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Jennifer Roth Miller  
University of Central Florida  
Jennifer.Miller@ucf.edu

Brandy Dieterle  
University of Central Florida  
Brandy.Dieterle@ucf.edu

Jennifer deWinter  
Worcester Institute  
of Technology  
jdewinter@wpi.edu

Stephanie Vie  
University of Hawai'i  
at Mānoa  
svie@hawaii.edu

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Jennifer Roth Miller  
University of Central Florida  
Jennifer.Miller@ucf.edu

Brandy Dieterle  
University of Central Florida  
Brandy.Dieterle@ucf.edu

Jennifer deWinter  
Worcester Institute of Technology  
jdewinter@wpi.edu

Stephanie Vie  
University of Hawai'i at Mānoa  
svie@hawaii.edu

## ABSTRACT

This article reports on the results of a research study supported by a CPTSC research grant that analyzed programmatic use of social media in professional, technical, and scientific communication programs (TPCs). This mixed-methods study included a survey of TPC program administrators ( $n = 29$ ), an inventory of TPCs' social media account use ( $n = 70$ ), and an inventory of TPCs' course offerings that included social media ( $n = 27$ ). Results showed that programmatic use of social media requires strategic consideration, particularly in order to generate two-way communication, a goal of many of the TPCs studied. To that end, our article generates questions and guiding suggestions (drawn from our three-part study) to guide administrators who wish to include social media in their TPC.

## CCS Concepts

CCS → Social and professional topics → Professional topics → Computing education → Model curricula

## Keywords

social media, technical communication, program development, programmatic analysis

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## INTRODUCTION

Based on original research supported by a Council for Programs in Technical and Scientific Communication (CPTSC) research grant, this article addresses current, emerging, and future directions for programmatic social media use. Historically, professional and technical communication scholarship has attended to social media use, but as this article explores, less research has focused on how social media research can inform administrative decisions related to technical, professional, and/or scientific communication programs. Similarly, social media use at the programmatic level is a fruitful area of exploration, including program administrators' decisions to utilize social media for student recruitment and retention as well as to embed social media use into curricula. Our article draws on both quantitative and qualitative data gathered in 2015 and 2016 to describe how the analyzed programs use social media for programmatic purposes. Also, our article articulates potential questions and guiding suggestions that can serve as a heuristic for programmatic engagement with social media.

Broadly, interest in social media by writing scholars has burgeoned in the past decade as social networking technologies have become more popular among students and faculty alike. In writing studies, technological tools like Facebook, Twitter, Reddit, and Pinterest (among others) spurred early conversations about the potential role of such technologies in the classroom and academia (Maranto & Barton, 2010; Vie, 2007, 2008). As these tools became more commonplace, scholars shifted to specific analyses of particular tools like Facebook or Twitter alongside multiplatform analyses. Many of these studies addressed pedagogical uses of social media in first-year writing courses (Balzhiser, 2011; Patrick, 2013; Shepherd, 2015) and beyond first year composition (FYC) (Faris, 2017). While some research took the form of case studies of undergraduate students across a variety of social media (Buck, 2012), others explored social media as a composing tool by specific user groups: second-language students (DePew, 2011), border and transnational students (Monty, 2015), graduate students (Coad, 2017), or members of fandoms (Potts, 2015; Wolff, 2015), among others. Finally, rather than take a pedagogical approach, some research analyzed specific social media composing features such

as Twitter hashtags (Dadas, 2017; Jones, 2014; Lang, 2019), for example.

Beyond this broad interest by writing studies scholars, technical and professional communication scholars have also attended to the increasing use of social media personally, pedagogically, and professionally by faculty and students. Lam, Hannah, and Friess (2016), drawing on research from Daer and Potts (2014), illustrated that over fifty articles published between 2009–2014 in technical communication focused on social-media-related topics (e.g., relationship building between clients and products; the use of social media tools by technical communicators for careers, research, and teaching). A 2014 special issue of *Technical Communication Quarterly* concentrated on social media, examining social media—as the guest editor noted—“as both/and in terms of their use and their relation to our constructions of ourselves as global citizens, communicators, and teachers” (Kimme Hea, 2014, p. 2). Similarly, two connected special issues of *Communication Design Quarterly* in 2016 explored social media from a communication design perspective by asking the question, “What should communication designers consider when using social media to share information?” (St.Amant, 2016). Other technical communication scholars have approached social media through various lenses, such as their potential pedagogical use (Dyrud, 2011; Verzosa Hurley & Kimme Hea, 2014; Vie, 2017), their use as a communication tool during times of crisis or disaster (Bowdon, 2014; Pflugfelder, 2019; Potts, 2013) or in international communication about climate change (Dong, 2019), and their roles in workplace communication and as a facilitator of distributed work (Ferro & Zachry, 2014; deWinter, Kocurek, & Vie, 2016; Lam & Hannah, 2016; Pigg, 2014). Further, social media research dovetails with initiatives in technical and professional communication, such as internationalizing programs and research agendas (St.Amant, Sapienza, & Sides, 2011; Shin, Pang, & Kim, 2015; Wang & Gu, 2015) and exploring user experience and interface design (Sano-Franchini, 2018), among others.

Where the field has not yet intervened as readily, and where this article contributes to the literature, is within the arena of programmatic research and curricular design. That is, despite a solid focus on programmatic research in both writing studies broadly and technical and professional communication specifically, few scholars have conducted programmatic research within technical and professional communication that is devoted to social media. Such a consideration is timely as recent books and articles have targeted engineers and scientists, teaching them how to use social media, and exploring how social media is changing the nature of knowledge making and work in these areas (DiPietro, 2011; Rifai et al., 2013; Tachibana, 2014). As well, management and consumer behavior scholars have examined social media for branding and marketing businesses and nonprofits (Brennan & Croft, 2012; Jin, 2012; Kohli, Suri, & Kapoor, 2015; Shen & Bissell, 2013). Many of the findings of these studies could be extrapolated to support further research in technical and professional communication related to programmatic use of social media.

Two recent articles in technical communication (Lam, Hannah, & Friess, 2016; Friess & Lam, 2018), however, do intervene in this rich space for programmatic research. In their article, Lam, Hannah, and Friess (2016) argued that Twitter data “can equip program administrators with unique, data-driven arguments to aid in several types of programmatic decisions including decisions regarding curriculum, assessment, and programmatic vision” (p.

48). Extending this argument, Friess and Lam (2018) looked at the introductory technical communication class as a space where Twitter can be used to enhance retention and persistence. The authors connected the pedagogical use of social media “as a way to foster a sense of belonging for retention and persistence outcomes” in the classroom with “technical communication’s exploration of social media as a fundamental competency for the technical communication practitioner” (p. 329). These articles create a space for the intervention that our article offers; that is, they articulate the potential for social media to affect retention, persistence, curriculum development, assessment, and programmatic vision. Thus, our article provides data-driven discussion of how programs might use social media to recruit and attract students, and to consider how curricula may be shaped by social media use. Our research reports on some of the challenges that programs interested in the use of social media at a programmatic level may face. We share potential best practices successfully used by programs that have incorporated social media as self-reported in their survey responses. Finally, to guide TPC administrators interested in including social media in their programs, we close with a heuristic drawn from our research data that guides administrators in considering some common questions and concerns they could consider when strategizing about whether and how to use social media in their programs.

## METHODS

This study intended to determine whether and how technical, professional, and scientific communication or writing programs (hereafter TPCs) across the United States were utilizing social media and toward what end. This study was a three-part study, and our three phases of data collection included:

1. a survey aimed at program administrators to capture administrative perspectives on social media use at a programmatic level (n = 29);
2. an inventory of which TPCs had social media accounts (either active or lapsed) (n = 70); and
3. an inventory of which TPCs had courses involving social media, with data gathered from course catalogs as well as participants’ responses to a survey question asking about existing courses (n = 27).

A cross-institutional team of researchers was involved with this project. This team consisted of two tenured technical communication scholars in conjunction with advanced PhD students in the digital humanities and a master’s student in rhetoric and humanities. The research team included the two grant co-PIs (Vie, at University of Central Florida, and deWinter, at Worcester Polytechnic Institute), two doctoral candidates (Roth Miller and Dieterle, both at University of Central Florida), and one master’s student (Angelia Giannone at Worcester Polytechnic Institute).

## Research Questions

Our research questions, as articulated in the grant application approved by the CPTSC, were as follows:

1. What is the current status of programmatic and curricular use of social media in technical and scientific communication in the U.S.?
2. What are potential “best practices” for using social media to attract and retain technical communication students?

3. What are potential “best practices” for using social media in teaching technical and scientific communication?
4. What challenges do faculty and programs face related to programmatic and curricular uses of social media?

Our data allowed us to begin exploring answers to these questions. We understood, too, that the second and third research questions had very different aims—using social media for programmatic purposes can be quite distinct from using social media for pedagogical purposes in one’s own individual classroom. However, previous technical communication scholars have explored programmatic research through discussions of curricula (Allen & Benninghoff, 2004; Harner & Rich, 2005; Melonçon, 2012; Melonçon & Henschel, 2013). Similarly, Watts’ (2019) study of an online student orientation embedded within her course helped her make claims about “student satisfaction, student perceptions of online learning, and students’ program retention,” all elements she found valuable as an online TPC program director (p. 254). Thus, we found value in addressing our second and third research questions in connection with each other, and our manuscript reports on findings in both areas.

### Data Collection

Active data collection was completed in fall 2015 and spring 2016. The survey was composed in Qualtrics and disseminated in fall 2015 and spring 2016 via email to TPC program administrators as listed on program websites. Next, our research team examined social media posts, websites, and course catalogs between January and April 2016 to inventory social media account use and program-level course offerings. Overall, we evaluated each TPC (n = 112) individually and

- noted whether undergraduate, graduate, or both undergraduate and graduate programs were offered by the TPC;
- offered the survey link via email and asked for the TPC director’s participation;
- identified social media platforms utilized by the TPCs;
- investigated activity or inactivity on Facebook and Twitter, requiring at least 10 posts in January and February 2016 to be considered active;
- coded all posts during spring semester 2016 for all active TPC accounts on Facebook and Twitter;
- categorized posts as accolades, program recruitment, events, or other; and
- searched course listings and catalogues on the TPCs’ websites for social media curricula.

### Compiling the List of TPCs

To gather these three forms of data, we first determined the list of TPCs that our research team would explore. We relied on several previous studies of TPCs that generated similar lists to guide our own compilation, such as Harner and Rich’s (2005) study of undergraduate curricula in TPCs, Melonçon and Henschel’s (2013) previous study of TPC degree programs, and both Nugent’s (2009) and Melonçon’s (2012) studies of TPC certificate programs as models. Using their discussions of list creation as guides, our research team composed and cross-checked an initial list. However, as Nugent (2009) noted, “no complete and authoritative list of

programs in technical communication can be said to exist, making it difficult to initiate systematic research of technical communication programs” (p. 79). Further, he stated, most programmatic research in TPCs draws from program directories compiled by organizations in the field “and in doing so, make[s] assumptions ... about the completeness and representativeness of those directories. ... Each study also makes assumptions about ‘what counts’ as a program for the purposes of their research” (p. 79). Despite these challenges, however, we worked within the parameters of organization-sponsored program directories and remained intentionally broad in our understanding of what counted as a TPC in an attempt to cast as wide a net as possible for our research purposes. This is similar to Melonçon’s (2012) approach in her study of TPC certificate programs, where she articulated criteria for a degree “in the general sense” as being a program that “includes a wide range of courses that would be recognized as courses appropriate for a TPC degree, e.g., courses in technical writing, courses that integrate technologies used in the profession, and courses focused on genres (that is, reports, instructions) common in the workplace” (p. 209).

Because this project was funded by a CPTSC grant, we started with their programmatic database and compiled a spreadsheet of programs listed with CPTSC in 2016. From there, our team augmented the listing with information gleaned from ATTW memberships, much like Allen and Benninghoff’s (2004) study of TPC curricula. Throughout, we consulted with each other to ensure that we were in agreement regarding a program’s inclusion (see also Melonçon, 2012, p. 209).

This resulted in a list of 112 programs that included undergraduate and/or graduate degrees in technical, professional, and/or scientific communication or writing in the United States. Though Melonçon and Henschel’s (2013) study resulted in a larger list of 185 undergraduate TPC programs, their study methodology looked at “majors, concentrations, emphases, tracks, and specialization[s]” (p. 45), while our study only focused on majors, minors, and certificate programs. While this may have limited our numbers somewhat, our team agreed that our list of 112 TPCs would provide us with enough breadth to begin to answer our research questions. Our number (n = 112) was more in line with previous studies of TPCs. These include Nugent’s (2009) study of 139 TPCs in the U.S. and listed in “the combined major program directories” (p. 83), Harner and Rich’s (2005) 133 programs as listed on the STC database, and Allen and Benninghoff’s (2004) 73 TPCs drawn from the ATTW website and ATTW-L listserv. Ultimately, our intention was not to provide an exhaustive list of best practices, but to explore potential best practices as well as challenges. As well, the qualitative portion of this mixed-methods study was never meant to be generalizable, but instead to generate potential best practices and spur further research into TPC social media use. Thus, we approached list creation with an eye toward breadth and within the guideposts of previous TPC studies.

The next sections offer greater detail about each phase of the project and the methods involved.

### *Phase One: Survey of University Perspectives on Social Media Use*

The first layer of participant data was collected through a national survey housed in Qualtrics. This survey was approved by the IRBs at University of Central Florida and Worcester Polytechnic Institute. A pilot version was sent in February 2015 to five TPC directors known to the co-PIs, who agreed to test the survey and

ensure the branching pathways worked correctly as well as to give feedback on the questions themselves. After they provided feedback, the results were discarded; pilot participants were made aware that they should save their actual answers for the revised version of the study. Those pilot participants were invited to take the lightly modified final version of the survey. Because the survey was anonymous (participants were invited, but not required, to provide their contact information in the survey), we were unable to track whether the five pilot participants also completed the final survey. The final survey was disseminated in September 2015 and open until February 2016. A total of 30 potential participants began the survey and 29 consented to participate out of a possible 112 participants, or 26.7% of our sample pool.

We sent via email a personalized invitation and link to the Qualtrics survey to the 112 chairs or directors of identified TPCs from our spreadsheet. We also sent two individual follow-up emails asking for survey participation. There were a possible 44 questions with branching pathways depending on the participant's responses, and the average responder answered 32 of those possible questions based on yes/no branches. At the survey's end, participants were asked if they would participate in possible follow-up research projects related to social media. The full survey is included in Appendix 1.

Survey questions thematically addressed the following five areas:

- Programmatic use of social media to recruit, attract, and/or retain students;
- Support to bring social media speakers and experts to campus;
- Incorporation of social media into the curriculum, individual courses, or instruction, including programmatic learning goals specific to social media;
- Faculty research in social media;
- Alumni employment in social-media-related fields and best practices for programmatic social media use.

Each of the five thematic areas was assigned a color for visual coding (i.e., programmatic use of social media = red; speaker support = yellow; social media in curriculum = green; faculty research = blue; alumni employment/best practices = purple). These colors were used in an initial coding pass by the research team that was facilitated by the use of ATLAS.ti qualitative data analysis software. That is, the research team first analyzed the survey responses by color-coding the participants' answers according to whether their answers corresponded to one or more of the above five areas. This color coding allowed the research team to quickly assess inter-rater reliability in a visually striking manner.

The researchers then, drawing on grounded theory methodology (Charmaz, 2006; Urquhart, 2012), coded for in-vivo trends that arose from the five main categories. These in-vivo codes revolved around accolades, recruitment, opportunities, and information. The research team carried these codes forward and continued to refine them in the second and third phases of the study.

The first phase of the study (i.e., the survey) also helped inform the second phase of the study (i.e., an inventory of social media use) because participants were explicitly asked in the survey whether and how their programs incorporated social media into curriculum, individual courses, and/or instruction. Those participants who

answered yes (that their programs incorporated social media) were asked for specific course titles and course numbers where possible, and were encouraged to provide URLs if available. The research team was therefore able to follow up on these URLs and course materials if available online.

### *Phase Two: Inventory of Social Media Use*

The second study phase involved an inventory of social media use by the 112 TPCs studied; we began our research in January 2016 and completed it in June 2016. The research team created a database for data collection and tracked whether or not programs were using social media and if so, which tools. We also tracked how the programs used social media (i.e., to announce events, to share accolades, or to recruit students) and how frequently the programs engaged with their social media accounts. We found that 70 TPCs had social media accounts (sometimes multiple accounts) for programmatic use out of 112 TPCs in our list, or 62.5%.

We went directly to each program website to determine which programs were using social media programmatically. If particular platforms (e.g., Facebook, Twitter, LinkedIn) were listed, we clicked links from the pages. Most often, programs included links to their Twitter and Facebook accounts; however, some programs did offer links to LinkedIn, YouTube, blogs, Instagram, Flickr, and Pinterest. We developed numeric codes (one through eight) with each numeral associated with a particular social media tool: Twitter = 1, Facebook = 2, LinkedIn = 3, YouTube = 4, blogs = 5, Instagram = 6, Flickr = 7, and Pinterest = 8. Using numerals allowed us to quickly scan which social media outlets were predominantly used and we ascertained that Facebook and Twitter were preferred. Therefore, we chose to focus our deep analysis efforts on Facebook and Twitter. We did not go directly to LinkedIn, YouTube, Instagram, Flickr, or Pinterest to check for use beyond what was indicated on program websites because of the more limited use of these technologies; that is, the data sample would have been too small given the low number of TPCs using these technological tools (see Table 1).

**Table 1: Programmatic Use of Social Media (n = 70 programs**

Coding number	Social media technology	Number of programs (n = 112) using
1	Twitter	31
2	Facebook	32
3	LinkedIn	4
4	YouTube	6
5	Blogs	8
6	Instagram	4
7	Flickr	1
8	Pinterest	1

**with a social media presence at the programmatic level).**

We also noted that of the 70 programs that were using social media, many used more than one social media technology for programmatic use (e.g., one program might use both Twitter, Facebook, and YouTube for programmatic purposes). Thirty programs of the 70 (42.8%) used more than one social media tool, and the greatest number used by one program at a time was five (i.e., one program used Twitter, Facebook, YouTube, Instagram, and blogs for program promotion). However, most programs (57.1%) focused on only one social media tool at a time.

We excluded university-wide social media efforts not specific to TPCs. We did, however, differentiate between general departmental social media use and TPC-specific social media use; in other words, our research team tracked whether the main department (e.g., English, writing and rhetoric, etc.) had social media accounts of some kind as well as whether the associated TPC (e.g., technical communication, scientific communication, professional writing) had social media accounts. In only four cases were there both departmental and TPC-specific social media accounts that overlapped.

Because Twitter and Facebook dominated use, we also went directly to those sites to search for program-related pages. In some cases, we would find related student organizations or projects, related departments, and outdated pages. In this sense, our search sometimes led us to complex “rabbit holes” that required subjective decisions. Decisions to include related accounts such as student organizations associated with a TPC or related department social media accounts were based on the degree to which they were specifically relevant to TPCs. We excluded generalized university, college, school, and department pages from our analysis unless posts directly and frequently mentioned technical or professional communication.

Next, we needed to determine which accounts were worthy of deep analysis and we agreed to only further pursue active accounts. We wanted to spend more time deeply analyzing active accounts and coding their activities in order to categorize the ways TPCs were using social media, and we wanted to label inactive accounts as such so that we could quantify how many TPCs had opened accounts, used them for a while, and then became inactive. To determine active or inactive status, we analyzed the time period during which the last 10 posts on Twitter and Facebook occurred. We determined which accounts were active by perusing recent posts. To consider an account active, we required at least 10 posts during January and February 2016. Any accounts below this threshold were considered inactive. Based on these limiters, 27 of the 70 programs with programmatic social media accounts (38.5%) were considered active. See Table 2 for a breakdown of active versus inactive social media accounts by TPCs.

Analyzing TPCs’ social media accounts—for active versus inactive status and for more fine-grained detail about how active social media accounts were being used—proved challenging for our research team for several reasons. First, when visiting the individual program pages, we found many programs displayed minimal information regarding social media. Often TPC program pages did not have links to social media pages; however, by searching further, we frequently found related department, college, and university social media links. In these early investigations, we found social media use usually leveraged efforts of the university-wide communications office. For example, many universities

would offer links to social media pages in Web site footers. Links would appear on each page as the footer was consistently displayed. However, when the links were clicked from the TPC’s page, a generic university-wide social media page would often be displayed. Second, we also found that often TPCs were contained within the larger umbrella of a department (most often English departments), some of whom had their own departmental social media pages. Programs were sometimes also organized within other departments, such as writing and rhetoric or communication. This resulted in social media accounts serving a wide range of degree programs and areas of study within a department rather than more exclusively the TPC housed within that department.

**Table 2: Active Versus Inactive Social Media Accounts by**

Social Media Platform	# of Programs with Active Presence	# of Programs with Non-Active Presence	Total # of Programs
Twitter	19	12	31
Facebook	18	14	32
LinkedIn	1	3	4
YouTube	1	5	6
Blogs	4	4	8
Instagram	2	2	4
Flickr	1	0	1
Pinterest	1	0	1

**TPCs**

Third, we experienced difficulty in the granularity of the search. In many cases, we needed to make a subjective call to draw boundaries between a larger department-supporting social media account and an account specifically supporting an embedded TPC. For example, the University of Central Florida (UCF) programs illustrated this well. UCF offers a technical communication master’s degree within the Department of English and a professional writing graduate certificate through the Department of Writing and Rhetoric. UCF also offers a scientific and technical communication area of specialization within the Texts and Technology doctoral program. The technical communication master’s program didn’t have active social media accounts, but the Texts and Technology (T&T) doctoral program did for both the overall program and the T&T student organization. Finally, the Department of Writing and Rhetoric did have active social media accounts, but not specifically for the professional writing graduate certificate; instead, the account promoted all activity (including that of this TPC) within the department. For this study’s purposes, we decided not to look for TPC-related social media activity beyond the boundaries of a departmental social media account, meaning university-wide social media use wasn’t considered true programmatic use. We did, however, consider TPC-related social media use to include activity around student organizations, related projects such as a journal in the field, and related departmental use as long as the content related to TPCs in some way.

For active accounts, we investigated the nature of their posts and categorized them as accolades, program recruitment, events, and

“other.” Accolades involved posts that congratulated faculty or students on recent achievements such as conference presentations, publications, awards, and so on. Events posts were targeted to current students and faculty and announced upcoming and ongoing events of interest. A fine line existed between events and accolades. Ultimately, we coded a post as an event if it was advertising a future activity with the purpose of increasing attendance. Alternatively, a post was coded as an accolade if it concerned a past activity and the nature of the post was to highlight the work of a person, group, or project. Program recruitment posts included notices to prospective students (e.g., “We are accepting applications for the PhD program in XYZ at ABC University”). Posts included in the “other” category included original posts or repostings of news articles, memes, discussions of the weather, interesting information originally posted by another entity, etc. We tracked the number and type of posts on active Facebook and Twitter accounts for TPCs and recorded the link to their Facebook accounts (if applicable) and their Twitter handles (if applicable) in our database.

### *Phase Three: Inventory of Social Media Courses*

The third phase of the study involved an inventory of TPCs’ curricula for courses that involved social media. Beginning with our full list of 112 TPCs, we further codified that list by breaking it down by offerings: undergraduate only, graduate only, or offering both undergraduate and graduate programs. We then returned to that individual TPC’s survey results concerning social media curricular development and followed any provided URLs or looked at any course syllabi shared online. After this, we visited each university’s program website to analyze their inclusion of social media at a curricular level from an outsider’s perspective. Additionally, our team searched course listings and catalogues for evidence of social media education and noted courses featuring social media curricula.

Subjective decisions were necessary during this phase’s coding process. For example, a course titled “writing and publishing in online environments” might not immediately strike the research team as a course related to social media, but some courses with this or a related title mentioned social media in the description and were thus coded as social media courses. When readily available, we read course descriptions and used our best judgment. Courses with the term social media in the title always counted. Courses with terms such as new media often counted based on descriptions and platforms mentioned. Ultimately, this method was employed to determine whether social media education was visibly occurring in the curriculum. Of the 112 programs possible, only 27 programs appeared to have courses with social media offerings.

We were unable to find course catalogs for some of the programs and syllabi were generally unavailable online. A number of factors might account for this. The first is that the absence is an accurate representation of some programs; for these programs, social media was not included in their curriculum. The second is that catalog copy is often written vaguely to allow faculty to approach courses individually, and course titles are sometimes written in such a way as to be as capacious as possible for all the faculty approaches to teaching that course. The third is that some courses included social media as a medium for communication (in the same way that websites and papers are), and as such were treated as a medium rather than a topic for instruction. And finally, online materials might have been out of date.

## **RESULTS AND DISCUSSION**

Our survey results indicated positive adoption of social media. However, phase two and three analyses of web and social media material highlights the uneven use of or education about social media in TPCs. This section attends to our survey results, our analysis of social media in programmatic use (attracting students, building programmatic communities, and the like), and the presence of social media in TPC curricula.

### **Survey Results**

As noted earlier, 30 participants began the survey out of a possible 112, all of whom were TPC administrators. One participant did not consent to complete the remainder of the study, and thus 29 participants continued through the remaining possible branching paths available in the survey. Table 3 shows one set of yes/no/not sure questions offered to participants and their responses; participants were always offered a follow-up qualitative free response space right after a yes/no/not sure question in order to give them space to elaborate on their response.

**Table 3: Yes/No/Not Sure Questions Offered to Participants**

<b>Categorical Questions: Does your program include ...</b>	<b>Yes</b>	<b>No</b>	<b>Not Sure</b>	<b>n =</b>
Programmatic use of social media to recruit, attract, and/or retain students	19	7	3	29
Programmatic student learning goals about social media	19	2	1	22
Programmatic incorporation of social media into curriculum, courses, and/or instruction	18	3	2	23
Faculty research about social media	15	4	3	22
Program sponsorship for guest speakers who focus on social media	10	8	6	24

When examining these numbers within the context of the second and third phases of the study (i.e., the inventory of TPC social media account use and the TPC course catalog inventory, respectively), our research team noted some dissonance. That is, the numbers in Table 2 are generally positive—many TPC administrators noted that their programs incorporated social media into the curriculum, or embedded student learning goals about social media into the program, for example. However, the catalog and social media/website analysis doesn’t bear this out across the many programs examined. Thus, we posit that those who chose to participate in the survey may have done so because they were already interested in or excited about social media use in a TPC and therefore would possibly have more elements to positively describe about their program as related to social media. It might also be the case that websites have not been updated to reflect recent additions of social media curricula, or that social media content is included in courses with names that do not reflect social media topics and thus are not easy for external audiences to ascertain the inclusion of social media. Finally, this also points to a definitional problem: like the issue of what counts as a TPC, defining what counts as social media has been similarly fraught for researchers (see, for example, Stewart, 2016).

We also studied TPCs that had an online presence, but the TPC administrator had not completed the survey. There could be a variety of reasons why a TPC administrator may not have responded. Some of those TPCs may have had a program administrator who was less enthusiastic about social media and therefore not as interested in participating in the survey. We also note the possibility of survey fatigue (or even email fatigue) as program administrators frequently receive a large number of emails daily, with some of those including survey or other research requests. However, our response rate of 26.7% is in line with typical response rates for online surveys at around 30% (Nulty, 2008), and thus we believe that our study's response rate provides enough data to present a useful snapshot of TPC administrators' use of social media.

### Programmatic Use of Social Media to Recruit, Attract, and/or Retain Students

Table 4 showcases the responses from participants regarding their use of social media at a programmatic level to recruit, attract, or retain students. Programs that used social media to recruit, attract, and/or retain students self-reported using the following platforms: Facebook (18 out of 19 possible "yes, we use social media" responses), Twitter (8 of 19), Google+ (1 of 19), YouTube (5 of 19), blogs (4 of 19), and other (3 of 19, which included podcasts and Tumblr). No respondent reported using Reddit, Instagram, Foursquare, Pinterest, or wikis.

**Table 4: Responses Regarding Programmatic Use of Social**

Categorical Questions: Does your program include ...	Yes	No	Not Sure	n =
Programmatic use of social media to recruit, attract, and/or retain students	19	7	3	29

#### Media to Recruit, Attract, and/or Retain Students

In this section, our data revealed several challenges to using social media for these aims. They include considerations of labor (both faculty and student), challenges of one-way versus two-way communication, and concerns regarding lack of recognition for social media efforts as service and/or administrative work.

When asked how programs use these tools to attract, recruit, and/or retain students, the qualitative data showed that content generation overwhelmingly depended on student (8 of 19) and faculty (5 of 19) labor, with only one program employing a department webmaster whose job description included social media content. In fact, one respondent wrote, "Getting students to post is the holy grail." The research team noted that most of what the TPC directors discussed in their follow-up responses about how programs generated content was what we determined as information sharing/pushing (11 of 19). For instance, directors described content such as "departmental happenings," "successes of current students and alums," "job openings," and "news of interest." Even though we asked in the question whether the departments engaged in "socially mediated discussion," the directors only talked about posting but not about discussion/two-way communication. We reflect that this could be a generative avenue for follow-up discussion.

The labor of content generation is an issue that TPC administrators acknowledged in their responses, and our respondents further delineated multiple issues that affect content creation for programmatic social media use. These include considering who is generating the content (e.g., students only, faculty members

only, students and faculty, directors only), whether and how those content generators are compensated for their work, and how current laws might impact content creation. Respondents suggested, for example, the potential role of social media for student professionalization, with students generating content as a form of "(micro) crowdsourcing," while others saw the need for a professional or dedicated role to generate content. Concerning what content should be shared, respondents saw the ability of social media to push information in a timely fashion and highlight the work of the department. Several respondents discussed the problems faced in developing best practices or strategies, such as the need for legal considerations and/or policies, as well as the pressures of time and uncompensated labor. These concerns arose again in both reasons why programs didn't use social media, as some noted that their programs were too small and did not have adequate resources. Many responses suggested a desire and willingness to do this (i.e., one respondent said, "We'd like to do more, but don't have staff or time to do these"), and also noted a need for a strategic plan (i.e., a different respondent said, "You need a coherent content plan and schedule. You must execute on what we actually teach"), with one person pointing out the need to use Facebook ads.

One respondent noted that it's difficult to engage with social media on top of teaching, research, and service, indicating that social media use for this or any other purpose does not currently fit under these three categories. Programmatically, this appears to be an opportunity to scaffold social media engagement as recognized service, and to also consider recognizing such service at the multiple levels where it can appear for a faculty member in the university—for instance, the inclusion of social media in one's teaching that supports a TPC is different than the labor of content creation as a TPC program director, although the same faculty member might participate in both activities. A TPC program director might have a research agenda that includes scholarship on social media, a teaching schedule where he or she incorporates social media assignments into pedagogy, and programmatic activities that support social media for his or her program such as creating content, responding to comments, or writing blogs. This is just one example of how the labor of social media for programmatic use can be distributed in different ways across the life of an individual TPC administrator.

#### Social Media Course Offerings

This phase of our research was one of the more challenging for two reasons. First, the research team lacked access to the actual course syllabi being taught in the TPCs. As a result, we were frequently unable to determine whether social media content was being taught in a given course, or whether social media was being incorporated as a communication tool in a course. Second, catalog listings for courses are typically generic, in order to apply to many different instructors' approaches to the same course within one institution. Thus, the undergraduate or graduate course catalog listings for a TPC might be intentionally broad to allow for faculty variance in teaching courses.

We had to rely heavily on the TPC administrators' self-reported data as to whether social media was being taught in certain courses. In our survey, we asked "Does your program include programmatic incorporation of social media into curriculum, courses, and/or instruction?" Given that the TPC administrators who responded to this question in our study (n = 23) overwhelmingly said yes (18/23, or 78.2%), our research team expected to see more references to social media in the materials that we evaluated (i.e., course

catalogs). However, of the 112 TPCs possible, our research team found only 27 explicit references to social media being taught in the curriculum in some way (24.1%) in their course catalogs. While this aligns with the number of TPC administrators who responded to this question in our survey, it seemed to us that the strong response of “yes” to that survey question would imply that, even among the additional 89 programs whose administrator did not respond to the survey, there would be higher numbers of courses identified in the course catalogs that included social media in some way. Because course catalogs only include course titles, a short description, and credit hours, there is limited information that can be gleaned from them, likely impacting our team’s ability to discern whether or not social media was incorporated into these courses.

Unlike Melonçon and Henschel’s (2013) study of undergraduate TPC programs in the U.S. that also relied on coding course catalogs, our study looked for information that was often more difficult to ascertain. That is, Melonçon and Henschel coded the course catalogs they gathered by dividing them into required and elective courses, then assigning them into general categories (e.g., capstone, editing, usability, linguistics, etc.) in order to assess what TPC programs nationwide were asking students to take as part of a TPC degree program. Instead, our research team was looking for evidence of one specific element of a course—in other words, was social media used as content and/or tool in this course? On hindsight, we realize that a necessary part of our study was missing if we wanted to more deeply understand whether or not (and how) social media was being taught in TPC courses: we needed to gather syllabi when possible and talk directly with instructors when possible. As Melonçon and Henschel noted, “Additional research should focus on analyzing syllabi and talking with instructors to gain a better understanding of what happens in the classroom” (p. 60). We agree, and while we asked for course numbers and course catalog URLs from our participants, we did not ask for syllabi and did not follow up with individual faculty teaching social media in TPCs. These would be fruitful areas for future research.

However, the qualitative responses from the TPC administrators offered some valuable detail when considering how these respondents saw social media being infused into the curricula of their TPC. One respondent reflected on their own use of Wikipedia, LinkedIn, Twitter, and YouTube in the TPC classes they taught, and shared that another faculty member in the program “taught an entire course about the business uses of social media as part of a study-abroad program in London. The class evaluated the social media presences of Harrods, the Maritime Museum in Greenwich, a brewery, etc., and made site visits.” Another shared the description of a class called “Designing Social Media Infrastructure” thusly:

This course prepares technical communicators to assess and develop governance/oversight procedures, policies, employee training, monitoring and measurement protocols, risk and compliance guidelines, and audit processes for social media. Students select a company and conduct a semester-long case study where they develop critical infrastructure documents for social media.

Still other respondents shared titles of courses in the curriculum of their TPC, such as Multimodal Composition, Digital Rhetoric, Content Strategy, Writing in the Public Interest, Writing and Digital Media, Developing Online Content, Rhetoric of Web Publishing, and International Technical Communication, among others. It is clear that, for these 23 respondents, social media infused the TPC

curriculum of their program in many different ways. And when asked, “Why do you think that it is important to teach social media in classes or curricula?” respondents reinforced its importance in the workplace as well as its prevalence in everyday communication and in technical communication specifically. As one participant stated, “Social media is an important element of writing and communication that must be addressed as seriously as standard academic discourse. It’s most likely that students will write more in social media platforms than in other modes throughout their personal and professional roles.”

## Questions and Concerns to Guide Future TPC Social Media Use

In addition to the descriptive research that we conducted about current observable practices, we surveyed programmatic administrators about current and best practices for social media in TPCs. Twenty-two people responded to our best practices question, and we coded these responses using the following categories that arose in vivo from the data:

- Student work & professionalization;
- Faculty and/or professional social media role;
- Information sharing;
- Ongoing problems; and
- I don’t know.

This final category of “I don’t know” was often accompanied with text explaining that the responding TPC director didn’t research social media and/or didn’t use it personally. In a separate follow-up question, we asked why the program doesn’t use social media to recruit, attract, or retain students, and of the six who responded, five programs reported being small and therefore lacking the resources, interest, or time to actively run or maintain a presence. Ultimately, the size of the programs matter, which makes sense considering the time commitment needed to manage a social media presence effectively. However, there is an opportunity even here to teach social media in coursework, thus preparing students for the platforms and communication challenges that they will likely face. TPC administrators can play a role in making arguments about the necessity for such courses or assignments as beneficial from a programmatic perspective.

Eight of our 22 respondents spoke strongly about student labor and professionalization as a TPC strategy. According to their self-reporting about student activities in service to the program, respondents discussed students posting to Facebook groups, running sites, or collaborating with faculty to manage a broader strategy. In discussing the benefits of student engagement, one respondent wrote that “it is useful for students in the program to do much of the social media posting and management because it gives an inside view of the program and its benefits to [other] students.” In this way, student labor becomes a means of pre-professionalization into the core competencies and skills that might be expected in the workplace after graduation (Brumberger & Lauer, 2015; Frith, 2014). However, with students cycling in and out of TPC programs as they matriculate and then graduate, some TPC administrators may be wary of involving students at high levels in programmatic social media use; the ongoing training required may be burdensome.

And while some respondents note the benefit of “crowdsourcing”

social media tasks through student labor, another respondent noted specifically the need for oversight of student work on these sites. Specifically, allowing students to post to programmatic social media sites indicates programmatic approval of all posts, which may not always be true. As one respondent wrote in response to best practices as a cautionary statement: “Take legal considerations seriously. The idea of having a student run an account could backfire. Create procedures and policies for social media usage.” Thus, calls for students to run and manage these sites in the future should only be done with clear documentation and training, and also include an oversight mechanism that ensures social media usage is done in service of the program. Many institutions have, or are in the process of developing, brand guidelines and social media guidelines, and the TPC programs will need to consider how best to introduce students to these guides.

While many respondents discussed student labor, four other respondents discussed the need for a dedicated faculty or administrative role, or a professional plan, for social media engagement. In addition, 13 respondents discussed faculty and staff postings to social media platforms, either on personal accounts or via programmatic accounts. In many ways, the responses concerning faculty or professional roles in social media management are closely linked to the challenges identified in implementing social media: namely, time and money. As one respondent wrote: “These are time-consuming. Yes, PR and recruitment have become our jobs—on top of teaching, scholarship, and service, but it’s hard to find time to make these work as they should.” In addition to this trickle-down professional role, another respondent noted that “administrators tend to see it as a ... panacea that requires no actual understanding of how it works or of the infrastructure and resources to make it effective,” and that “if universities would invest the resources for meaningful data mining, targeting, and so on, we might be able to make good use of it.” Such comments point to frustrations within social media use. Best practices indicate that social media managers need time, training, and resources to be used effectively for the purposes identified. In terms of time, social media managers need time to develop an understanding of their local institutional context, including understanding the institutional social media guidelines (if any), the key stakeholders and players involved in social media use throughout the institution, and the audience’s needs and desires as related to social media. At one institution, Instagram may be key in reaching out to students; at another, faculty may be active in private Facebook groups for a program. Without an awareness of such local contexts, social media managers may waste valuable time setting up TPC-focused social media accounts that lay dormant because their potential audiences were active elsewhere.

Despite frustrations with time, time can also be used as a guiding principle for TPC-related social media use. For example, three respondents pointed to the benefit of creating a master calendar and posting schedule to maintain active social media accounts. In such a calendar, social media managers or coordinators pre-schedule set content during the year using available tools. In some cases, these schedules were very simple, from posting opportunities for students every other Friday to a three-day-a-week posting schedule. In some cases, this responsibility is placed on the department webmaster or designated staff person; however, in most cases, these posts and engagement fall to faculty in the program. To distribute the labor of maintaining accounts, several institutions described rotating the posting responsibilities. Finally, technologies abound that can

assist with scheduling social media posts, setting up automated responses to program pages and accounts, and even trawling other social media accounts to suggest content that a TPC social media account might want to share.

The final identified best practice from the field is social media for information sharing (i.e., one-way communication), which is discussed in 19 of the 22 responses. Programs identified Facebook, Twitter, YouTube, and blogs as the primary ways to share information about the program, update course descriptions, announce events, and post about student activities. One respondent discussed keeping in touch with alumni. For the most part, responses indicated that social media was mostly used for announcements and news items—pushing information out to networks. However, along with pushing out information on a one-time basis, TPC administrators responsible for social media account content may also consider curating “evergreen” content (i.e., information that can be considered timeless, useful year after year) that can be reposted on a consistent basis; they may also want to curate a network of accounts of interest whose content can be reblogged, shared, retweeted, and so on to demonstrate engagement with the network and create an active presence for audience members.

Absent in responses concerning best practices was social *engagement* via social media (i.e., two-way communication). In other words, many programs discussed posting news and events to social media, but they did not discuss active tagging of individuals in the network, liking or retweeting others’ items, or running synchronous or asynchronous online community sessions organized around a hashtag. In some ways, social media serve as extensions to an organization’s website presence, which, taken in conjunction with comments about time and resources, makes sense. Active social media engagement—the type of activities that a community manager might foster—consumes time, resources, and social labor. Faculty may be willing to do this for their personal careers and personal networks because the labor is of deep personal interest to them. However, the labor dedicated to a program may not have the same social and emotional rewards needed to justify and motivate people to engage in such work, particularly when the day-to-day work of a TPC administrator includes so much already. Programs that can tap into a point person or people in the department/program whose research, teaching, and/or service interests align with social media specifically or digital communication broadly will likely be more successful in structuring their social media presence over the long term. However, those programs should also consider what happens if that point person leaves.

## Limitations and Future Research Directions

One limitation of our study involves the content of our list of TPCs that we studied ( $n = 112$ ). As noted earlier, and in previous TPC research as well, determining an exhaustive list of TPC programs for research purposes is difficult for many reasons. Our research team created a list of 112 programs for our study based on methods and guidelines explored in previous TPC scholarship. However, we realize that our choices of programs to include or exclude created a listing that is not monolithic. That is, our listing includes large doctoral-granting institutions alongside regional comprehensive institutions alongside tech schools, and so on. As such, future research could explore nuances in TPCs’ programmatic use of social media by applying limiters such as sorting programs according to a listing like that of the Carnegie Classification of Institutions of Higher Education. We recognize, too, that TPCs constantly evolve and grow, and our data are a snapshot of an earlier time. While

accurate in 2015-16, changes have of course occurred since, and future research can build upon the baseline we present here.

A second limitation involves the nuances between our second and third research questions. That is, our second research question asked, “What are potential ‘best practices’ for using social media to attract and retain technical communication students?” and our third research question asked, “What are potential ‘best practices’ for using social media in teaching technical and scientific communication?” We described in this article that we see many connections between programmatic use of social media to attract and retain students and programmatic use of social media embedded within pedagogy (i.e., use of social media in a course that is taught within a TPC). However, we acknowledge that pedagogy involves both the individual (i.e., the faculty teaching the course) and the collective (i.e., the course is embedded within and supports a larger program). Future research can continue to deeply explore both of these areas and examine ways that individual curricular choices about social media in TPC classes can affect the larger program-level outcomes and goals for the TPCs in which they are embedded.

A third limitation involves our coding methods as well as the self-reported nature of the data we gathered from the survey. First, more social media posts than we anticipated were coded “other.” Posts in the “other” category included scholarship, internship, and job opportunities as well as various random posts such as quotes or shared information. Breaking down the “other” category and understanding the nature and purposes of these less-common types of posts may be an area for future research. Second, we were unprepared for the lack of information about curriculum from our survey results, from online sources, and from course catalogs. We expected to more easily be able to find information about TPC courses online, and would design our study differently in order to find this data more easily next time, perhaps using a structure drawn from Melonçon and Henschel’s (2013) study of undergraduate curriculum that relied heavily on course catalogs. Finally, we acknowledge that the first phase of the study gathered data from those TPC administrators who self-selected to respond. While our aim in this study is not to generalize (and thus our heuristic of questions and concerns is not meant to be a monolith), we would like to see a broader study with more TPC administrators responding to allow for even greater depth and nuance to the self-reported data.

Some of our respondents illustrated valuable avenues for future research. In terms of seeing social media as an opportunity for development, survey responses indicated that programs saw social media as a potential tool for engaging students, faculty, alumni, and the community, yet TPC administrators were unsure how to accomplish this goal (see Vie, 2017, for further articulation from TPC faculty about the tension between an interest in social media pedagogically and a need for specific training to feel comfortable moving forward with this interest). This may be an area for future research or a potential recommendation for how to communicate with and involve varied vested parties in technical and professional communication programs and in associated professional fields.

Similarly, many of the survey responses as well as content posts appeared to try to reach multiple audiences at once. They often attempted to bridge student, university, and professional interests in technical and professional communication education. As a result, we recognize that as social media has become increasingly central to professional business strategies. We see a greater need for savvy

technical and professional writers who can simultaneously act as community managers (see Bingham & Conner, 2015; Carnegie & Crane, 2018; Hackos, 2015; Shalamova, Rice-Bailey, & Wikoff, 2018).

Finally, our survey was not able to draw out much discussion of student retention as a result of social media use by TPCs, and this was difficult to discern from phase two or phase three of the study (e.g., there was little way to capture results that discussed retention from studying TPC posts or catalogs). Because retention is often so important to program administrators, this would be an important area for future research. More research with TPC alumni that asks whether social media played any role in their retention as students could be key.

## A Heuristic for TPC Social Media Use

Based on our research team’s findings, we share here a set of possible guiding questions for TPC administrators who wish to consider, or further develop, the incorporation of social media into their program’s design (Table 5).

**Table 5: A Heuristic for TPC Social Media Use**

<b>Accessibility</b>	Have we considered accessibility issues that may arise from our TPC’s use of SM?	Consider professional development around SM and accessibility  Encourage individual faculty teaching SM in the TPC to include alternative assignments when possible
<b>Audience Analysis</b>	To whom are we (as a program) trying to speak?  Are we focusing on one-way or two-way communication with our audience?  What might potential future students learn about our TPC program from looking at our SM accounts?	Consider which social media (SM) will reach this/these audience(s)  Think about ways to encourage participation from community members but be aware of the increased labor of two-way communication
<b>Connections to the Broader Field</b>	Does the use of SM in our TPC align with current research in the field?  Does SM use in our TPC prepare graduates for the work they will do after graduation?	Work to stay aware of SM research in TPC journals, books, and conferences  Continue to stay abreast of industry needs and partnerships in TPC, particularly relating to SM
<b>Curricular Development</b>	Where, when, and how do we want SM included in TPC curricula? To what end?	Hold programmatic conversations about the goals of incorporating SM in curricula and the program as a whole

	Have we considered why as a program we want to include SM in (1) individual courses (2) the program as a whole?	Consider how SM assignments and tools can meet learning goals or outcomes for individual courses and program goals or outcomes for the TPC as a whole
<b>Longevity and Labor</b>	<p>Have we thought about the labor required to successfully sustain our TPC's use of SM over time?</p> <p>Do we have a designated point person or community manager for our TPC's use of SM?</p> <p>Do we have a plan for if our SM of choice goes down/is discontinued?</p> <p>Do we have a content calendar?</p> <p>Are we focusing on several SM accounts at once or a deep dive into one or two SM accounts only?</p>	<p>Build recognition and reward for programmatic use of SM into the TPC and/or broader aspects of the university (i.e., promotion, tenure) where possible</p> <p>Consider internships, course credit, work-study, and other means of rewarding student labor in SM for the TPC</p> <p>Ensure that multiple individuals are aware of the SM logins and passwords in case the point person leaves</p> <p>Back up SM accounts where possible; consider alternative SM in case primary choice(s) fails</p> <p>Create a detailed content calendar and regularly check for communication with audience members</p>
<b>Marketing and Branding</b>	<p>Is the TPC administrator aware of university brand guidelines (if applicable)? Social media guidelines (if applicable)?</p> <p>Does the program's use of SM align with these guidelines?</p> <p>How are, or will, members of the SM taught to align with these guidelines?</p>	<p>Regularly examine and share brand guidelines and SM guidelines, as applicable</p> <p>Highlight elements for the SM team to be aware of and engage in what-if questions to spur discussion (e.g., is our Twitter avatar on brand? What do we do when our audience complains on Facebook? What happens if a student organization in our program creates an Instagram without our knowledge?)</p>

<b>Training</b>	<p>Does the TPC administrator need training in SM use to more effectively include SM at the programmatic level?</p> <p>Do TPC faculty need training in SM to more effectively include SM at the curricular level?</p>	<p>Consider workshops, brown bag lunches, seminars, reading groups, and other forms of professional development for members of the TPC</p> <p>Draw on in-house expertise when possible to share locally contextual best</p>
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## CONCLUSION

Social media can build communities, yet the effective use of social media is a specialized skill that requires a significant commitment to long-term engagement with that community. At the level of programmatic adoption, either for programmatic use or curricular inclusion, social media use requires strategic consideration, especially for growing two-way participation over unidirectional information sharing. Our data indicate that an opportunity exists to expand social media curricula in TPCs to meet the increasing demands that these new platforms place on professional and technical communicators. Further, programs can use social media successfully as expansions of their current web activities to push up-to-date information about courses, news items, announcements, and job opportunities for students. Such activities, our research indicates, do not require significant time or resource investment. However, they do require a designated point person or people who can think big-picture about the TPC channels' strategy and select the appropriate platforms, ways of engagement, and content that align strategically. TPC administrators or faculty are ideally situated to take such a rhetorical approach to social media use and able to develop networks (both local and field-specific) over time. Should programs choose to engage with the capabilities of social media, our research indicates that they will want to coordinate with marketing or other units on campus to access analytics on the different platforms and/or designate a social media coordinator to engage actively with the social networks through tagging individuals, liking posts or retweeting them, and hosting live sessions via these platforms.

And those TPCs that are not yet prepared to incorporate social media as part of their overall strategy for student retention, recruitment, or engagement may choose in the meantime to bring experts to their institution to speak to faculty and administrators about the power of social media at a programmatic level. Once TPC programs are ready to take the leap, they might participate in workshops that help faculty and administrators understand the local institutional context, develop a potential social media strategy and content calendar, and learn about platforms and time-saving tools. Given the increasing interest in the field with which we began this article, there is a wealth of expertise available for TPCs who wish to move in this direction.

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## APPENDIX

**Q1** You are being asked to take part in a research study. Whether you take part is up to you. The purpose is to survey technical, professional, and scientific communication programs about social media. We are interested in learning about social media for student recruitment, engagement, and learning outcomes.

The study is led by Dr. Stephanie Vie (Institution 1) and Dr. Jennifer deWinter (Institution 2). The survey should take approximately 15 minutes of your time. At the end, you will be invited to share your contact information to enter a drawing for a \$50 gift card from Amazon.

You must be 18 years of age or older to take part in this study. Are you at least 18 years of age or older?

- Yes
- No

**Q2** Do you teach in or are you an administrator (e.g., a program director, co-director, coordinator, assistant, or similar) of a technical, professional, or scientific communication/writing program?

- Yes
- No

**Q3** Do you consent to participate in this study?

- Yes
- No

**Q27** For the purposes of this study, we use “student” to refer to any student enrolled in a professional, technical, and/or scientific communication or writing program (such as a certificate program, undergraduate degree, or graduate program (MA/MS/PhD).

We use “program” to refer to any professional, technical, and/or scientific communication or writing certificate, undergraduate degree, or graduate program (MA/MS/PhD).

We use “social media” to refer to web technologies such as Facebook, Twitter, Google+, Reddit, YouTube, Instagram, Foursquare, Pinterest, blogs, wikis, etc. For the purposes of this study, we do not consider email or static webpages (such as a department or program website) to be social media.

In this survey, we will ask about three main areas related to your program’s potential use of social media: (1) to recruit, attract, and/or retain students; (2) to teach enrolled students; (3) to connect social media with your program’s learning outcomes or related elements.

**Q4** Does your program use social media to recruit, attract, and/or retain students?

- Yes
- No
- Not sure

**Q32** You mentioned that you are not sure if your program uses social media to recruit, attract, and/or retain students. Can you explain further?

**Q5** What do you see as some potential “best practices” for using social media to recruit, attract, and/or retain students by programs? How might programs best use these tools for these purposes?

**Q18** Has your program brought, or do you plan to bring in, guest speakers who focus on social media to your campus?

- Yes
- No
- Not sure

**Q32** You mentioned that you are not sure if your program has brought, or plans to bring in, guest speakers who focus on social media to your campus. Can you explain further?

**Q19** You mentioned that your program has not brought, or does not plan to bring in, guest speakers who focus on social media to your campus. What are the reasons why not?

You may make multiple selections.

- Faculty in the program are not interested in social media.
- Students in the program are not interested in social media.
- We do not know any social media experts who can be guest speakers.
- We do not have the time.
- We have not thought about it.
- Other \_\_\_\_\_

**Q33** You mentioned that your program has brought, or does plan to bring in, guest speakers who focus on social media to your campus. What do you hope this speaking engagement will do in terms of recruitment, attraction, and/or engagement for students enrolled in your program? For faculty members?

**Q7** You mentioned that you do not use social media to recruit, attract, and/or retain students in your program. Can you please explain further?

**Q29** You mentioned that your program uses social media to recruit, attract, and/or retain students. Which social media technologies does your program use for these purposes?

You may make multiple selections.

- Facebook
- Twitter
- Google+ (Google Plus)
- Reddit

- YouTube
- Instagram
- Foursquare
- Pinterest
- Blogs
- Wikis
- Other \_\_\_\_\_

**Q40** How do you use the above social media to attract, recruit, and/or retain students? For example, do you post, have students run the sites for you, engage in socially mediated discussions, and so forth?

**Q6** Are there any other ways that your program uses social media to recruit, attract, and/or retain students that the previous questions did not capture? Or do you have further thoughts about social media's use for recruiting, attracting, and/or retaining students in programs?

**Q34** This next section will focus on curriculum and instruction in your program as related to social media.

**Q12** Does your program incorporate social media into curriculum, individual courses, and/or instruction?

- Yes
- No
- Not sure

**Q35** You mentioned that you are not sure if your program incorporates social media into curriculum and instruction. Can you explain further?

**Q15** You mentioned that your program does not incorporate social media into curriculum and instruction. Can you explain further?

**Q13** You mentioned that your program incorporates social media into curriculum and instruction. Can you provide course titles (and course numbers) for those courses if possible? Alternatively, you can point us to a course catalog or URL.

**Q14** Does your program have courses that specifically focus on social media as a topic, theme, or form of instruction?

- Yes
- No
- Not sure

**Q41** Why do you think that it is important to teach social media in classes or curricula?

**Q8** What do you see as some potential "best practices" for using social media in teaching professional, technical, and/or scientific communication or writing? Or, what are some of the ways your program has used social media successfully for curriculum and instruction?

**Q9** What challenges do you believe programs face related to uses of social media for curriculum and instruction?

**Q20** Do any of the faculty in your program research or write about social media?

- Yes

- No
- Not sure

**Q37** You mentioned that you are not sure if any of the faculty in your program research or write about social media. Can you explain further?

**Q38** You mentioned that some faculty in your program research or write about social media. Would you be willing to share their names for potential follow-up research? If so, please write their first and last names below.

**Q39** Does your program have overall student learning outcomes or goals?

- Yes
- No
- Not Sure

**Q40** You mentioned that you are not sure if your program has overall student learning outcomes or goals. Can you explain further?

**Q41** You mentioned that you are not sure if your program's overall student learning outcomes or goals address or incorporate social media in any way. Can you explain further?

**Q17** Can you please explain in what ways do your student learning outcomes address social media?

**Q16** Do your program's student learning outcomes or goals address or incorporate social media in any way?

- Yes
- No
- Not Sure

**Q43** Now we would like to ask you about former students' use of social media in their professional lives (their jobs).

Do any of your former students who have graduated (alumni from your programs) use social media in their professional lives (their jobs)?

- Yes
- No
- Not Sure

**Q44** If you answered yes, please describe what they do, if known (their jobs), and what they do with social media in their jobs.

**Q29** Thank you for participating in our research study. We thank you for your time. May we contact you for a brief follow-up interview?

- Yes
- No

**Q30** Please provide your name and email address below so we may enter you into the drawing for a \$50 Amazon gift card. If you indicated your willingness to have us contact you for a brief interview, we will use this same contact information.

**Q31** Thank you for your participation in this survey. Your responses will be valuable to us as we research the role of social media in program development. If you have questions or need assistance,

please contact [name] at [email].

## ABOUT THE AUTHORS

Jennifer deWinter is a professor of Rhetoric and director of the Interactive Media and Game Development program at Worcester Polytechnic Institute. She brings together her expertise with technical communication and game design to analyze the potentials of these articulated disciplines. She is an expert on Japanese games and media, directs the Japan Project Center, and is an associate in research at Harvard University's Reischauer Institute of Japanese Studies.

Jennifer Roth Miller is a faculty member at the University of Central Florida in the Nicholson School of Communication and Media. Jennifer's work seeks to better understand digital citizenship and social media engagement by exploring the convergence of communication, technology, philanthropy, and education in socially constructing collective views and actions for social justice.

Brandy Dieterle is a lecturer in Writing and Rhetoric at the University of Central Florida. Her research interests are in multimodal composition, digital literacies, new media, and gender and identity studies. She serves as an associate editor with *Kairos: Rhetoric, Technology, and Pedagogy* and serves on the editorial review board of *Xchanges*. Her open access co-authored chapter "Confronting Digital Aggression with an Ethics of Circulation" appeared in *Digital Ethics: Rhetoric and Responsibility in Online Aggression, Hate Speech, and Harassment* (Eds. Jessica Reyman and Erika Sparby). Her work has also appeared in *Computers and Composition* and *Composition Forum*.

Stephanie Vie is Associate Dean of the Outreach College and Professor of English at the University of Hawai'i at Mānoa. She is the co-editor of *Social Writing/Social Media: Publics, Presentations, and Pedagogies*, and her scholarship has been published in numerous journals like *Computers and Composition*, *Technical Communication Quarterly*, *Kairos*, and *First Monday*. She is the 2016 recipient of the Charles Moran Award for Distinguished Contributions to the Field and the 2018 winner of the 7C Committee Technology Innovator Award. She tweets at @digirhet.