

A Content Analysis of the 2016 National Teach Ag Day's Facebook Posts

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Abstract

A serious issue facing the agricultural education profession is a lack of qualified teachers. The profession recognizes there is a need to recruit new teachers and retain existing teachers. With these goals in mind, the National Teach Ag Campaign was established as an effort to encourage students to pursue a career in agricultural education and to support existing instructors. Each year, the campaign celebrates National Teach Ag Day to highlight this campaign and encourage others to help reach the initiative's goals. The purpose of this study is to explore how the National Teach Ag organization used Facebook for its annual "Teach Ag Day" campaign. Guided by the conceptual framework of communicative functions, a census of all posts on the National Teach Ag Facebook page for a three-week period was selected for this quantitative content analysis to evaluate general Facebook page attributes, post characteristics, engagement indicators, and communicative functions. The majority of posts contained text, graphics, hashtags, and links. Community Building was the most prevalent communicative function. The campaign demonstrated many best practices to engage audiences on Facebook, but future efforts should incorporate more videos and respond to comments. Future research should explore the reach and sentiment of shared Teach Ag Day posts.

Keywords: Recruitment; retention; Teach Ag Campaign; National Teach Ag Day; Facebook; social media engagement; FFA

Introduction

A persistent problem throughout the past four decades in secondary agricultural education is teacher shortage. According to the 2015 Agriculture Teacher Supply and Demand study, there were 11,834 agricultural teachers nationwide and 1,028 open positions (Foster, Lawver, Smith, & Thompson, 2016). To fill all available positions, the number of agriculture teachers needs to increase 8.7%. The agricultural teaching profession had a total deficit of 287 teachers in 2015, and 42 programs closed because of low enrollment, budget cuts, and a lack of teachers (Foster et al., 2016).

The profession recognizes there is a joint need to recruit qualified new teachers and to retain existing teachers (Lemons, Brashears, Burriss, Meyers, & Price, 2015). One specific recruitment and retention effort is the National Council for Agricultural Education's Teach Ag Campaign, led by the National Association of Agricultural Educators (NAAE). Members of NAAE

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“advocate for agricultural education, provide professional development for agricultural educators, and work to recruit and retain agricultural educators in the profession” (NAAE, 2017b, para. 2). The National Teach Ag Campaign is an effort to encourage students to pursue a career in agricultural education and to support existing instructors (NAAE, 2017a). “The National Teach Ag Campaign is actively engaged in the recruitment and retention of agriculture teachers while celebrating the contribution that ag teachers make in their communities” (Thompson, 2011, p. 4). Each year, the campaign celebrates National Teach Ag Day to highlight this campaign and encourage others to help reach the initiative’s goals. On this day, agricultural educators and advocates participate in a variety of activities such as community events and special lessons. Participants and advocates are also encouraged to use social media to further promote these local events and extend the Teach Ag message (NAAE, 2017a).

From 2005 to 2015, the Pew Research Center tracked the percentage of U.S. adults (18 years and older) who use social networking sites such as Facebook, Twitter, and Instagram (Perrin, 2015). Over this decade, the use increased nearly tenfold from 7% to 65%. This growth in social media use has impacted many aspects of our lives including how we work, get our news, and seek advice (Perrin, 2015).

Facebook is the most popular social media platform among U.S. adults, with 79% of those with internet access using the platform (Greenwood, Perrin, & Duggan, 2016). This represents 68% of the U.S. adult population. Facebook users access the site more often than other social media sites – 76% of Facebook users indicated they visit the site daily and 55% said they visit several times a day (Greenwood et al., 2016). The rate of Internet and social media use among U.S. teenagers (ages 13 to 17) is even more striking. Lenhart (2015) reported that nearly nine out of every 10 teens (92%) go online daily and 24% described going online “almost constantly”. Among teens, Facebook is the most popular social media site with 71% of teens using this platform, followed by Instagram (52%), and Snapchat (41%). Facebook is also the site teens access most frequently (reported by 41%) indicating that “Facebook remains a dominant force in teens’ social media ecosystems” (Lenhart, 2015, para. 10).

With the need to recruit more agricultural educators and the prevalence of social media, specifically Facebook, efforts to leverage this platform should be researched to provide best practices and evaluate effectiveness. These investigations will provide insight for recruitment and retention efforts that use social media.

Literature Review

Social media use is important to understand because of its power in developing and delivering organizational messages (Cho, Park, & Ordonez, 2013). Social media tools help an organization interact with existing and potential stakeholders, and bring attention to circumstances that traditional media might ignore (Guo & Saxton, 2012). Social media platforms such as Facebook are acknowledged for creating a platform of engagement between stakeholders and an organization in real-time (Guo & Saxton, 2012). This provides an effective tool for people to share timely information to a large and diverse audience.

Most nonprofits use advocacy strategies in their efforts to achieve the organization’s mission (Guo & Saxton, 2012). Social networking sites provide a platform for interaction between an organization and its audience, a medium for conversation between individuals that share common interests or concerns (Bortree & Seltzer, 2009), and is growing in popularity as a communication tool for political and advocacy campaigns (Guo & Saxton, 2012). Social media is

also cost-effective, allowing nonprofits to allocate more financial resources to other operational functions of the organization (Guo & Saxton, 2012).

In their research, Bortree and Seltzer (2009) found that organizations need to use all dialogic strategies available on social networking sites to build relationships with stakeholders. Dialogic strategy was linked to positive conversations, growing network size, and boosting involvement and response to the overall organization. To effectively use Facebook, advocacy organizations should provide posts on a regular basis that include photos, videos, and content that will generate discussion. An advocacy organization should have a designated individual to monitor conversations on social media platforms, respond to comments, address concerns, and provide relevant information (Bortree & Seltzer, 2009).

As an interactive online communications tool, Facebook provides a variety of useful features for organizations to meet their goals (Sukhraj, 2016). Having a presence on Facebook in the form of a page is a first step, but to gain followers and encourage engagement organizations must implement several strategies. Jackson (2016) provided 10 specific ways marketers could improve their Facebook pages and posts to increase engagement. These strategies included using real-life photos, writing shorter posts, replying to comments, using Facebook video, and having an engagement plan. According to a report on Business Insider, Facebook is set to surpass YouTube as the primary site for users to watch live and short-form videos (Meola, 2016). Within a Facebook post, Ayres (n.d.) recommended using one to two consistent hashtags relevant to the audience. Hashtags are keywords or phrases that follow a “#” symbol. These hashtags become links to other content that use the same terms, which helps to classify or categorize the content. They are useful for social media campaigns because they serve as identifiers for the campaign and organization, and generate and track engagement (Kissane, 2015).

Nonprofit organizations can use social media to provide advocacy activities to achieve organizational goals and interact with members, particularly millennials (Guo & Saxton, 2012). Members of the Millennial Generation (people born 1980-2004) represent current high school and college students and recent college graduates. These audiences are the logical segments to target for agricultural educator recruitment efforts and researchers have studied why high school (Henry, Talbert, & Morris, 2014; Thieman, Rosch, & Suarez, 2016) and college students (Lawver & Torres, 2012; Vincent, Henry, & Anderson, 2012) want to pursue a career in agricultural education.

A unique characteristic of millennials is their heavy dependence on social media (Cho et al., 2013). “The Millennial generation has grown up with technology and considers social media like Facebook an integral part of their lives” (McCorkindale, DiStaso, & Sisco, 2013, p. 80). In a qualitative study, McCorkindale et al. (2013) found millennials view Facebook as a place in which to engage in community relationships, but many organizations do not effectively leverage features of the platform to encourage these relationships. Organizations can foster this type of atmosphere by providing relevant information and responding to comments. Another specific way organizations can build an online community on Facebook is by encouraging millennials to tell their own stories as they relate to the organization. “The more tools they have to do this, the more passionate they will become and the easier they can spread awareness” (McCorkindale et al., 2013, p. 81).

Conceptual Framework

The communicative functions for organizational social media messages (Saxton & Waters, 2014) served as the conceptual framework for this study. Building on a study of communicative functions present in nonprofit organizations' Twitter content (Lovejoy & Saxton, 2012), Saxton

and Waters (2014) analyzed 1,000 Facebook messages from the 100 largest nonprofit organizations in the United States. The researchers established three primary functions of this social media content: information-sharing; community building and dialogue; and promotion and mobilization. The information-sharing communicative function describes messages that provide information about an organization (Saxton & Waters, 2014). This includes details such as events and activities, related facts, anecdotes, and reports. The community-building communicative function is present in messages that attempt to build relationships, networks, and communities. This is observed through messages that promote dialogue and interactivity. The action communicative function, also called promotion and mobilization, contains messages that seek a response from the audience member. Typical components of this communicative function are solicitations for donations or sales and seeking assistance with specific volunteering, lobbying, or advocacy efforts (Saxton & Waters, 2014). Table 1 provides a description of the three communicative functions.

Table 1

Communicative Functions of Facebook Messages (Saxton & Waters, 2014)

Communicative Function	Description
Information-Sharing	Provides facts and news, including details about events, anecdotes and reports
Community Building	Promotes dialogue and interaction to grow relationships, networks, and communities
Promotion and Mobilization	Seeks responses from the audience, typically to petition for donations or sales, volunteering, lobbying, or advocacy efforts

In the Saxton and Waters (2014) study, the most common communicative function used was information-sharing. They noted that messages containing community-building and action communication functions had more stakeholder interaction (Saxton & Waters, 2014). King, Meyers, Baker, and Doerfert (2016) researched these communicative functions in a content analysis of international rural development nonprofit organizations' Facebook messages. They also identified the information-sharing function as the most prevalent and suggest the other functions would lead to higher levels of audience interaction.

Purpose and Research Questions

Research Priority 3 of the American Association for Agricultural Education 2016-2020 *National Research Agenda* seeks to develop a "sufficient scientific and professional workforce that addresses the challenges of the 21st century" (Stripling & Ricketts, 2016, p. 29). One aspect of this priority area is to identify successful methods for recruiting individuals into agricultural careers, specifically agricultural education (Stripling & Ricketts, 2016). The purpose of this study was to explore how the National Teach Ag organization used Facebook for its annual "Teach Ag Day" campaign. The following research questions were used to address this purpose:

1. What characteristics were present in individual posts?
2. What communicative functions were present in individual posts?
3. How did audience engagement differ between post characteristics?

4. How did audience engagement differ between communicative functions?

Methods

A census of all posts on the National Teach Ag Facebook page for a three-week period was selected for this quantitative content analysis. National Teach Ag Day occurred Thursday, Sept. 22, 2016. Posts from Monday, Sept. 12 to Friday, Sept. 30, 2016, were analyzed. This allowed for analysis of posts for the week leading up to, the week of, and the week after the 2016 National Teach Ag Day.

Screenshots of each individual post within the study's timeframe dates were taken on Oct. 7, 2016, from 2:30-3:30 p.m. This ensured that posts could not change while analysis of the posts took place. A total of 78 posts occurred during this time period.

The Facebook posts were analyzed using a researcher-developed codebook adapted from previous research (King et al., 2016; Saxton & Waters, 2014). The codebook had four sections to answer the research questions: general Facebook page attributes, post characteristics, engagement indicators, and communicative functions. General Facebook page attributes (not reported in this manuscript) include the presence of the organization's mission, logo, contact information, social media policy, steps to volunteer/donate, links to the organization's website and other social media sites, and other external agricultural education websites or social media sites. Post characteristics included the creator, date, time, and the presence of text, quotes, graphics, videos, links, and the hashtags specific to Teach Ag Day – #TeachAg and #Tagged16. Engagement indicators were reactions, shares, hashtags, comments, and likes and/or comments on external comments. Reactions on Facebook are "like," "love," "haha," "wow," "sad," and "angry". Communicative functions were information-sharing, community-building, and action. All functions present in each post were recorded.

The codebook was developed before coder training, then revised as necessary to add clarification for the subsequent coding process. The lead researcher and one other independent coder served as coders for the study. Denzin and Lincoln (2011) suggested using more than one coder, noting that "a single coder may not notice the dimensions of a concept being missed...several coders are more likely to hammer out conceptual and operational definitions that are clearer and more explicit" (p. 105). Before the coding process, the lead researcher met with the additional coder for an hour-long coder training session. In this session, the lead researcher explained the purpose of the study, how to interpret the codebook, and practiced coding a few posts from the Teach Ag Facebook page with the additional coder. The posts examined in the training session did not occur within the date range used in the study. The coders met again for a 45-minute session to analyze posts on the National FFA Facebook page to practice using the codebook and resolve any issues. The National FFA Facebook page was chosen for coder training because it aligns with the purpose of the Teach Ag campaign without duplicating the content. Following this training, the coders independently coded 10 posts from the Teach Ag Facebook page to establish preliminary intercoder reliability. Those 10 posts were from dates outside of the date range analyzed in this study. Denzin and Lincoln (2011) recommended that 10% of the sample be coded to establish reliability between the coders. Seventy-eight total posts were analyzed in this study, thus the 10% recommendation was exceeded to establish preliminary intercoder reliability.

Intercoder reliability for each variable was calculated using the reliability calculator available at dfreelon.org (Freelon, 2010). Krippendorff's alpha was used to determine intercoder reliability for each variable, which ranged from .625 to 1.0, with 85.2% of the variables having

100% agreement. Denzin and Lincoln (2011) recommended that a Krippendorff's alpha of .8 or greater is adequately reliable, but .677 is considered acceptable for reaching conclusions. Additional coder training was conducted to allow Krippendorff's alpha levels to reach a minimum of .677 on the three variables that fell below this threshold.

After an acceptable level of intercoder reliability was established, posts were randomly assigned to each coder for analysis. Data were entered into Microsoft Excel then imported into IBM SPSS v. 22.0. Descriptive statistics were calculated to address the research questions.

Results

RQ1: What characteristics were present in individual posts?

The objective of research question one was to understand the characteristics present in the individual posts. All of the posts were created by the Teach Ag organization and contained text. Only eight posts (10.3%) included a quote. More than half of the posts (65.4%) contained graphics ($n = 51$). Of these, 49 contained one graphic and two contained four graphics. Only six posts (7.7%) included a video and the views on these videos ranged from 160-602. One post had an external link to the video, so the Facebook views were not available.

More than half ($n = 45$, 57.7%) of the posts included a link to additional content. Forty-four (56.4%) posts contained one link and one (1.3%) post contained two links. Of the 45 posts that included links, 93.3% ($n = 42$) linked to an internal site (a site managed by NAAE). Hashtags were present in 69 (88.5%) of the posts. The number of hashtags in those posts ranged from 1-4, with 40 (58%) containing two hashtags and 17 (25%) containing one hashtag. #TeachAg was used in 64 (82.1%) of the total posts and #Tagged16 was used in 51 (65.4%) posts.

The number of reactions ("likes", "loves", "hahas", "wows", "sads", and "angrys") on posts ranged from 0-65. The only form of reactions that occurred in posts within this study were likes, loves, and wows; haha, sad, and angry reactions were not present for any of the posts. Nearly 90% ($n = 69$, 88.5%) of the posts contained likes, with a range of 1-60 likes per post. Fourteen (18%) posts had "loves", which ranged from 0-5 "loves" on the post. Six posts contained one "wow" reaction.

Forty-two (53.9%) of the posts were shared and of those, the number of shares per post ranged from 0-97 with 22 posts having one share each. Nineteen posts had shares ranging from 2-11 and one post had 97 shares. Comments were present in 34 posts (43.6%). The number of comments per post ranged from 0-4. The Teach Ag Facebook page did not like or reply to any external comments.

RQ2: What communicative functions were present in individual posts?

Research question two sought to identify what communicative functions were present in individual posts. Modeled after King et al. (2016), this study analyzed posts to identify which communicative function or combination of communicative functions were present. Table 2 displays the frequency of the communicative functions in this study and provides examples of each category.

Table 2

Examples of Communicative Functions Present in Teach Ag Day Facebook Posts (N = 78)

Communicative Function	Example	n	%
Community Building	We want you to share your #TeachAg Day plans with us on social media! #tagged16 <Link>	29	37.2
Information	Lesson plan for 9/22 Done #tagged16 Biofuels 101 11:00 - 11:45am EST #TeachAg Day Live webcast 1:00 – 3:00pm EST <Link>	26	33.3
Information Community Building	and Get ready to dive deep in our #TeachAg Chat with you as our participants! Plan on joining us Sep. 15 at 8pm! <Graphic>	16	20.5
Action	Calling all seniors who plan to major in #AgEdu in Fall 2017. Sign up to declare your plans at the #TeachAg booth <Link>	3	3.8
Information and Action	#Hashtag is the day we give back amidst the holiday season. It's in its fourth year & we're ready to make this year better than ever! Make a proclamation to have signed for #TeachAg Day! We have a sample wording here: <Link>	2	2.6
Community and Action	Tell us about a person who makes your #TeachAg journey worthwhile! We want to recognize them, deadline is Today! <Link>	1	1.3
Information, Building and Action	Already planning for #tagged17 and looking for ideas? Check out our social media wall from #TeachAg Day! <Link><Graphic>	1	1.3

Note. The authors identified each example.

Figure 1 presents a visual representation of the frequency of occurrence of each individual communicative function, with the overlap indicating the frequency of posts containing a combination of the communicative functions. The community building function was present in 60.3% ($n = 47$) of the posts. The information communicative function was present in 57.7% ($n = 45$) of the posts, and the action communicative function occurred in 9% ($n = 7$) of the posts. In posts containing one communicative function, community building accounted for 37.2% ($n = 29$), information, 33.3% ($n = 26$), and action, 3.8% ($n = 3$). A combination of information and community building accounted for 20.5% ($n = 16$) of posts, and a combination of information and

action accounted for 2.6% ($n = 2$). The combination of community building and action occurred in 1.3% ($n = 1$) of the posts. Only one post (1.3%) contained all three communicative functions.

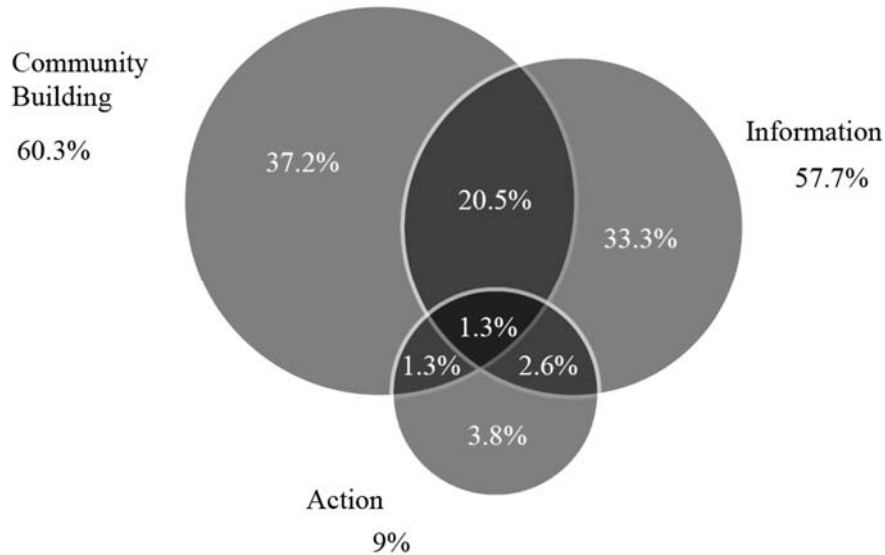


Figure 1. Communicative Functions Present in Teach Ag Day Facebook Posts

RQ3: How did audience engagement differ between post characteristics?

Research question three examined if the amount of engagement (reactions, comments, and shares) differed for posts containing certain characteristics. All posts contained text and were created by National Teach Ag, so those characteristics did not affect post engagement.

There was little difference between posts with or without videos in regard to reactions and comments; however, the difference was more dramatic in regard to the shares. Posts with videos experienced a slightly lower average number of reactions ($M = 12.1$, $SD = 6.2$) and shares ($M = 0.83$, $SD = 0.75$) when compared to posts lacking videos regarding reactions ($M = 12.2$, $SD = 13.4$) and shares ($M = 2.5$, $SD = 11.5$). However, posts with videos had slightly more comments ($M = 0.83$, $SD = 0.99$) on average than posts that did not include a video ($M = 0.71$, $SD = 1.03$).

Posts containing graphics had more reactions ($M = 13.8$, $SD = 14.3$) and comments ($M = 0.78$, $SD = 1.1$) on average than those lacking graphics, where reactions ($M = 9.2$, $SD = 9.4$) and comments ($M = 0.59$, $SD = 0.84$) were slightly less. However, posts with graphics had fewer shares ($M = 1.5$, $SD = 2.3$) on average than those that did not ($M = 4.2$, $SD = 18.6$).

Posts that included links experienced less engagement than those without links. In posts without links, the engagement averaged 17.5 reactions ($SD = 15.6$), 4.2 shares ($SD = 16.8$), and 1.1 comments ($SD = 1.3$). Posts with links averaged 8.4 reactions ($SD = 9.0$), 1.1 shares ($SD = 1.9$), and 0.44 comments ($SD = 0.72$).

The engagement between posts with and without hashtags was nearly the same. The average number of reactions to posts with hashtags was 12.1 ($SD = 13.1$) compared to a mean of 12.9 reactions ($SD = 12.3$) to posts without hashtags. This pattern was also observed for the average number of comments on posts with hashtags ($M = 0.7$, $SD = 1.0$) and those without ($M = 0.8$, $SD = 1.0$).

= 1.3). Shares for posts with hashtags averaged 2.5 ($SD = 11.7$), while posts without hashtags averaged 1.6 ($SD = 1.4$).

RQ4: How did audience engagement differ between communicative functions?

Research question four sought to determine the difference in post engagement between the communicative functions. The total sample ($N = 78$) had an average engagement of 12.2 ($SD = 12.9$) reactions, 0.72 ($SD = 1.0$) comments and 2.4 ($SD = 11.0$) shares. Table 3 displays the mean number of reactions, comments, and shares for each communicative function category. While the one post with all communicative functions had the highest number of reactions, it only had one share and no comments. With a total of 29 posts, Community Building displayed the greatest engagement. The Community Building posts had an average of 14.1 ($SD = 13.4$) reactions, 0.62 ($SD = 1.1$) comments and 4.1 ($SD = 17.9$) shares.

Table 3

Comparison of Engagement Means for Communicative Functions Present in Teach Ag Day Facebook Posts ($N = 78$)

Communicative Function	n	Reactions		Comments		Shares	
		M	SD	M	SD	M	SD
Community Building	29	14.1	13.4	0.62	1.1	4.1	17.9
Information	26	12.7	15.2	0.85	1.1	1.4	2.2
Information and Community Building	16	9.9	9.3	0.81	0.91	1.0	1.5
Action	3	8.0	11.4	0.33	0.58	3.7	6.4
Information and Action	2	7.5	3.5	1.0	0.0	2.5	2.1
Community Building and Action	1	0.0	-	0.0	-	0.0	-
Information, Community Building and Action	1	18.0	-	0.0	-	1.0	-

Conclusions, Discussion, and Recommendations

The National Teach Ag Campaign was formed to recruit and retain agriculture educators to help curb the industry's growing teacher shortage (NAAE, 2017a). A primary demographic group to target for these efforts are millennials, who rely heavily on social media for several purposes. In the U.S., 71% of teens use Facebook, and 92% access the site on a daily basis

(Lenhart, 2015). Due to Facebook's popularity among adults and teens, it can serve as an effective communication tool to encourage advocacy and achieve an organization's mission. Therefore, the purpose of this study was to evaluate Teach Ag's Facebook presence before, during, and after the 2016 Teach Ag Day. This study identified the characteristics and communicative functions present in each post over a three-week period and assessed how those aspects influenced individual post engagement.

All of the posts in the study were created by the Teach Ag organization, meaning they were not shared from other Facebook users. While it is appropriate for organizations to predominantly post their own content, they should look for ways to share what others have created. As McCorkindale et al. (2013) noted, millennials appreciate Facebook pages that allow them to engage in relationships and tell their own stories. Sharing content from others would provide an opportunity to do this. This study coded the individual reactions Facebook users can now use to indicate their response to a post. While the number of reactions ranged from 0-65, the only type of reactions were positive (like, love, haha) indicating the audience members enjoyed the content.

Bortree and Seltzer (2009) stated that advocacy organizations should post photos, videos, and relevant content on Facebook to generate discussions. In the current study, the majority of posts contained at least one graphic and links to additional content. However, videos were present in only 7.7% of the posts analyzed. Videos are growing in popularity on Facebook and may soon surpass YouTube as the go-to place to watch online video (Meola, 2016). This feature of Facebook was underutilized in the current study.

Teach Ag consistently used the hashtags created for 2016 Teach Ag Day. The hashtag #TeachAg was in 82.1% of all posts analyzed, and #Tagged16 was in 65.4% of all posts. According to Ayers (n.d.), social media experts agree it is important to have consistent hashtags to improve searchability. Teach Ag typically used one or two hashtags in its posts. More than two hashtags were present in 12 (15.4%) of the Facebook posts, but no post had more than four hashtags. Practitioners have noted a significant decrease in audience engagement when more hashtags are used in a post and recommend only having 1-2 hashtags. One study found that engagement drops by an average of 30% when 3-5 hashtags were used compared to 1-2 hashtags (Ayres, n.d.). This indicates that Teach Ag was appropriate in using only two hashtags for its Teach Ag Day campaign.

The Teach Ag organization did not like or respond to any external comments on individual posts. In their research, King et al. (2016) found higher engagement in posts when an organization responded to comments. Posts where organizations engaged with audience members experienced more comments, likes, and shares. Teach Ag should increase its level of interaction and two-way communication with audience members to foster relationships with its stakeholders.

In regard to research question two, the most common communicative function present in posts was community building followed closely by information. The third most prevalent communicative function was the combination of community building and information. The other functions were present in only a few of Teach Ag's posts. Previous researchers (King et al., 2016; Saxton & Waters, 2014) found that information was the most common communicative function, and suggested using the other functions would lead to higher engagement. Teach Ag should incorporate more posts with the action communicative function to boost engagement.

Research question three explored how post characteristics affected audience engagement. Posts that included graphics had more likes and comments but received fewer shares. Graphics either contained informational materials or photos of real-life subjects. Engagement rates did not differ between posts with and without videos. Posts with links were shared fewer times on average

than posts without links, and the presence or absence of hashtags did not impact engagement mean scores. It is not evident from this study what might make one type of social media post more engaging than another. This implies that the question of why someone chooses to react, comment, or share social media content is worthy of additional study.

Finally, research question four looked at audience engagement in relation to communicative functions. Although the post with a combination of all three communicative functions had the highest mean reactions, it is important to note that this combination only occurred in one post. Posts categorized as community building or information had the largest mean score in terms of reactions. The posts containing the most comments were those with either information or a combination of information and one other communicative function. The researchers noted that most comments were individuals tagging their Facebook friends, rather than joining the conversation with thought-provoking comments. We surmised that individuals wanted to tag specific friends needing the provided information, rather than sharing the post with their entire Facebook audience, many of whom would find the information irrelevant.

In their research of nonprofit organizations, Saxton and Waters (2014) found individuals primarily shared posts containing the information communicative function. In the current study, posts containing the information communicative function were shared the least. Posts with either community building or action communicative functions had the largest numbers of shares. We attribute the higher share rate in posts containing community building and action to the use of phrases asking the audience to “share the video,” or “share to show your support”.

This study is novel in how it explored the connection between communication functions and Facebook reactions. The authors also did not find previous research that examined online efforts to recruit agricultural education teachers. Certainly, additional research is needed to further examine these areas. Specific studies should identify what factors influence target audience engagement such as the amount of posts per day, the ideal times to post, and effective use of graphics and videos. Finally, future research should use social media monitoring software to explore the reach and sentiment of shared Teach Ag Day posts.

The results of this study provide the Teach Ag organization and similar groups with practical suggestions to develop effective Facebook content for future campaigns. Based on this study, Facebook posts should contain one or two consistent hashtags that brand the event. More short-form and live videos should be used to increase engagement. Facebook page administrators should like and respond to external comments on posts to engender more discussion. When possible, they should also seek ways to encourage user-generated content to allow audience members an opportunity to share their opinions and experiences. When writing content for the posts, the community building or action communicative functions should be used to generate more shares. The community building or information communicative functions will be the most effective to increase reactions. Posts including either information or a combination of information and one other communicative function will promote the most comments.

Further research should analyze the content of external comments on individual posts. The sentiment of each comment should additionally be assessed to note the type of questions, suggestions, criticisms, and feedback of each post. Furthermore, the researchers noticed that many external comments consisted of individuals “tagging” other individuals. Based on the findings of this study, we recommend that the Teach Ag Campaign improves engagement with the existing audience.

Another key element in analyzing the effectiveness of the campaign is to determine how the campaign can be improved. Page “likes” are not enough. An individual who “likes” a page does not necessarily engage with others on the page or with the page itself. If the page is less active and the individual does not engage in the page often, Facebook’s algorithm could additionally decrease how often an individual sees posts from this page. To increase this engagement, a variety of content should be provided on the page as we noted that several posts were repeats of older posts with the same graphics or messages. Engagement could also be improved if audience members are allowed to post content to the Teach Ag Facebook page. This would help cross promote Teach Ag campaign activities happening at various locations across the nation. Finally, page administrators should provide more content after the campaign has ended to highlight local #TeachAg campaigns, provide recaps on events, and feature awards and recognitions of related programs. A weekly campaign such as #TeachAgTuesday could increase engagement throughout the year to engage the target audience of high school agriculture students, agricultural education college students, and agriculture teachers.

The ultimate goal of the campaign is to encourage more high school and college students to consider teaching agriculture as a career and to support the number of agriculture teachers in the pipeline. Using other social media outlets that are more prevalent for high school users such as Instagram and Snapchat could increase the reach and engagement of this campaign. Facebook is popular among older audiences who use social media so it can be a resource for current teachers. The Teach Ag campaign’s Facebook page could prove useful in efforts to address teacher retention by providing encouragement and support for current agriculture teachers.

While this study may lead one to ask, “Does the Teach Ag campaign work?”, answering that question is beyond the scope of a content analysis. The current study provides an investigation of what is being shared, who is engaging, and what types of posts create the most engagement, but it does not provide enough data to answer this significant question. Additional research is necessary to identify any potential relationship between the strategic Teach Ag campaign efforts and the number of students entering agricultural education undergraduate programs, new teachers entering the profession, and teachers leaving the profession. Further, analyzing other campaign metrics such as the use of provided materials, personal posts using the #TeachAg hashtag, and tracking local-level events would provide a holistic evaluation to measure participation in the campaign.

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