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Leveraging the Methodological Affordances of Facebook: A Model of Social Networking Strategy in Longitudinal Writing Research

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Leveraging the Methodological Affordances of Facebook: Social Networking Strategies in Longitudinal Writing Research

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Jenna Pack Sheffield and Amy C. Kimme Hea

Abstract: While composition studies researchers have examined the ways social media are impacting our lives inside and outside of the classroom, less attention has been given to the ways in which social media—specifically Social Network Sites (SNSs)—may enhance our own research methods and methodologies by helping to combat research participant attrition and build a community around a research project. In this article, we share some of the successes and shortfalls of using SNSs for research purposes, based on our own experiences using Facebook in the context of our writing program's Longitudinal Study of Student Writers. Specifically, we present five considerations related to the integration of Facebook for research—Building a Community, Sharing Study Data, Constructing Identity, Understanding Analytics, and Conducting Usability Testing—and we discuss how these methods can be extended to other SNSs.

Longitudinal research has been employed in composition studies to examine a variety of issues related to students' writing practices, such as investigating how students transfer knowledge gleaned in writing courses to other courses in their majors or professional communication contexts (Bergmann and Zepernick; Nowacek; Wardle; Yancey, Robertson, and Taczak) to investigating students' metacognitive awareness of their writing processes (Negretti) or even their writing memories from early composition courses (Jarratt, Mack, Sartor, and Watson). Three institutional studies that have had a broad impact on the ways in which compositionists understand students' composing processes are Nancy Sommers' study of undergraduate writing at Harvard (1997-2001), the Stanford Study of Writing led by Andrea Lunsford and Jenn Fishman (2001-2006), and the University of Denver's Longitudinal Study of Writing conducted by Doug Hesse and colleagues (2007-2011). Hoping to build on these studies while also exploring new concerns—particularly the metacognitive and affective dimensions of student writing over time and across contexts—a research team at the University of Arizona's Writing Program, consisting of the Writing Program Director, Associate Director, and two Research Assistants, launched a five-year longitudinal study of student writers.{1} [#note1] This mixed-methods study aims to follow a cohort of undergraduate students through their different writing experiences at the University of Arizona and one year after graduation. Although the lead researchers felt confident in designing different phases of the research project, one serious issue plagued our team: how to maintain a large enough research participant pool to gather data over the next five years. In other words, the team wrangled with the issue of attrition, or the loss of participants.

As noted medical and public health researchers and sociologists have argued, attrition complicates a research team's efforts, especially when it leads to "attrition bias" where the loss of participants from the target population can lead to statistically inaccurate data or to a less-than-representative pool of members (Miller and Hollist). In rhetoric and composition, attrition is typically a concern for longitudinal studies because of the latter more than the former. In our research, scholars are not often arguing for generalizability, but we do want to ensure that we are working with a range of student writers in terms of social statistics and demographics. Of particular importance in our study are questions about the relationship of students' identity formation and their affective and metacognitive relations to writing, and thus, early retention of participants is key to ensuring a diversity of experiences and perspectives on literate practice. To alleviate attrition concerns, Sullivan, Rumptz, Campbell, Eby, and Davidson argue for participant retention protocols that include developing trusting relationships and acquiring detailed contact information (266-267); applying participant-oriented retention strategies such as phone calls, personal visits, and mailings (267); and focusing on participants' social networks and communities (267-268). Early on, our team was concerned about attrition, and we were well aware that the noted longitudinal studies had the benefit of knowing their potential participants were at least likely to be retained at their home institutions, if not in the study. Consider that Harvard and Stanford share retention rates of 98% for first-year students,{2} [#note2] with the University of Denver at 87%. On the other hand, the University of Arizona's first-year student retention rate stands at 78%. In contemplating our own study's retention protocol, we understood that one of the complications of a longitudinal study of student writers at a large public university such as ours is loss of participants, including diversity of participants. As such, we would soon come to consider a social networking strategy as a potential means to address attrition. We turned to the Social Network Site (SNS) Facebook as one possible way to connect with the participant community—to concentrate on, as Sullivan et al. suggest, developing trusting relationships and focusing on students' social networks for the purpose of assisting with attrition concerns.

danah boyd and Nicole Ellison define SNSs as web-based services that allow users to generate a profile, create a list of users with whom they are connected, and "view and traverse their list of connections and those made by others within the system" (boyd and Ellison 211). What makes these sites unique, they argue, is that they allow users to delineate and "make visible their social networks," which can result in relationship initiation between strangers, although the goal is often primarily to communicate with existing connections (211). Attention to SNSs, and social media more generally, is not unheard of in the field of rhetoric and composition. Many scholars in our field have investigated social networking and social media in relationship to knowledge workers (Ferro and Zachry; Pigg; Spinuzzi), crisis communication (Potts; Potts, Seitzinger, Jones, and Harrison), writing pedagogies and classroom practices (Bowden; Kimme Hea; Kaufer, Gunawardena, Tan, and Cheek; Maranto and Barton; Verzosa and Kimme Hea; Vie), and peer knowledge-making practices (Longo; Stolley). And while the field has begun to explore the impact of digital technologies, generally, on our research practices (McKee and DeVoss; Nickoson and Sheridan), less attention has been given to the ways in which social media—specifically SNSs—may enhance and complicate our research methods (practices, tools, or techniques for doing research) and methodologies ("justifications for why we do research," or the theoretical frameworks guiding our research) (Sheridan 73). For our research team, we originally saw our selected SNS, Facebook, as a way to enhance our research methods by reducing participant attrition. On a practical level, we saw Facebook as a means to have a consistent connection with participants, since our students would be transitioning from college to writing in the workplace, graduate school, or other contexts after graduation and might not use as readily their university email addresses or might lose them altogether. However, we also felt that an SNS allowed us a unique opportunity to describe our research and our research team, create interest in the study, and encourage conversations around study-related issues, all of which we saw as potentially reducing attrition if our participants gained a sense of investment in the research or were at least persuaded by our own investment in the research.

Thus, while retention was our primary exigence, the process of building our social networking strategy led us to other significant use values of SNSs for longitudinal research. We argue that SNSs can serve a contextual function, allowing researchers to articulate the purpose and value of their research to study participants and others in a forum that can be updated and revised as the longitudinal research takes shape. SNSs can also help researchers understand their participants' writing practices without necessarily intruding on those practices. SNSs allow researchers the opportunity to enter into conversations about topics related to their research with study participants and other members of the site, and these conversations can offer researchers insights that they might not have otherwise gathered—which might inspire researchers to reshape the research by revising survey or interview questions, for example. Some of the analytics offered through SNSs can help researchers learn about the types of content that their participants find interesting or valuable; in turn, posting content the

audience finds valuable contributes to the ethos of the research team, helping study participants retain confidence in the researchers and their commitment to the study. In this way, the use of SNSs for research can also allow for the research to become pedagogical, if researchers aim to provide information about literacy practices that can help the members of the site with some of their own writing challenges. If the research is initiated by a team associated with a writing program, which is common with longitudinal studies, an SNS can also be used to showcase and widen the impact of the program and the research. Each of these use values contributes to creating an active community around a research project, which we believe has the ability to reduce participant attrition, build support for a research project, and potentially turn a research project into a form of public scholarship.

It can be a challenge to effectively take advantage of these use values for SNSs; thus, in this article, we share five important considerations for employing SNSs for longitudinal research purposes. These five categories can be seen as methods or tools for collecting data about and for student writers, connecting with participants, or offering context about a research study. Yet, we also argue that the methods we discuss imply values that are aligned with, and have roots in, feminist and ethnographic research methodologies employed in our field—particularly prioritizing ethical engagement with research participants (Schell and Rawson), embedding reflexivity into the research process by critically examining the research process, sharing study data with participants and valuing their feedback, valuing long-term engagement, and earning participants' trust (Fonow and Cook; Sheridan).

We start by briefly describing our own longitudinal study, contextualizing it in relationship to our participants and community audiences. Then, we discuss why we selected Facebook as our preferred SNS and inventory some of its affordances for research purposes. Following this contextualizing discussion, we explain the five key considerations we negotiated as we began to approach Facebook as a research tool: Building a Community, Sharing Study Data, Understanding Analytics, Conducting Usability Testing, and Constructing Identity. Threaded through these sections are discussions of the ways in which use values of SNSs came to the fore in our own process. Although each consideration is presented individually, we acknowledge that each is imbricated in broader aspects of research practice. While we use our own experience with Facebook as a case study, we take the opportunity in each of the five sections to suggest how these methods can be employed by other composition researchers across a range of social networking tools.

Local Context of the University of Arizona Writing Program's Study of Student Writers

The University of Arizona Writing Program serves more than 6,000 undergraduates each semester, offering twelve different writing courses, including first-year (developmental, honors, L2), advanced, business, and technical writing courses, with the share of its collective labor dedicated to supporting the university's first-year composition requirement. The goal of the University of Arizona Writing Program's Study of Student Writers is to follow a cohort of first-year composition students, investigating how their understanding of writing informs their undergraduate education and their experiences one year after graduation, with a specific focus on student metacognitive development and affective relations to writing over this period of time. Our specific research questions are as follows:

1. What metacognitive practices of awareness and monitoring do students deploy over time and across multiple domains (genres, rhetorical situations, contents, discourse communities, etc.)?
2. Assuming writers engage in metacognitive practice, how does it emerge in students' writing lives?
3. What sociocultural and affective dimensions become relevant for understanding students' metacognitive practices across multiple domains?

Early on, our research team had to consider the best ways to actively engage a large number of undergraduate student writers, ones we would continue to follow for five years, and build rich descriptions of their writing lives in relationship to these research questions. In an effort to guarantee a cohort by year five, in our first year we recruited from a pool of 300 participants selected through a stratified random sample, which we had adjusted for teacher diversity in terms of program affiliation and year in the writing program. This large sample of students was designed to gather a baseline of student writing experiences as well as authentic samples of writing for future comparison. Since this study began with a large cohort of undergraduates but would scope to case studies of specific students in subsequent years, we needed to explore ways for our study participants to feel connected to the study and the writing community on our campus, and this is where our initial interest in establishing a Facebook presence came to the fore.

The Affordances of Facebook for Research

Researchers have used Facebook to learn about users' activities (Golder, Wilkinson, and Huberman), their motivations for using Facebook (Lampe, Ellison, and Steinfield; Pempek, Yermolayeva, and Calvert), how users construct their identities on Facebook (Gosling, Gaddis, and Vazire), and their awareness (or lack thereof) regarding privacy concerns (Gross and Acquisti). Much of this research, however, has focused on how users operate in Facebook as opposed to using Facebook to establish a community around a particular research project or to combat attrition. Sally Baker, Research Associate in the Centre of Excellence for Equity in Higher Education at the University of Newcastle, does argue for the potentials of Facebook for ethnographic research, suggesting that Facebook is useful for communicating with participants, for providing participants with context about the research and a "shared, observable space" that frames data collection, and for providing researchers data about students' literacy practices (135).

Facebook offers researchers certain affordances, such as the ability to disseminate study results quickly, establish interest around the research and promote research-related events, remind participants about interviews or to submit materials, and start conversations around research-related topics, conversations that may offer insights that could shape future iterations of the research process. Facebook also allows a space where researchers can offer context about themselves or their research—either through a robust entry on the "about" page or through individual posts written by the researchers. While some of these affordances are similar to other SNSs, such as Twitter or LinkedIn, we selected Facebook because many of our students use it (something we gleaned from an early survey), our research team was comfortable with the technology, we could write longer posts than some tools allow (such as Twitter's 140-character limit), and we could provide a robust and detailed description of our writing program and receive writing program reviews through Facebook's Pages tool, which could lend to our program's ethos and that of the research team.

Using SNSs for research, though, also comes with its fair share of constraints. As Heidi McKee argues, using commercial websites such as Facebook means that we are allowing them to collect, package, and ship data about us (researchers) and our participants. She notes that corporations like "Facebook and Google collect every search, every post, every website visited by people online" (282). Yet, this concern about data mining fed into our choice to preserve participants' anonymity on the Facebook Page and our decision not to directly share study data, two dimensions we discuss more in the following sections. And in some ways, our decision to select Facebook was driven by our knowledge that many of our students already use it, making it less about us imposing a new tool on them but more about meeting them where they were, inviting them to "like" our Page if they were already members of Facebook. As with any research practice, the decision about which SNS to select should be local and contextual, and it should consider the complex issues surrounding the ownership of data.

For our own part, we chiefly conceptualized Facebook as a communicative tool, not one to collect primary data, and one that could bring attention to the study for colleagues in the field. Thus, Facebook became a means to create connections with our research participants, the local campus community, and the community of writing scholars in our field. We also saw it as a potential means to reduce attrition if we could incite enthusiasm about writing and the project on the site. We also wanted our Facebook presence to provide a context for research participants so they would understand the ways in which our program values writing. Yet, in order to reap the potential benefits of Facebook's affordances, we were faced with a variety of practical, functional, and ethical

decisions as we established our goals for our Facebook presence. In our next section, we describe our process as a case that can provide rhetoric and composition researchers with important considerations when considering Facebook as a research tool, and we offer suggestions for extending these practices to other SNSs. Our process of creating our Facebook page, in many ways, led us to understand the complexities of the five issues we discuss below.

Building a Community

The first issue we faced was how to develop a community around our research through Facebook. In relationship to knowledge workers, Ferro and Zachry contend that social media provide new avenues for "developing and strengthening connections" (9), and referencing longitudinal research, Baker maintains that Facebook is a useful communication tool for researchers to use in the "maintenance of research relationships" (134). As making and maintaining connections with research participants is one key component in helping to reduce participant attrition, we needed our Facebook presence to maintain associations with our research participants and a larger writing community that would be interested in our research study. Creating a robust community on the page would also allow us to showcase and widen the impact of the program. Thus, an early concern was whether to build a page, a group, or "friend" the research participants.

By directly adding participants as friends, we felt we might lose the community aspect we found important to our research because students would not be connected with other members of our campus writing community and beyond. Additionally, while researchers such as Baker have chosen to connect directly with participants by adding them as friends, we felt that this practice could potentially lend to attrition, rather than prevent it, in the early stage of our project. If students did not want to be "friends" with a researcher on Facebook, they might not choose to participate in the study at all, or they might not get the chance to learn more about our program and research. Thus, we wanted a lower-stakes approach. Facebook Pages allow individuals and organizations to establish a Facebook presence, and these pages are visible to everyone on the internet. When individuals "like" the Facebook Page, they receive posts as updates in their news feeds from their "liked" pages. On the other hand, Facebook Groups are designed to connect already-formed groups, and they are often members-only invited pages. The main distinction between a page and group is that a group singles out particular individuals associated with the community, and thus, a group would have clearly identified our individual research participants, making them known to us and one another. With a page, however, we could focus on building rapport with participants by asking them to like the University of Arizona Writing Program, and taking attention away from them as individuals in the study. Thus, we were able to provide an inclusive space without calling individuals into one-on-one relationships with any one member of our research team. At the same time, we selected a Page because we did not want it to seem that our program was trying to be exclusive. We wanted other writing programs or even individuals from other schools, who we might not think to invite, to be able to search for and "like" our page so we could gather wide interest and widen the impact of the program.

Once we settled on a Facebook Page, we needed to understand how to develop the audience for the page. Because the study was implemented by the Writing Program Director, Associate Director, and Research Assistants and was formed around the program's students, it made sense to build the Facebook community around our writing program, not the study exclusively. Because the program did not have a social media presence prior to the longitudinal study, we had to develop our entire Facebook presence. Even though our goal was to encourage our longitudinal study participants to join the page to keep them invested in the research, our first decision when considering audience was that we would not invite the participants first. We wanted an already-established community when they came to the site because it was important that they did not feel exposed, talked-about, or acted upon, even though they had given us IRB consent for their participation in the study. The IRB consent forms also did not mention our SNS use because we had not fully developed an SNS plan when the IRB paperwork was being prepared. Similar to our decision to make a page instead of a group, we felt the choice to already have an existing community on the site before inviting participants was an important ethical dimension to our approach because we wanted to publicly preserve the anonymity of our participants.{3} [#note3]

Consequently, we first invited local writing program instructors. We began with posts that would be relevant to this particular audience so that we would get "likes" and perhaps comments from these instructors. In this way, the page would demonstrate active engagement prior to our study participants visiting the site. At this time, the page included logos and photos from our program, a description of the program and its purposes, and a variety of posts, which were mainly tailored to the original audience of local instructors. For instance, Figure 1 [#fig1] is a screenshot from a post intended to spur conversation among instructors about the connections between high school and college writing.
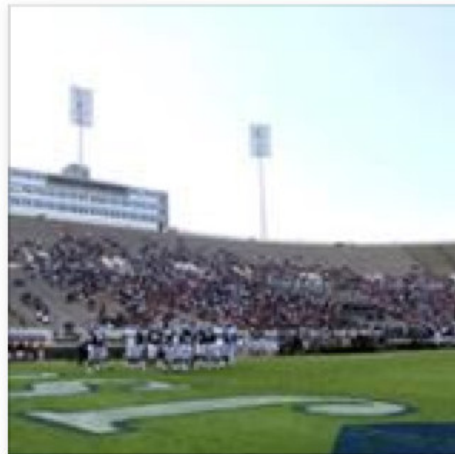
Figure 1. Screenshot of Facebook Post for Instructors.

(While the site has changed over the last two years, readers can follow this link [https://www.facebook.com/UAWritingProgram/] to view the current page.) {4} [#note4]

After foregrounding our local community, we began to invite other writing programs and colleagues at other universities to join our page and learn more about our program. We then invited some students (upper-level business and technical writing students) from whom we sought feedback about what they would like to see on the page. This scaffolded approach allowed us to target specific audiences and learn their preferences. Approximately two months after we established the page, we invited the longitudinal study participants to "like" our page via email. While we cannot know how these students received the site, it was important to us that the site was active and lively before they were invited. We felt this could help to build the social network that could be important to combatting attrition, and if done well, it could be another communication point for us and participants. This move also helped to protect the identity of our participants since if we had only invited research participants to the page or if we invited them first, it would be obvious who the study participants were. It was also important to invite a wide range of stakeholders to become part of our Facebook community. By creating an overall community around our program (as opposed to a community solely around our research study), we felt we would better be able to establish a sense of investment surrounding our page that would keep subscribers paying attention when we did begin to invite feedback or make posts related to the study. Thus, we also were not yet focusing on including many posts that were directly related to the study, as we felt this should come later in our process.

Based on the variety of decisions we came to face as we began thinking carefully about our own social networking strategy, we suggest that researchers weigh

the different opportunities for community building. Although we selected a page because we did not want to make participants known to each other early in the process, a group would give members more privacy if the researchers wanted to ask specific questions to participants or share data with them, but we recommend that researchers pursue the necessary IRB permissions to do so. Google+ even allows individuals and groups to share each post selectively with certain members of their networks, and those individuals will not be able to see who else the post was shared with. This tool can be useful for researchers who only want to communicate certain information to certain groups and for situations when researchers might consider reminding participants about a study-related interview, for example, but do not want to make the participants known to each other or others. Our decision to start with Facebook came from our sense that it was used by more students than Google+ at the time, but in year two of the study, we ourselves added Google+ as part of our data collection strategy.

We also recommend that researchers consider the ethical dimensions of their choices. As Version 2.0 of the Recommendations from the Association of Internet Researchers (AoIR) Ethics Working Committee regarding Ethical Decision Making and Internet Research (AoIR report) advocates, ethical decision-making is best approached by being attentive to the local context, and researchers must attend to ethical decisions at all stages of the research process (Markham and Buchanan). Regardless of the social networking tool they select, researchers should consider the ethical implications of making study participants known to each other and to others in the research community; these considerations should come early in the process when researchers first determine the social network they plan to employ, a decision that should be driven by their local context. By choosing a Facebook Page, creating an existing community, and using a scaffolded approach to inviting members, we were able to invite study participants to become a part of that community while protecting their anonymity. Thus, researchers may want to carefully consider the timing of invitations. Although individuals could have found our page and liked it before they were invited, we did not often find this to be the case. A scaffolded process can be a step towards protecting participants' identities while still inviting the participants and other community members to witness and participate in the exciting buzz the research has generated. Heeding the AoIR suggestion that ethical decision making should be attended to at all stages of the process, we later moved to Google+ when we decided to make a later phase (and hence smaller group) of participants known to each other, which we discuss further in our conclusion.

Because not all research will be initiated by a composition program, researchers may have different types of identities they need to construct. A group of researchers may choose to create a Research Collective Page that describes their work and connects with stakeholders, for example. Yet, they will still be faced with similar decisions regarding the type of page to create, how to build their audience, and how to protect the privacy of participants. We encourage researchers to see SNSs such as Facebook as places to connect participants with each other and the researcher, and we further invite researchers to consider stakeholders such as instructors, other writing programs, even students at other schools, as a part of this community as well, as each can contribute to the collective knowledge of the site, enabling researchers to engage the "wisdom of crowds" (Moxley). In this way, the SNS can become a place for making a research study a form of public scholarship that is constantly changing as researchers learn from the members of the SNS. At the same time, these choices raise concerns about what kinds of data should be shared, which became another key consideration for our team.

Sharing Study Data

Sharing data online can create interest around the research, and it allows researchers to disseminate findings with colleagues using a quicker approach than could be accomplished through a traditional publication venue. It can also allow researchers, as we had hoped, to gain feedback from participants and stakeholders that can shape future phases of the longitudinal research. Yet, as mentioned, we did not want to create a presence that led participants to feel talked about, which could mean losing them in the study. We came to see the page as figural to the relationship that we hoped to establish with the research participants, and thus, we felt that attrition could best be linked to ethical and trusting approaches to describing the research and results in this space. This connects to the contextual function of SNSs we have described in that we had to consider if and how we should describe our research and results in this space. We could also take advantage of widening the impact of our program, an important use value of SNSs, by sharing study results in a space where other writing programs might learn from the results; however, we elected for a slightly more indirect approach in order to maintain trust.

One way we elected to build trust while still creating interest in and garnering feedback about the study was our decision to post links related to our research topics, including popular articles and even memes, without directly sharing data, as yet, from our study. For instance, one of our key findings early in the study showed that when students are asked about the types of writing they engage in regularly, they do not consider social media and texting to be "writing." We found a Pew Internet Report (2008) stating that while 85% of all teens engage "at least occasionally" in electronic personal communication, including "text messaging, sending email or instant messages, or posting comments on social networking sites," a majority of them (60%) do not consider these communications to be "writing" ("Writing, Technology and Teens"). We prepared short posts relaying this information (along with a link to the article), and we asked direct questions to our Facebook audience about their opinions on the issue. In this way, we were able to engage our audience in questions that concerned our research without directly calling them out by using our own findings. We felt that this approach created interest in study-related issues, but it did not undercut the trust of the participants. Another example, as shown in Figure 2 [#fig2], is a post in which we asked page members to describe their writing process. Because metacognition was an important concern in the study, we hoped that brief comments from study participants or even other students in the writing program might illuminate issues we had not even thought of. If a student said her process consists of dictating thoughts on her phone while driving, then perhaps this would be an option to include in a survey or interview question in the future. In this way, research participants' comments on our Facebook posts would illuminate new ideas and questions for the research.

The University of Arizona Writing Program via
Writing Commons
November 20, 2013 · 🌐

How would you describe your writing process?

Writing Processes
The writing process is bounded by two contrary actions: believing and doubting. Especially during the early stages of the writing process, you can work more productively by setting aside doubt and playing the believing game, a game that is characterized by
WRITINGCOMMONS.ORG

63 people reached   Boost Post

Figure 2. Post inviting comments about writing process.

While we had also hoped that these study-related posts would incite comments from participants that might help us shape future iterations of student surveys and interview questions, we found that typically only instructors commented on our posts. We attended to this concern through usability testing (discussed in a later section), but we also discovered instructor comments helped us see different ways to interpret our data as well.

Other ways that we attempted to create a buzz around the research and to contextualize it included posting information about a research fest we were holding and about a grant the research team had been awarded. We felt that this type of content strategy would also incite enthusiasm about the study without alienating the participants.

Thus, SNSs have unique affordances in that they allow researchers to quickly share information and data and even get feedback about that data, but we suggest that researchers carefully consider sharing data that may call attention to participants in a public forum or make them feel exposed, as this could alienate study participants and lead to attrition. In terms of ethical internet research, the AoIR report suggests that the greater the vulnerability of the research participant, the greater the obligation of the researcher to protect the participant. Following this recommendation, we suggest that researchers consider the *types* of data they share, and when possible, they engage participants in such decisions to determine with them the levels of vulnerability. For example, researchers might elect to share quantitative data but not quote directly from students' writing in this space (even with a pseudonym), since sharing individual writing is more personal and potentially identifiable. These choices are guided by the purposes of the research and the relation the researcher establishes with the participants.

Relatedly, researchers might also consider privacy settings as integral to their sharing methods. The greater the risk to the participants (which depends on the type of data researchers are sharing or even collecting about the participants), the more obligation researchers likely have towards selecting the appropriate privacy settings for an SNS. Scholars might even make their choice of SNS based upon the SNS' privacy functionalities, if privacy is a key concern. For instance, while Twitter profiles allow individuals to protect their Tweets, once a follower request has been accepted, all Tweets can be viewed by that follower. Facebook Secret Group posts have fairly strict privacy settings, but any current members can invite other members—which may cause privacy issues. Google+ posts can be selectively shared with members in different circles, and the members of circles are not known to one another. Thus, Google+ seems to have the most private functionalities, but privacy is one affordance to weigh among other concerns.

McKee and James Porter rightly remind us that the ethical dimensions of internet research must be considered not as problems to be easily solved but rather as rhetorical and situated problematics to be negotiated. The types of data to collect and share and the SNS' privacy settings are important components to consider, and they are components in a complex, situated decision-making process. Some researchers may elect to study students' literacy practices on social networking sites, and this approach, more so than our own, requires considering the ethics of capturing these data, which will be part of a negotiated process between an IRB, the researchers, and their relationships with participants. For our own part, we considered these possibilities, and we ultimately chose Facebook as a community-building and conversational tool rather than a tool to directly gather data about students.

With longitudinal research, sharing findings with participants via an SNS could also potentially influence their responses during future interviews or surveys. Thus, researchers might consider using an SNS such as Facebook to encourage conversations around issues related to the research prior to (or instead of) sharing results from their own study. According to the study's purpose, researchers must weigh the positive affordances of quick data dissemination and feedback with ethical concerns and the potential to influence participant responses. In our own case, we found a middle ground by developing conversations around our study's aims without directly sharing our preliminary findings. Once we moved to Google+ and made participants known to each other, we began to share more specific findings with them.

Understanding Analytics

Even when researchers decide to share research results on an SNS, it may be difficult to inspire research participants to contribute to these conversations. Because we wanted to learn from Facebook conversations (through comments on individual posts) about topics related to our research, we turned to Facebook analytics to help us determine how to reach and consequently engage our audiences with our content. Reach, a term that has been theorized by product developer Bob Pearson, and picked up by Kimme Hea and Verzosa Hurley as applied to technical communication pedagogy, requires that the company or page trying to reach others must "become an effective peer . . . one who provides the right information at the right place and at the right time" (Pearson 39). While "reach" is the term employed by Facebook, the traditional rhetorical principle of kairos contributes to our notion of reach. Seizing the kairotic moment, "the right or opportune time to do something, or right measure in doing something," depends heavily on the context or rhetorical situation (Kinneavy 80). Facebook's "Page Insights" are analytic tools that can help researchers assess the rhetorical situation and seize the right moment and proper situation in which to send a post, along with the appropriate content to include in the post.

For us, we saw the analytics tools afforded by Facebook as offering us a way to better understand content that would inspire feedback in the form of comments from participants, since we'd hoped to use the SNS to inspire additional insights about issues related to our research. However, we also viewed understanding the content that would inspire feedback from participants as integral to reducing attrition because if we could encourage engaged conversations on the site, this could affect participants' opinions towards the research and the researchers, as well as their willingness to remain participants.

In order to get comments, however, we needed to know the types of posts that would engage users. On Facebook, three main Page Insights tools are "Page Likes," "Post Reach," and "Engagement," each of which we describe.

- **Page Likes**: The Page Likes section constitutes the total Page Likes (based on the number of unique people who like your Page.) New Page likes show how many new likes your Page received "during the last 7 days, compared with the previous 7-day period."
- **Post Reach**: *Total Reach* means the number of unique people who have seen any content associated with your Page during the last 7 days. *Post Reach* is the number of unique people who have seen the Page's posts.
- **Engagement**: Engagement means the number of "unique people who have clicked on, liked, commented on or shared" a page's posts during the last 7 days. ("About Page Insights")

Page *likes* are straightforward, in the sense that they can signal to researchers how many people have subscribed to the page. Regarding *reach*, a post counts as reaching someone when it is shown in the NewsFeed. Our own process taught us to rethink the usefulness of this term because even though a post shows in a user's NewsFeed, this does not mean the user carefully read the post or had an interest in it. Thus, trying to determine how well the content has been picked up using the "reach" metric is not necessarily reliable. *Engagement*, on the other hand, requires users to click on the post, like it, comment on it, or share it. This metric better served us, since we could determine what types of posts were being actively engaged with, as opposed to a passive NewsFeed skim. The ability to determine engagement was important to our study because we felt that retention on the page, and hopefully in the study, was linked to offering content users cared about.

We continue to use engagement numbers to help us determine the types of content we want to continue providing, as well as the appropriate format. For instance, we learned early on that posts that included images were more often engaged with than purely text-based posts, so we aim to make our posts as visual

as possible—using our own images, linking to memes, infographics, multimedia, or even a thumbnail from a website to which we are pointing to attract attention. The post depicted in Figure 1 [#fig1], for example, linked users to a podcast about the essay portion of the SAT, which allowed us to engage in offering a multimedia post. While this had to do more with format, content was important for us to consider, too. The highest engagement numbers seemed to come from posts about teaching (such as teaching tips). This also likely indicates that teachers were more actively engaged than students.

We also used the *people* tab to determine the demographics of our Facebook Page community (gender, age, location), and the Posts page to see when most of our posts were being viewed. For instance, late afternoons on Wednesdays tended to be the most popular viewing time. These metrics further helped us tailor our post topics and timing. Facebook also offers a negative feedback metric, which delineates any time a user hid a specific post, unliked the page, or reported it as spam. While we have not had much negative feedback, we track it in case our posts turn off an audience, so we can adjust future content. We have also found it important to complicate Facebook's analytics. For example, while Facebook measures engagement, a like or click still does not mean the user has thoroughly read the post, read the associated link, or viewed in detail the posted image. We needed additional information from real users, which we attended to through usability testing, discussed in the following section.

We argue here that researchers should attend to the analytics capabilities of SNSs, which are in many cases quite robust, as they can help researchers make decisions about the when, why, and how of their posts—to seize the kairotic moment. But we also suggest that researchers complicate the definitions of analytic tools, considering their different affordances. For example, we originally considered reach and engagement in our analysis of a post's effectiveness, but we learned that engagement was a better gauge (and that engagement still did not offer us all we needed to know). Researchers might even consider the analytics opportunities offered by different SNSs before they select the types of SNSs they may want to use to build a research community, as some SNSs offer unique metrics that could help researchers discover information about their research participants. For example, an interesting affordance of LinkedIn is that it allows users to view the top job titles and top industries of post readers. In another vein, users can check Twitter's analytics to determine the percent of their audience that is interested in a particular topic such as technology or science news (these topics are set by Twitter), and they can compare their audience's interests with all Twitter users. If these kinds of metrics are important to researchers' ability to create posts relevant to their study participants, then they can lead the selection of the appropriate SNS. Even for a site like Instagram, which does not currently have its own analytics, there are independent sites that users can use to track analytics. Analytics can be linked back to retention if researchers see themselves as trying to retain study participants by offering content that is useful to them. Using analytics also links to the contextual and pedagogical use values of SNSs. Researchers contribute to the ethos of their research team by posting valuable content, especially if that content can teach page participants something new about writing.

Conducting Usability Testing

When our Facebook campaign began, there was a definite lack of engagement on the site, and analytics could only take us so far in understanding why. So, we decided to seek feedback from the audience we knew we would have the most difficulty targeting—students. Two study researchers asked their business and technical writing students to participate in usability testing of the Facebook page. The three main areas of concern the instructors asked students to assess included the following: what would encourage the students to "like" the page in the first place, what types of posts would they like to see on the page, and what types of posts would encourage them to leave feedback in the form of comments.

Our concern with engagement was linked to our goal of reducing attrition because we felt that if we could create a buzz around the study or at least maintain an active site, our research participants would sense the importance of the study and potentially stay invested. At the same time, we came to see our Facebook page as a way to showcase and widen the impact of our program. The best way to do this was to understand the content that our students would find useful. This was important to the research because not only could we learn more about our students' writing needs (Do they want writing tutors? Tips for writing emails?), but we could also show, as researchers within the writing program, that we cared about helping them become better writers, contributing to the ethos of our program and research team. Thus, the use of an SNS can help a research team establish an ethos for themselves that helps study participants view them as committed to the subject of their work. Usability testing also linked to our concern with how we could get feedback from research participants that would shape future iterations of the study.

In terms of the usability testing results, the most common response we received concerning how to get "likes" was for instructors to promote the page. Many of our students stated that they would "like" the page if their own instructor told them about it—especially if the page offered information about writing workshops on campus. With regard to the types of posts students would like to see on the page, the two most common themes that emerged were writing workshops hosted on campus and tips about writing, with 46% of all responses indicating that students would want to see posts about writing tips and 23% of all responses noting an interest in writing workshops. In terms of workshops and tips, many students suggested they wanted tips about writing job application materials and improving their writing for the "real world," although this might have been influenced by the fact that these were upper-level professional writing students. Other common interests included information about our writing courses and local writing events such as poetry slams. Finally, when asked what types of posts students would actually comment on, we were not surprised that a good amount said they would not be likely to comment on or engage with any posts our writing program had to offer, beyond passively reading them in the NewsFeed (26%). However, some did suggest they would comment on posts that directly asked students questions about writing or they would respond to polls (12%, respectively). A few suggested that they would comment on grammar memes or funny posts, and a few suggested they would respond to status updates only if the posts were written by their instructors.

Perhaps the most important lesson we learned from usability testing was an important reminder that we needed to focus on delivering information and tips that our community cares about in order to engage them. In addition to using analytics, we suggest that researchers reach out to target members of their audience and investigate what types of social networking posts would elicit their engagement. Based on the feedback we received from our audience, we propose that researchers pursuing their own uses of social networks for research balance the needs of their research study with the needs of their social networking community, which might mean providing a service to that community, delivering tips and information the community cares about. Researchers can even consider conducting more traditional usability testing with participants by observing them as they interact with the site, something that could be built into longitudinal study interviews. Researchers might consider adding to their existing social networking strategy based on what they learn from usability testing. For instance, as mentioned earlier, we learned that our students prefer visual posts with images or memes to textual posts. A more visual SNS such as Instagram might help researchers promote events related to their research study. Instagram posts could add to engagement and interest surrounding the research and could be linked to a Facebook Page, for example, to make the researcher's social networking strategy more robust and increase potentials for engagement.

Constructing Identity

We have also been careful to think about the identity we are constructing for the University of Arizona Writing Program on our Facebook page. As much as we are studying student writers, we also are identifying what writing is to our program, and we are trying to give some of this context to our study participants. We had to consider carefully the presence we wanted to build because our page would serve what Baker defines as a contextual function—our audience would learn about our program and our research through this page. While this is a significant use value of SNSs that could reduce attrition and widen the impact of our writing program, concerns surfaced such as: What does it mean when we post a tip about grammar? Are we saying writing is all about error correction? While such concerns are not directly related to our longitudinal study, establishing our program's relationship to writing cannot be separated from the posts

that we provide there. Thus, we aim to balance the many purposes of writing that we find to be important by including posts that show our Facebook followers that we believe writing is a multidimensional practice that has knowledge-making, socio-economic, and social justice dimensions. While we may include posts about grammar, tips on how to avoid writer's block, reminders about commonly misspelled words, among others, we feel that it is the sum relationship among the various posts that come to identify reasons why writing is important, and that, taken together, these posts establish an ethos for our writing program and our research that will appeal to our student participants.

Additionally, in establishing our identity on this page, we have realized that our research identity is connected to multiple audiences and that it is difficult to appeal to multiple audiences on one page. Our writing program, like many other programs (and like many other corporations, for that matter), serves multiple stakeholders. Our page connects students, instructors, staff, and alumni—many from our own university and some from other universities. It has been a challenge to appeal to all of these audiences, and appeal we must, in order to maintain an audience. Corporate communications research shows that non-profit agencies as well as top global organizations struggle with appealing to multiple audiences, but some meet this challenge by aiming to provide an equal amount of topics that will appeal to each audience and by engaging in dialogic discussions with the audience (Shin, Pang, and Kim; Cockerill). Similarly, we aim to offer posts intended for each of our audiences and to balance posts related to our research with other posts that may be useful to our audiences. We also try to determine posts that can be useful for multiple audiences. For example, we might post a link to an article about writing résumés and suggest that the article could be useful for professional writing instructors as well as students. We also invite dialogic communication by asking direct questions to the audience as opposed to just providing information, and we ensure that we respond quickly and thoroughly when we receive comments. Through these approaches, our Facebook page serves a contextual function where we create a shared, active space that contextualizes not only our research but our program as a whole, which ultimately helps our research participants, campus instructors, and other audience members understand the purposes of our research and the value we place on the research and on writing.

We recommend that composition researchers interested in using SNSs for research purposes consider the identity they are constructing around their research and recognize that the ethos portrayed on their Facebook page or other sites could impact participant attrition and investment. Part of doing this well is learning how to post for multiple audiences, which involves engaging in dialogic communication and offering content relevant to all involved audiences. This practice also includes demonstrating the multifaceted aspects of literacy that are important to researchers and writing teachers, constructing an appropriate ethos.

Ethos is a term that we have used throughout this article, and it is a term that deserves further attention in relationship to SNS use for longitudinal studies. Judy Holiday argues that ethos supersedes the notion of the rhetor's character or reputation; it is co-constructed, shifting, and she says (borrowing from LeFevre), it "arises from the relationship between the individual and the community" (389). Social networks afford us the opportunity, as researchers, to see our ethos and the ethos of our composition programs or research teams as shifting and as a relationship between us and our larger writing or research community. As research changes shape, SNSs afford researchers the opportunity to redefine their goals on an About Page or ask new questions in a post. This also extends back to the notion of engagement discussed earlier. By attending to engagement metrics, researchers can co-construct their ethos with their social network community by providing information that is important and relevant to them but also in line with the identity of the researchers and their goals.

Moving Beyond Facebook

While we will ask participants in later iterations of the study to determine if their connection to the Facebook Page retained their interest in the study, we do know that we have managed to get a good number of "likes" on our page, through inbound links, email invitations to colleagues, instructors, students, and research participants, and much of our content is shared by page members. We also have had relatively few people stop following our page after initially liking it. A few key posts provided us with comments that have shaped or framed our research process, but much as our usability testing revealed, many posts received likes but not comments. We have realized that even if we receive little useful feedback from participants on this page, it is possible that they will pick up on the sense of importance of this study and perhaps even stay involved because they have experienced the active nature of our writing community on campus through our Facebook page and because they have learned some of the context regarding our relationship to writing. Following the argument of Sullivan et al. with regard to participant retention protocol, we were able to use Facebook as a way to develop relationships, make contact, and focus on students' social networks in an attempt to reduce attrition problems that are characteristic of longitudinal studies.

This process, however, revealed concerns researchers must consider. One such concern, as mentioned, is a lack of feedback received through user comments. While feedback was not our only goal, for researchers whose primary goal is to receive feedback that might shape their research, public relations and corporate communications research suggests that SNS users are more likely to garner feedback if they provide useful information, update their SNS regularly, and engage the audience in dialogic communication (Briones, Kuch, Liu, and Jin; Cockerill). The methods we have provided here, such as critically analyzing analytics tools and conducting usability testing, can help researchers provide useful information that will engage the audience. Regularly posting information and responding to feedback could be another concern for researchers, depending on time or lack of dedicated staff, which can be barriers to effective SNS engagement (Briones et al.; Cockerill). Thus, composition researchers might attempt to budget for a research assistant who can manage social network sites or set a plan for a researcher to make the time for maintenance because the research suggests that providing useful information and responding to posts are key to deepening existing relationships with an organization's audience (Briones et al.) While it is not an easy task, we argue that researchers must see the maintenance of their SNS site critically and as integral to the research itself.

It is not simple to develop an effective SNS presence for research purposes, and we certainly had challenges. Our goal here is less to offer the 'right' way to do something than to offer up the challenges and questions we faced so that other researchers can potentially foreground these considerations before establishing a social networking strategy for longitudinal research. Some of our disappointments, such as the lack of comments from students, further emphasized the notion that the implementation of an SNS for research purposes is part of the recursive process of research. This notion led us to a recent move, in which we integrated Google+ to add an additional layer to our social networking strategy. Even though Facebook laid the groundwork for helping participants feel connected to the larger project, we have selected Google+ to collect data that will not be publically visible except to other participants. As the research community in our study has come to fruition, participants were willing to be public with each other. In this phase of research that began in year three, participants can do more than merely look at or comment on posts; they are now providing video log literacy narratives, participating in text message blasts with polls, and Google surveys. We have begun to share more direct results from the research and have found that the more interactive tools, such as surveys, are useful for gathering data that helps contextualize our findings. These new data collection activities make visible to the collective of participants their literacy stories and their investments in writing and are beginning to provide us with rich data about their literacy practices.

Conclusions

An apt metaphor for our approach to our social networking strategy is Nardi and O'Day's concept of an *information ecology*. An information ecology constitutes a "system of people, practices, values, and technologies in a particular local environment…the spotlight is not on technology, but on human activities that are served by technology" (49). According to Nardi and O'Day, this metaphor focuses attention on *relationships* involving tools, people, and their practices (50). Technologies change, and the affordances of Facebook we discuss will likely have changed significantly by the time this article is read by others, but if we focus on the relationships that can be afforded by these tools and the people and practices we engage through these tools, Facebook, along

with other SNSs, can become a way of staying connected to research participants and establishing a sense of future investment. In the same vein, following Nardi and O'Day's reminder that the focus should be on the human activities and relationships served by the technology as opposed to the technology itself, we suggest that researchers focus on their values and commitments—for us, it started with building a community and understanding the participants' preferences in order to retain them in the study—prior to the selection of a particular tool. Foregrounding these values can ultimately guide researchers to select the right tools, privacy settings, and approaches for content dissemination.

Our focus has been on the affordances of SNSs for longitudinal research and the associated challenges to taking advantage of these affordances, but the methods we discuss can be employed by researchers who are engaged in shorter studies as well. Researchers can still invite and connect with participants via SNSs, ask for participants to offer feedback about the study, and use the SNS as a place to establish a context surrounding the study. In turn, these researchers will be faced with some of the same considerations we have discussed here. The five key concerns that we attended to in our own social networking development process must also be balanced with the situated, contextual, rhetorical, and ethical aims of research, but when done so, we argue that SNSs can be used to develop and shape research, share ideas, attempt to retain participants, and learn from the collective wisdom of local and national communities devoted to similar goals.

Notes

1. In Spring 2012, the Assistant Director joined our research team, and we also have enjoyed contributions of other Writing Program members and colleagues in the Department of Education. (Return to text. [#note1_ref])
2. http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities/freshmen-least-most-likely-return [http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities/freshmen-least-most-likely-return] (Return to text. [#note2_ref])
3. Because we wanted to preserve the anonymity of our participants, we have selected not to quote from or provide screenshots of *conversations* from the Facebook Page. Although the Page itself is public, directing attention to particular comments by participants in this article makes them known publicly as participants. (Return to text. [#note3_ref])
4. The UA Longitudinal Study of Writing is now in its fourth year with both Co-Principal Investigators, Dr. Amy C. Kimme Hea and Dr. Aimee C. Mapes, as leads. These investigators have worked with Dr. Anne-Marie Hall, since retired from University of Arizona's Writing Program, and many graduate students, including Research Assistants, Dr. Jenna Sheffield, Dr. Kenny Walker, Anushka Peres Swan, and Ana Milena Ribero. Graduate student fellows, Erec House, Brad Jacobson, Madelyn Palowski, Elizabeth Bentley, Devon Kehler, have contributed by helping to interview participants. Presently, both authors of this essay are not leads in the University of Arizona Writing Program, but Dr. Kimme Hea is now Associate Dean for Instruction at the University of Arizona and Dr. Sheffield is Assistant Professor at the University of New Haven. The Facebook page is not currently maintained by the authors of this article, since they have moved on to new positions. Both authors are grateful for all the support of the study team, past and present, and for the useful advice of blind reviewers who offered productive feedback on this essay. (Return to text. [#note4_ref])

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