yourself out there and talking people come to you as the expert on stuff that you are not the expert on just because it falls under agriculture. So work on developing that network of different people in the industry...

Morgan concluded that it is important to "[Develop] your network in a positive and critical way."

Ability to Communicate at a Level of Understanding. The ability to communicate with those who have questions or concerns about agriculture or production practices in a way the public can understand arose as a common theme among the participants. Anna described the importance of communicating at a level of understanding,

I think maybe it's more of a technical skill, but as far as communications, the ability to explain things at a level that people who don't have experience in agriculture can understand. I work with a lot of college students who say the terminology they use is understandable in their circles, but [those same terms] can be difficult to understand in real life.

Sam discussed the importance of the use of language,

Look at the language we are using and kind of find the level that works with people we are speaking to. I hate to say dumb it down, but you know I'm not a professional banker or real estate agent or whatever, you know I'm not going to understand those terms, so we just have to talk to people on the level that they can understand.

RQ3: What activities and/or assignments can be implemented in a course targeted at developing agricultural advocates?

To achieve the skills established in research question two, the purpose of research question three was for the participants to outline specific course activities and assignments that could aid in student learning and could further develop their confidence in, ability to, and understanding of agricultural advocacy. Three themes emerged from the data analysis: face-to-face communication, development of listening skills, and ability to utilize online media.

Face-to-Face Communication. The ability to communicate face-to-face arose as a common theme among participants. Anna described a situation where students could use face-to-face communication skills learned in the classroom in a real world setting,

I think that incorporating real life experiences in that course whether they do an event on their university farm or on campus or something like that where they actually get to use the [communication] skills in real life would be really important and helpful.

Additionally, Kirsten described an activity to encourage a conversation between farmers and ranchers and consumers about an agricultural topic. She explained,

...give them a scenario where they have to sit down and one of them that we have use is kind of about a friend whose mom has cancer and they blame it on GMOs. The first time I did the exercises... I went straight into 'well why do you blame GMOs?!' Instead of being a friend first, you say I'm so sorry to hear your mom has cancer...I need to be a human first before I become an agricultural advocate.

Development of Listening Skills. The development of listening skills arose as another important theme. Elizabeth described the following activity as a way for building active listening skills,

Working on some active listening exercises where [students] are really listening to people. One of my favorite things that I've ever taken part in is having panels of people come in and speak to groups like food bloggers, chefs, and foodies from all different backgrounds and really hearing what they have to say and what they think and what they are learning.

Elizabeth went on to explain,

Going to the grocery store interviewing people there about food or even online surveys and really asking questions. Anything you can do that can help them get out there and talk to the people in the middle is going to be really key for them to understand what the middle is thinking instead of just guessing.

Sam also noted bringing people into the classroom who might have differing viewpoints to discuss issues could aid in developing listening skills among students and further develop their ability to understand both sides of issues. He suggested,

...bring people into the classroom with different viewpoints. We always have a panel of three or four people that have different viewpoints on food production and what they eat and where it comes from and sometimes it hurts a little bit to hear what they have to say, but it's very, very important for those of us in ag to hear face-to-face what consumers are saying and thinking. Have a dialogue with them.

Ability to communicate through online media. The ability to utilize online media was the final theme that arose from the interview discussions. Kirsten provided an example activity for students to practice their online media communication abilities,

...set up a fake Facebook account that you can make a group that's closed and private and test your students. Where you post either a meme or a comment attacking agriculture, attacking the food system, or attacking grocery prices, and blaming the farmer because prices are rising higher because the farmer wants to make more money. Give students a chance to see actual concerns that real people have and role-play in that situation in a closed Facebook group and see how they handle it.

Kirsten added that real-time online discussion skills could be practiced through weekly online discussions such as #AgChat. She described,

Another thing you can encourage the students in that class is to... every Tuesday night that we do AgChat or food chat conversations on Twitter and you know of course sit in or participate or follow along with those hashtags.

Matt described the importance of punctuation, intonation, and word choice when communicating through online media. He offered the suggestion of having students evaluate archived conversations, arguments, and discussions to learn what worked and what did not work. Matt explained,

...you break down whether it's a conversation from Twitter, a conversation on Facebook, comments, interactions on blogs. Really take a look at the importance of word selection, because that's the biggest challenge with social media. You do not have the ability to hear the tone in someone's voice or see the expression on their face and so the choice of words and language and punctuation become critical.

Becky explained the need for teaching students a more conversational type of writing style to be used on social media. She explained,

One of the transitions that I have noted, with interns who have come out of ag communications programs, is a transition into a more approachable writing style. I know that as an ag communications alumni we are taught very technical writing. You know reporting style, research style, but that's simply not the type of writing that's going to cut it in advocacy. So more of the creative writing, the entertaining writing style...

Morgin explained how more communicators needed experience with the live video-based social media tools. She explained,

All of those video services like Periscope and Blab. These tools are much more important now, and people don't know how to use them well so they're not really effective....I think students should work through a scenario or a task where they plan out a post, and where they have to decide what to do with that video post.

CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

Increased The purpose of this study was to explore what competencies students enrolled in an undergraduate agricultural advocacy course needed to advocate for agriculture after graduation as perceived by agricultural advocates. Continued consumer skepticism regarding the production practices within the agricultural industry (Weatherel et al., 2003; Zimbelman et al., 1995) coupled with an increasing consumer interest in the food production system (Smith, 2015) has created a need to equip agricultural communicators with the skills and capabilities to disseminate information to a questioning and concerned public.

By understanding the current and past experiences of agricultural advocates, participants with and without agricultural backgrounds found advocating for agriculture helped to connect consumers and agricultural producers. This finding supports the previous literature that discussed an ill-informed audience has many questions and misunderstandings about agricultural products and processes (Funk & Raine, 2015; Ruth et al., 2015; Smith, 2014). Further, understanding the participants' current advocacy efforts helped the researchers to understand the methods of delivering a two-way conversation from producer to consumer. Similarly, to the previous literature, the participants indicated digital media and interpersonal communication strategies such as social media platforms, video streaming platforms, and blogging sites, provided opportunities to encourage a conversation about agriculture (Blackshaw & Nazzaro, 2004; Moore et al., 2015).

The second research question sought to discover the skills needed for graduates to effectively advocate for agriculture in their personal and professional lives. This research question resulted in four emergent themes: genuine conversation and listening skills, open mind, industry knowledge and connections, and the ability to communicate at a level of understanding. Overall, the emergent themes resulted in skills that emphasized the idea of an agricultural advocate engaging consumers in two-way communication, or more simply, a conversation that would result in a mutual understanding of the topic at hand (Grunig & Hunt, 1984). Supporting the theoretical framework of the two-way symmetrical model of communication, the emergent themes provide a baseline framework of the two-way model of communication. The foundation of the model is the genuine conversation and listening skills. The participants indicated these skills were the ability to have genuine conversations with consumers while actively listening to the questions, needs, and concerns of consumers. As seen in Grunig and Hunt's (1984) model, the ability to exchange information, knowledge, and opinions is crucial. The emergent themes of keeping an open mind and the ability to communicate at a level of understanding showed the importance for agricultural advocates to have an open mind and adjust their objectives as they engage in conversations both online and face-to-face. The two-way symmetrical model of communication encompasses the idea of the advocate to have the willingness to adjust their objectives, beliefs, and behaviors on account of the parties' opinions and situations (Thayer, 1968). As agricultural advocates follow the model, they must be willing to adjust and have an open mind when communicating with those with differing views. Further, these findings are consistent with Duncan and Moriarty's (1998) findings indicating a conversation and a relationship can be built through listening, informing, and answering. Thayer (1968) discussed how a mutual understanding could arise from mutual respect for the views of the consumers as well as the views of others within agriculture. According to the two-way symmetrical model, this mutual respect and exchange of opinions and knowledge can cultivate an environment of open dialogue and understanding (Grunig & Hunt, 1984; Thayer, 1968).

Further, some consumers often assume agriculturalists have an infinite knowledge of agriculture as a whole; therefore, students must be equipped with a specific knowledge base of their industry while also developing a network of agriculturalists. A network of agriculturalists from many disciplines allows communicators to have someone to reach out to when faced with questions regarding agricultural practices outside of their knowledge and experience base. Finally, research question two allowed us to better understand the importance of technical writing and speaking skills in communicating at a level of understanding for consumers. Speaking in industry jargon can only increase consumer skepticism and widen the knowledge gap between producers and consumers of agricultural products. These findings align with those of Cooper (2009) who suggested the two-way symmetrical model allows the communicator to adjust the way he or she communicates information based on the needs and behaviors of the receiver.

The participants' discussion indicated specific class assignments that could foster the development of these skills. Previous researchers have indicated academic programming must be structured to prepare students to communicate in a variety of ways (Corder & Irlbeck, 2016; Doerfert & Miller, 2006; Large, 2014). The findings from this study indicated a course should be designed to incorporate elements of two-way communication such as lessons in face-to-face communication, the development of listening skills, and the ability to communicate through online media. Lessons in face-to-face communication may allow students to gain experience in exchanging knowledge about agriculture through farm and industry tours, and practice in conversations using case studies of agricultural topics. Further, the participants indicated the development of listening skills as an important competency needed by an agricultural advocate. Duncan and Moriarty (1998) suggested listening skills were an important aspect of forming conversations and relationships. Using suggestions

from the participants, an assignment incorporating interviews with agricultural consumers to understand their knowledge base and analyzing panel discussions with individuals with differing viewpoints may allow students to gain an understanding of varying opinions, understanding, and knowledge of agricultural topics.

Students must also be equipped with the skills needed to communicate through online media. The findings supported the previous literature suggesting a strong knowledge base of social media platforms such as Facebook, Twitter, and Instagram as well as video streaming platforms was necessary (Corder & Irlbeck, 2016). Further, students must practice their online media writing skills. Traditionally, agricultural communications students have been trained to write using a more technical approach using research, technical, and AP style writing (Corder & Irlbeck, 2016); however, the participants indicated students should be able to use a conversational tone and a more creative approach when writing for online media.

Although these findings may be used to help develop a course structure for learning agricultural advocacy, the findings could be useful for agricultural communications practitioners and Extension personnel. Advocacy efforts are spreading across the agricultural field, and practitioners may use these to understand how a conversation develops between their organization and a public audience. Activities mentioned by the participants such as interviews with stakeholders, a more creative writing approach, and participating in conversations about agriculture may allow practitioners to gain an understanding of how stakeholders and the public responds to their message. Practitioners should use this knowledge to adapt their communications strategies to help their target audience gain a more mutual understanding of the topic at hand.

Future research should continue to examine the use of advocacy efforts by individuals and organizations involved in agriculture. A quantitative study should evaluate the most important factors when advocating for agriculture. Future research should be used to gain a deeper understanding of consumer knowledge. As noted in the previous literature, a deeper understanding of consumer perceptions of agriculture is needed to advocate for agriculture. This understanding can help agricultural communicators as they develop their messages to be sent to agricultural consumers. One study could identify agricultural and food industry buzzwords and their meaning to agricultural consumers. Once a course is developed on agricultural advocacy, a pre- and post-test should be conducted to understand how a student could respond to agricultural consumers on a given topic. This study could be qualitative in nature and should evaluate how a student responds to a topic at the beginning and end of the semester. The student should show progress in how they are able to communicate at a particular level of understanding, communicate with an open mind, and openly listen to the consumer, and, how they are able to creatively write. Finally, a quantitative pre- and post- test should be conducted in the agricultural advocacy course to determine students' increased knowledge of agricultural topics.

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