

Reflections on Research: Examining Practitioner Perspectives on the State of Research in Technical Communication

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Abstract

Purpose: While research is an important to both academics and practitioners alike, it seems the field is currently at an impasse about what constitutes research and what questions should be a priority for the field. We wanted to give practitioners a forum to provide their perspectives on what research is and what questions the field should be researching.

Method: We conducted 30 asynchronous interviews with practitioners, and then analyzed the interviews for common themes and topics.

Results: Interviewees (practitioners) noted an interest in research that examined how individuals (particularly specific audiences) use different technologies as well as an interest in collaborating with academics to explore research on different topics and from different perspectives.

Conclusion: The information reported here and the related questions it raises can enhance understanding of and facilitate collaboration across the field. This study helps industry practitioners of technical communication to better understand how other industry practitioners in the field view and think of research; it also helps academic researchers in technical communication to better understand perspectives, assumptions, and expectations industry practitioners have about research.

Keywords: research, practitioners, workplace research, research questions

Practitioner's Takeaway:

- Provides an overview of current research questions that are of interest to practitioners.
- Provides academic researchers and industry practitioners with perspectives, assumptions, and expectations that practitioners have about research.
- Offers a range of possibilities for practitioners to engage academics in the research enterprise.

Introduction

Today, technical communication appears to be a divided field, at least in terms of research. Practitioners think academic research does not apply to them, and academics think practitioners are not recognizing the importance of their research. From our position, both sides are right, and both sides are wrong; thus, the need arises to find a common ground between the two groups. After all, technical communication is one field.

Some scholars (St.Amant & Meloncon, 2016; Rude, 2015) have argued research, when conducted well, can bridge this divide as both sides should have equal stakes in the results. Academics need to do research to meet professional obligations at their institutions, and practitioners need research results to answer many of the questions they face in their daily work lives. However, even with an equal investment from academics and practitioners, a major stumbling block remains: There is little understanding between the two groups about a number of research-related aspects. Such differences include what research in the field should focus on, how it should be undertaken, and how and where results should be shared. By understanding these differences, groups within the field can better apply the work of and engage with other segments of the field.

Academics and practitioners might question why it is necessary to find such common ground. After all, specific job demands in both industry and academia often do not permit the flexibility to focus on anything other than immediate day-to-day concerns of the individual. The academic field of technical communication has, however, historically maintained a connection to workplace practice (e.g., Keene, 1997) or recognized the need for such connections (e.g., Bridgeford & St.Amant, 2015) as many programs in the field claim they are preparing students to enter this workplace (e.g., Gordon, 2009; Scott, 2006). Building stronger relationships can therefore provide insights that facilitate effective education and training across the field. And research—recognized as essential across the field—can serve as a mechanism through which the two sides can come together, share ideas, and collaborate. In this way, by uniting around the area of research, academics and practitioners have the opportunity to help one another professionally. This entry is a first step toward facilitating such a broader understanding about research across the greater field.

In considering this situation, we (the authors) realize cross-field interactions around research require individuals to understand research from both the academic and the practitioner perspectives. This entry represents the initial helps to foster understanding by examining industry practitioner perspectives on research as it relates to technical communication. Specifically, we review and discuss the results of 30 asynchronous interviews with industry practitioners¹ in technical communication. In presenting these results, we report on interviewees' perceptions and views of what research topics merit focus and what approaches should be used to conduct research. We also share interviewees' ideas for how research might be shared across the field and the value of collaborating around research.

The information reported here and the related questions it raises can enhance understanding of and facilitate collaboration across the field, for it helps:

- Industry practitioners of technical communication to better understand how other industry practitioners in the field view and think of research.
- Academic researchers in technical communication to better understand perspectives, assumptions, and expectations industry practitioners have about research.

As such, these results can offer insights into what each side needs and wants in regards to research. Such understanding can facilitate information exchanges and collaborations that can be of benefit to all involved.

Background on the Research Divide

Research is central to the existence and the advancement of any field. It helps its members address problems, plan for future activities, and better recognize current contexts in which they interact. That is not to say all individuals need to agree on research findings or their implications (or applications) for the overall field to be successful. But for research to be effective within the greater context of a field, it must serve as a foundation for ideas members can discuss and debate. However,

¹ *Industry practitioners, or practitioners is the term we will use throughout to designate someone who is currently working outside of higher education in the broad field of technical communication and who identifies as this type of working professional.*

Reflections on Research

academics and practitioners do need to be aware of what research other individuals are doing in order to:

- Know what existing research to draw on when planning different technical communication projects (particularly for practitioners).
- Plan research activities designed to test, expand, or build upon existing research in the field (for academic researchers).

Such an understanding might also serve as a foundation that industry practitioners and academic researchers can use to seek out areas of collaboration in relation to research (e.g., industry practitioners identifying a problem that requires further research and academics engaging in related research on that topic).

Focusing on Research

As an academic field, technical communication has long focused on the methodological assumptions that drive the research process (e.g., Scott, Longo, & Wills, 2006; Herndl & Nahrwold, 2000; Andersen, 2014; Rickly, 2007; Meloncon, 2013; McKee & Porter, 2009). This concern is shared by academic researchers and industry practitioners alike, as evidenced by a recent podcast interview posted to the practitioner website “I’d Rather Be Writing” (2015) (see <http://idratherbewriting.com/2015/08/10/lisa-meloncon-academic-practitioner-divide-podcast/>).

Previous attempts to investigate academy-industry relations have revealed that research can play a central role in bringing the two sides together. For example, at the 2000 Milwaukee Symposium that brought together 17 academic and industry professionals to explore enhancing relations across the field, Blakeslee and Spilka (2004) explained, “one particular area where we need to define more and better [research] questions is relation to industry. We found universal agreement that the needs of industry should have at least some influence on the questions we articulate” (p. 78). Similarly, a survey of industry professionals (n=190) and academics (n=54) performed by Benavente et al. (2013) found

What is clear is that while the priorities for these two groups can differ quite dramatically, the two groups’ missions are intertwined. We have some

work to do to better understand the differences. But we are excited to note that we also have some clear shared priorities with which to begin engaging one another. (n.p.)

The topic of research has thus come under increasing scrutiny in the academic literature in recent years. Moreover, as a field, we have begun looking more closely at the research we have done and are doing (e.g., Carliner, Coppola, Grady, & Hayhoe 2011; Coppola & Elliot, 2005; Dayton & Bernhardt, 2004; Lam & Boettger, 2013; Lay, 2004; McNely, Spinuzzi, & Teston, 2015; Rude, 2015). Such reflections reveal the need for and the value of research. The point of contention, however, involves what should guide our research practices and agendas.

Addressing such items becomes a matter of commonality and coherence. That is, the key to moving forward on issues of research to unite the field involves identifying areas of common interest across it. By focusing on these issues, researchers in technical communication can create a foundation of mutual interest around which individuals can unite. The answer might thus involve agreeing on the questions that should be central to—and should guide research in—the field. Creating commonality via research questions is central to ideas noted by Carliner et al. (2011):

The researchers we surveyed went further than simply suggesting the need to replicate existing work. They all concurred that we need to agree upon specific, broad questions that we consider important for our field to explore, and we need to articulate these questions in a clearer and more focused manner . . . Many of the researchers surveyed sense that we are having difficulty as a field articulating research questions that are appropriate and useful. (p. 77)

Again, the central issue to address becomes what are these over-arching questions that can help unite the field around shared perspectives of research.

Methodology

This project was reviewed by the University of Cincinnati Institutional Review Board, #2016-0888 and was determined to be “not human subjects research.”

Collecting data on practitioner perspectives on research

Academics often have a general idea of the purposes of research. As noted, they have also consistently examined the process of research and have more recently examined the products of research. The practitioner voice, however, has historically been more limited in the existing academic research (Beneventa, 2013; Blakeslee & Spilka, 2004). For this reason, we wanted to examine the topic of research across the greater field by looking at the ideas, opinions, and perspectives of practitioners.

One of the challenges with this sort of project is getting a representative sample of practitioners. A researcher's first impulse might be to send a survey to gather data from the largest number of respondents possible. In essence, survey design is meant to deal with pre-determined categories established via prior research in a topic area. This project, in contrast, represents foundational or pre-survey-stage inquiry—a point at which the major research challenge is to determine what these categories should be. Within this context, the concept we wish to examine does not require a large number of respondents. Rather, it requires more in-depth responses to determine what future categories might be (for potential survey design). For this reason, we selected interviews as the method of data collection because the more open-ended questions central to interviews seemed to be a better approach for collecting in-depth data needed at this fundamental stage of the process.

We were, however, challenged by the existing synchronous/real-time format of the interview as a research method. Technical communicators in industry are often limited in the time they can dedicate to a single, focused activity—particularly one not directly related to their professional duties or responsibilities. We therefore realized it would be difficult to get the types and quality of responses (i.e., data) needed through a traditional interview method. Trying to do so with a relatively large pool of individuals (i.e., 15 or more industry professionals) would be even more complex and difficult.

Additionally, attempts to use the conventional synchronous interview method were met with resistance. In fact, one potential participant went as far as to say s/he might have time to address some of our interview questions, but it would be at least a month before s/he would have time in their schedule. Thus, we were faced with finding a method for collecting the kinds of rich data we needed based on the constraints of our targeted

group of participants. Our solution was to use an approach that combined the data collection richness of an interview with the asynchronous distribution of the questionnaire: the *asynchronous interview*.

For the purposes of this project, we define *asynchronous interview* as a one-on-one qualitative instrument that is delivered to participants through some available technology (such as email or third party tools for questionnaire distribution). Interviewees can then respond to questions at a time convenient for them. Such interviews differ from a questionnaire and other survey types in that, outside of demographic data, all of the questions posed to individuals/interviewees were open-ended. (See Appendix A for asynchronous interview questions.)

Like all good interviews, questions were designed to:

- Solicit focused responses on a common topic and in the respondents' own words.
- Avoid imposing limits on the length of or the nature of the responses.

Our asynchronous interview questions followed this pattern by asking respondents to provide answers to questions at any point in time during a 14-day period. After that period ended, the online mechanism for providing responses was closed, and no additional answers/responses were collected. The asynchronous nature of this approach meant respondents had the flexibility to take as much (or as little) time as they wanted to respond to questions (within a given time frame) and could do so during a time and in a place convenient for them.

Like any interview, the asynchronous interview can be seen as a burden for participants because of the time involved. One person who received our original request remarked, "It would take hours of my time to consider these questions and provide answers." However, in some ways, this participant's response indicated that the questions were indeed crafted that would achieve our original aims. All questions were collected into an online form within the same online data collection program (Survey Monkey), and interviewees used the spaces and options in this form to provide answers to different interview questions.

The interview problem solved, we turned our attention to determining our target population. The basis of our research study design hinged on the need

Reflections on Research

to get responses from a very specific group of people—practitioners of technical communication. Because of this need, we employed *purposive sampling*, which is “primarily used in qualitative studies and may be defined as selecting units based on specific purposes associated with answering a research study’s questions” (Teddlie & Yu, 2007, p. 77). In purposive sampling “particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices” (Maxwell, 1997, p. 87). This method allowed us to create a list of prospective interviewees we knew were working practitioners in the field.

Through conference presentations, presence within the field, publications, or references from other practitioners, we knew the practitioners initially selected to invite to participate in this project.² These interviewees represented individuals who had been practitioners in the field for between 0.3 and 37.5 years (the average interviewee had been working in the field between 10–20 years with a mean of 10.3 years of experience across interviewees) and represented individuals working in a range of positions in the field including “information security office program manager,” “consultant/trainer,” “president,” “senior technical writer,” and “technical writer.” (See Appendix B for more details on the job titles and years of employment reported by interviewees.)

We originally emailed requests for interviews to 54 individuals, and we received a 45% response rate from the original solicitations. Some of the individuals we contacted forwarded our request to other persons they knew were practicing technical communicators.³ In the end, we reviewed interview responses from

² All of these individual were persons the authors knew via each individual’s affiliation with Society for Technical Communication, which means these individuals self-identify within the broad field as a technical communicator as defined in part by the U.S. Bureau of Labor (see <http://www.bls.gov/ooh/media-and-communication/technical-writers.htm#tab-1>) and as advocated by professional organizations such as the Society for Technical Communication (see <http://www.tcbok.org/wiki/about-tc/career-paths/technical-writer/>).

³ In one case, our request was sent to a listserv in India, which generated a larger number of responses from technical communicators working in India. To keep the data for review more manageable and to maintain a focus on a common definition of technical communication as stated by the US Department of Labor and advocated by the STC, we confined the interview responses we analyzed either to respondents working in the US or who had long-term established careers working with US organizations and with the STC. We do, however, plan to further examine the responses provided by Indian technical communicators in a future publication on international views of the field.

30 individuals who were familiar with US-based perspectives on and trends in technical communication.⁴ While the data were collected confidentially, we report it anonymously, which ensured that interviewees could feel free to speak frankly and honestly.

As with most qualitative research, we approached the analysis of the interviews by trying to determine common connections among them. We grouped common questions and topics. While there is a movement within the field to use a variety of theoretical approaches to qualitative data analysis (e.g., grounded theory), we opted for a much simpler—and still as rigorous—approach, and that is, simply let the data speak for itself. In the next section, we have excerpted a large number of direct quotes from interviewees, and we have taken care to ensure that data reported represents the majority of interview voices. In other words, we have not cherry-picked the data (which is obvious because some of it is not complimentary to academic research), nor have we only included a handful of voices that may have been “quotable.”

Results from Practitioner Asynchronous Interviews

Using the results of these asynchronous interviews, we examined two of the initial, over-arching questions we asked:

- What should we, as members of the field, research?
- What methods should the field use to engage in research that most would find compelling, valid, and trustworthy?

A common interview analysis technique is to review interview data and determine common themes. This was the approach that guided our analysis at the start of this process. However, we soon realized the practitioner responses actually overlapped in some important ways with critical academic work related to research in the field (St.Amant & Meloncon, 2016). In other words, interview responses aligned with certain research-focused

⁴ We eventually decided to exclude non-US responses from this entry because the published literature we are discussing either appears in journals associated with US-based organizations or are edited by US editors, housed in US institutions, and are the main source of publishing outlets for US academics. We do, however, plan to further examine these non-US perspectives in a future publication on international views of the field.

questions raised in prior examinations of research in the field. These questions were:

- What do we investigate/research?
- Who do we represent when doing research?
- Why do we create and disseminate knowledge via research?
- When (at what point in time) do we focus our research? (St.Amant & Meloncon, 2016, p. 274)

As such, we used these questions to organize interview data in the following sections. Interview data also divided along two over-arching areas: one that was industry/workplace specific and one that was profession/field specific. Thus, such a distinction is also used to organize the results presented here. Additionally, it is important to note that some of the points made by practitioners are not entirely new. That is, academics have researched in and around some of the questions raised by practitioners. But what is new is the fact that this is one of the few times that practitioners have offered their perspectives, especially in this number.

Question 1: What do technical communicators investigate/research?

Industry/workplace specific: How are individuals using technologies to do things/perform tasks?

In their responses, interviewees emphasized that research should focus on studying human behavior—particularly behaviors associated with how individuals use a technology for finding, creating, and revising content. One interviewee summarized this sentiment, stating a central goal of research should be “developing quality content in support of user experience.” Another bluntly put it that research should focus on answering the question, “How do users use documentation?” It was a third interviewee, however, who addressed the complexities and nuances involved in research explaining it should focus on “How adults learn how to use technology. How to help them learn faster, retain what they learn, and self-serve when they forget.”

It also became clear that interviewees saw the goal of research as determining how the design of a technology affected the ways individuals use that technology to find, create, collect, or modify/revise content/information. Particularly, interviewees saw a distinct need for research on how users:

- *Locate or access information:* Such behaviors encompass questions including
 - What kinds of information/content are individuals looking for when they use a particular technology?
 - How are individuals using or interacting with a technology as they attempt to find the information/content they are seeking?
 - How effective are different media (e.g., text vs. video) at conveying content?
- *Create or develop content:* Such behaviors include questions such as
 - How are individuals using technology to create [original] content?
 - How does a technology’s design affect the content one creates with that technology?
 - Is it better to create content in certain media (e.g., video) vs. others (e.g., text)?
- *Collect/update/add to content:* These behaviors include questions such as
 - How are individuals using technologies to contribute to, edit, or update existing content?
 - How does the design of a technology/interface encourage certain users (e.g., technical experts) to contribute content to a project?
 - How does interface design affect the ways individuals create, edit, or feel encouraged to provide content?

Thus, in terms of researching human behavior, interviewees noted a need to research how individuals used a technology to achieve communication-based tasks and how technology design affects communication behavior.

Profession/field specific: Who are we as a field/ what does it mean to be a technical communicator? Several interviewees noted a need to re-think the title by which technical communicators present themselves, particularly outside of the field. In many instances, this idea was connected to conveying the value of what technical communicators do or could offer. As one interviewee explained, a major objective of research should be: “[H]ow to increase the credibility of our profession in industry (in many industries we are still seen as ‘clerks’ and ‘minute-takers’).”

Reflections on Research

In other cases, this notion of naming was more internally focused and connected to establishing what members of the field do and what expectations one could (if possible) associate with the skills and knowledge members of the field are expected to have or to develop. As one interviewee pointed out:

The phrase “technical communication” is outmoded. No, not my preference, but that’s how the next gen of people who do this are viewing it. They’re calling themselves documentation designers, content specialists, information architects, and a dozen other things that are still 95% or more of the same job that technical communicators—by name—are doing. We need to include them or we’ll be done in another 10–15 years.

Interestingly, these comments on naming were in response to interview questions asking what the field should research. This connection seems to indicate a need for research into what members of the field call themselves. A more indirect research topic connected to this theme might be “How do titles affect perceptions and expectations within the field and outside of it?” as evidenced by one interviewee who called for research to examine “How the divisions of content into techcomm, marcom, support, training, and so on, are becoming less defined—and even arbitrary.”

Question 2: Who(m) do technical communicators represent when doing research?

Many interviewees noted a need to conduct research on the audiences for technical content. One interviewee succinctly summed up this idea by responding to the question “What topics, questions, or problems should we be researching in the field?” with the two-word answer: “Audience analysis.” Another interviewee echoed this need in responding, “Find out what works. What techniques effectively communicate for different audiences (culture, age, gender, profession), different subject matters (scientific, engineering, general), and different purposes (to instruct, to report, to motivate).” Moreover, this individual seemed to feel such research has been needed for some time, yet, the call to do so had remained unanswered: “It seems this should have been done by now, but sadly, no.” Other interviewees addressed this idea indirectly in comments noting research should focus on “[T]he ability to consider

different points of view. [T]he ability to interpret different points of view. [T]he ability to understand the concerns involved in different points of view”—but the focus on audience and the need to understand audience needs and expectations remains.

Industry/workplace specific: What specific audiences do we need to understand in today’s workplace/industry context? In addition to more research on audiences in general, a number of interviewees noted the need for more research on specific audiences—in particular, to better understand the communication expectations of younger technology users. This factor was evidenced by responses calling for research on “Content consumption habits of the Generation Z (also iGen, Post-Millennials): on mobile devices, video vs. text, etc.” This sentiment was echoed by other interviewees who noted generational differences related to technology use meant technical communicators could not assume what worked with audiences in the past would still work (or be perceived as useful) today. As one respondent put it “What are millennial usage patterns and expectations for technical communication formats and writing styles. What existing standards are becoming ‘old styles and methods’ for younger audiences.”

Interviewees also saw the necessity for learning more about audiences with technical backgrounds. In part, this focus involves the background of end-users/technically savvy consumers and how their expectations and needs differ from more novice users. As one interviewee explained, there is a distinct need for research on “How to write for expert audiences instead of novice audiences; or, how experienced audiences use technical info different from novice audiences.”

At the same time, a number of interviewees expressed an interest in better understanding the information seeking and using patterns of the subject matter experts (SMEs) with whom technical communicators work to create products. Part of this had to do with the changing nature of technical communication and the need to understand SMEs in order to communicate with them as peers.

Additionally, the desire for research on subject matter experts (SMEs) as an audience seemed to be driven by the need to better obtain information from them. One interviewee, for example, noted how a lack of such knowledge “can bring a problem to interviewing SMEs” when trying to obtain essential information.

Other interviewees echoed this sentiment. One, for example, explained technical communicators needed research on “Leveraging SMEs as content providers.” This individual also saw it as important to better understand SMEs in order to develop more effective approaches for collecting information from them: “[W]e need a way to use our tools without having to teach SMEs to use them, while still getting their writing into and out of our systems.”

Profession/field specific: Who are we /technical communicators as an audience that must share information within and outside of the field?

Interviewees also identified the need for academic researchers to understand the requirements and expectations of industry practitioners as an audience. As one interviewee summed it up: “Research must be reported in terms that practitioners, not familiar with the esoterica of the academic field, can nonetheless glean useful principles and guidelines.”

None of the interviewees dismissed academic research outright. Many of them, however, felt the ways in which academics report research findings fail to account for the information-seeking needs of industry practitioners. As one interviewee explained, “Most of us ‘professional’ technical writers feel we don’t have the time to read. How many do you know who can talk about a book on technical writing they have read? How many of them have read any book in the past year?” Another interviewee noted that research in the field should be reconceptualized as “A form of discovery that provides not only an ‘academic’ perspective, but also a ‘practitioner’ perspective for the common person, who is not an academic, to gain value from the research presented.”

Interestingly, several of the interviewees expressed an appreciation for academic research in and of itself. As one interviewee explained, “I realize academics have a heavy research process.” That same person, however, called for a mechanism that would also allow for alternative approaches to and perspectives on research to have a voice in research discussions in the field: “I would just say . . . try to lighten that. Allow more opinion and experience-based pieces every now and then. Throw in an editorial or something.”

Question 3: Why do we create and disseminate knowledge via research?

It’s one thing to ask, “What should we research?” It’s another to ask “Why are we doing/researching it?”

The interview responses provided important insights on the “why?” question. The responses all centered on a common topic: understanding human behavior. Specifically, many interviewees saw research as helping understand how individuals use/communicate with and through technologies. As one interviewee put it, the reason we do research is to determine “Why we should do things certain ways.” Another interviewee paralleled this sentiment in noting the objectives of research are “to provide solid evidence for why we should create [them] a certain way.” Such an understanding could help technical communicators achieve what one interviewee noted as the field’s main objective of “getting content to the right people in the right format at the right time.”

Industry/workplace specific: What kinds of information are we trying to find and to share via our research? Of particular interest to interviewees was how individuals use technologies to:

- ***Author/create content:*** Such practices include not only how technical communicators use technologies to create content but also how the designing of a technology encourages (or does not encourage) users to create or contribute content. Some interviewees, for example, expressed a desire to better understand how to use different technologies more effectively to author/create content to meet user needs (e.g., “Chunking vs. longer pages (perhaps with expanding text) - what works better for users online and gets them information faster?”). Others saw a need for research that teased out nuances of content creation. One interviewee, for example, noted a desire for research that distinguished “editing as a separate process from writing” in relation to content creation.
- ***Search for, locate, and access information:*** Of particular interest was understanding how individuals look for information and what aspects of design affect search behaviors. As one interviewee explained, research should answer questions like, “Online indexes vs. search? Would customers use an index? Is there still a place for it? Effective use of keywords for searching, and what options make search in a content/help system most effective for users?” Interviewees also expressed a desire to understand how technological options could influence search behaviors (e.g., “Do they [users] object to using hyperlinks to find additional

Reflections on Research

documentation (in other words — do they prefer longer topics over links?)”).

- *Communicate/convey ideas to others:* Of particular interest to interviewees was understanding the media (e.g., text vs. visuals or video) individuals use to access content and what technical communicators should do meet these expectations. One interviewee summed this idea up with, “Is the written text a thing of the past: do we need more graphical content or use of infographics to get the same amount of information across to our audiences?” Another interviewee similarly noted research should address questions like, “Do they [users] prefer video over print?” And one interviewee summed this discussion up with the direct but all-telling “Videos vs. PDF vs. help?”
- Also of interest to interviewees was determining how technical communicators should use newer forms of media (e.g., social media) to convey information. As one interviewee put it, “How much is social media playing a part in how documents/information are viewed in that medium?” Another interviewee asked researchers do more comprehensive reviews of media use and look at “The vital role of visual elements, multimedia, the web, and social media in technical communication.” And one interviewee advocated for more research on the role emerging technologies (“Upcoming virtual and augmented reality”) could play in how persons accessed and used information.
- *Collaborate with others—particularly technical experts/SMEs:* There was a desire among interviewees to better understand SME expectations of technology design to get SMEs to provide needed content in a format technical communicators can use. (“It’s often necessary to output that information for further updates by SMEs, but current tools have difficulty keeping the full semantic richness when SMEs are not using the same schema and tools.”)

Field/profession specific: How can research help advocate for what technical communicators do as a field? Many interviewees also saw an important connection between research and providing members of the field with the information needed to support, define, or advocate certain practices within the field. For some interviewees, effective research with applicable results was essential to supporting current technical

communication practices in the eyes of other members of an organization (either internally or externally). Interviewees were surprisingly specific at times in providing examples of the need for such research. As one interviewee explained, “Where I work, they don’t know how to use bulleted lists. They either put everything in a bulleted list or everything in a paragraph. I try to tell them about white space and using bullets for lists and paragraphs for explanations (for example), but they want to see research.” This notion of using research results to support best technical communication practices was echoed by other interviewees, such as one individual who summed this idea up as research was needed to “[provide] numbers/facts that help substantiate trends” associated with what technical communicators practice.

For other interviewees, research was seen as important to test (and verify or disprove) certain claims about how individuals use technologies. The underlying objective seemed to be to show how technical communication practices actually contribute value to an organization. As one interviewee noted “The assertion that ‘good documentation reduces calls to tech support’ has never been proven. It would be great to have metrics on that.

Additionally, some interviewees viewed research as a mechanism for dispelling lore-based arguments that guide some communication practices. As one interviewee noted: “Many bloggers say that ‘PDF is dead’ and should no longer be produced, but there is no proof that customers don’t prefer it.” For still others, there was a perceived need for research to better understand some of the research results individuals already had: “I have other document design questions that I have tried to research but I often end up without a clear answer and never find research to support what answers I find.”

Question 4: When (at what point in time) do technical communicators focus our research?

The interview responses revealed a distinct desire for research to focus on the “here and now” and the context of the “real world” workplace vs. discussions of more theoretical—and timeless—topics.

Industry/workplace specific: What are the current contexts of the real world and how do these contexts affect uses of technologies? One over-arching concern was that much of the research reported in technical communication journals is seen as disconnected from both the workings of modern society and actual

workplace scenarios. As one interviewee put it, research should focus on “Studying actual users doing the work.” Another interviewee called for research that focused on “Real-life case studies in a variety of industries. A full understanding of the time pressures and complexities of documentation in the field.”

For several interviewees, this problem was connected to the fact that so much of the published research focuses on classroom contexts or involves students as subjects vs. studies that observe human behavior outside of formal, educational settings. One interviewee, for example, remarked that researchers needed to focus on “Access to real people, both technical writers and the users they write for. Don’t do studies using your classroom of students and then arrive at a conclusion.”

As a result of these factors, a number of interviewees perceived current, published scholarship in the field as limited in applicability to what technical communicators in industry require to work effectively in current contexts. One interviewee explained there was a distinct need for “Real-world situations - participants who reflect real users (not just students, for instance) and practicable, usable results. I’d like to see more research that gives me tips I can incorporate into what I am doing now or might do in the future.”

Additionally, some interviewees saw this failure to focus on the present as connected to a preference to examine the theoretical and the abstract. As one interviewee stated:

Research in the field of technical communications needs to expand and include industry needs and perspectives. A significant amount (not all) of what passes for research in technical communications today looks at arcane composition based theory & re-examines oft-examined questions. Such research does little to further or improve our existence as humans & consumers of data/information in a connected society.

For a number of interviewees, the solution was not to overhaul academic research agendas but to move the site in which research was done from the classroom to the context of modern society. One interviewee voiced this idea as follows:

I strongly believe in the value of an ongoing knowledge exchange between academia and

industry. This is best achieved by constant engagement on a number of levels and in a variety of approaches and projects: corporate relations, joint research projects with students and faculty, work shops, speaker exchanges, event collaboration, recruiting/hiring practices, think tank level collaboration.

Interestingly, no interviewee called for a complete end to using students to study usage behavior. In fact, one interviewee actually requested more research on such behavior in order to understand how this particular audience (an important technology market) used technology, noting a need for research on “Usability and UX studies of existing college students.”

What several interviewees did ask for was to expand the pool of subjects studied beyond just students to include more individuals from a wider range of backgrounds—and thus more representative of the various audiences technical communicators need to consider in modern society. As one interviewee explained, “Consider [doing more] ethnographic research to gain a full understanding of how teams are investigating or addressing ways to manage information across the enterprise.” Such an expanded view of the modern audience also included extending studies of the behaviors of college-age students beyond just the parameters of educational contexts—or as one interviewee put it, there was a need for “Usability and UX studies of 20–[30] year olds in the workforce,” which would be different from studying them in the classroom.

Profession specific: How effective are current educational programs in the field at preparing technical communication student for the current workplace context? A number of interviewees noted a parallel interest in connecting the training of technical communication researchers—specifically, students currently enrolled in technical communication programs—to current workplace contexts. In fact, in response to the question, “What topics, questions, or problems should we be researching in the field?” one interviewee replied, “How to best prepare students for entry into techcomm-related fields.” Another interviewee stated “What transferable skills Technical Communicators can bring to new positions?” The problem for some interviewees, however, was they felt academic programs were failing to prepare students for

Reflections on Research

the current workplace. As one interviewee explained “[M]any of the graduates do not have the necessary technical backgrounds to succeed once they obtain a position in industry.”

For one interviewee, the failure to realize the current industry need that technical communicators bring some form of technical expertise to the current workplace threatened the legitimacy of individuals currently working in the field. As that person explained:

Technical writers, today, do not have enough technical/science knowledge in order to be effective contributors on technical product development teams. They also do not have the necessary skills to successfully translate engineering requirements and medical technology standards/regs/laws into end user deliverables. The product development/engineering SME perspective of technical writers has changed from team member peer to that of a desktop publisher, i.e. taking poorly written content from SME’s and make it “look pretty.”

This situation, moreover, was seen as having negative effects on the field. As one interviewee noted, “Bringing industry perspectives to research in technical communications in the educational research setting is an urgent need of the times.” While this response was perhaps the most critical of educational programs in the field, it was by no means unique in expressing—directly or indirectly—concerns relating to how well these programs prepared students to enter today’s workforce.

This situation, however, was not perceived as insurmountable. Rather, for a number of interviewees, the solution to this problem involved undertaking efforts that could better connect today’s technical communication student to the expectations of the modern workplace. Some interviewees suggested fostering such connections via mentoring programs that paired current students with technical communicators currently working in industry:

I see great potential for pairing practitioners with academics to leverage both research and practical experience. I am also a passionate proponent of partnerships between practitioners and students, with the students taking the lead on research and the practitioners contributing subject matter expertise and practical experience.

Thus, as with perspectives on the timeliness/time-oriented focus of research in the field, the situation involves establishing effective partnerships that expose students to a broader perspective of the field and that can help them better understand and (ideally) address the needs of the modern workplace.

Aligning practitioners’ questions with academic research

The information from the interviews ranges from the broad to the very specific and indicates the breadth and depth that is needed in research in technical communication. Further compounding the research divide is the number of sites and locations that technical communicators work, which makes it difficult to easily align academic interests with those of practitioners.

When comparing the information from interviewees to published research in the field, there are a number of areas where academics do have research that can help further define questions raised by practitioners. For example, Blythe, Lauer, and Curran (2014) report on survey results of now-practicing technical communicators who are alumni of academic programs. While this could potentially shed light on whether programs are preparing students for the workplace, a concern raised by the interviewees, the study had several research design problems that limited its application of findings. However, this information, combined with programmatic research (Meloncon, 2009, 2012, 2014) and information on job ads data (Lanier, 2009; Brumberger & Lauer, 2015), as well as insights from select companies (Baehr, 2015; Dubinsky, 2015; Kimball, 2015) could provide important insights that could be used by academic programs in preparing students for current workplaces.

Throughout, the interviewees suggested that the best research would be done outside of classrooms and with actual users. Academics still tend to rely on textual analysis—the texts produced by people—to draw conclusions, but there have been a number of recent studies where researchers have incorporated actual users into the process. In another example, Pigg (2014) did an in-depth study around one freelance professional communicator’s social media use. While this could be useful by providing a rich case study, it does not go far enough in answering the applied and practical questions that many of the practitioners raised about the use of technology in creating and finding content.

Academics have also provided important insights into areas of content management that intersect with a number of questions presented above. Andersen's (2014) work provides important insights into how academic research can enhance the use and application of content management systems in workplace environments.

The fact that one of the organizing strategies involved looking at the profession was telling, particularly from a research perspective. The field has tried to define itself but has yet to come to any sort of agreed upon conclusion (e.g., Faber, 2002; Hart & Conklin, 2006; Hughes, 2002; Kneivel, 2006; Locker, 2003), and in recent years, these conversations have waned. Instead, academics have moved to reframing the issues of definition and legitimacy to those of professionalization (e.g., Brady & Schreiber, 2013; Carliner, 2012; Cleary, 2012; Coppola, 2012), which, again, may be another way to connect and bridge our academic identity to that of the workplace.

These limited examples point to two important takeaways. One, academics have been researching and do research topics that directly impact practitioners, but that research might often be framed in a way that is not easily accessible. Two, academic research does need to do better at building on existing work in ways that could answer some of the questions raised here but also to construct better, and more relevant, studies that could have potential generalizable application.

Where Do We Go from Here?

Without doubt, practitioners understand and appreciate the value of research, but they also see major divides between the current academic research being published and the needs for research in their jobs. In large part, the data from the interviews opened up more questions than they answered. At this point, academics might ask how they can fit anything more into their already over-stretched job descriptions. One response would be to encourage academic researchers to engage in more collaborative partnerships involving working with practitioners in ways that can be folded into the research, teaching, and service tasks academics already do. And there seems to be interest among the industry practitioners interviewed to engage in such relationships.

Many interviewees, for example, noted the value and importance of academic-practitioner collaborations in relation to research. As one interviewee put it, "I see

great potential for pairing practitioners with academics to leverage both research and practical experience."

However, attempts at doing this in the past have not produced tangible results (e.g., Andersen, 2013; Blakeslee, 2009) and/or not been sustainable (STC and CIDM grants programs). There are a multitude of reasons for this.

However, there are initial, reasonable, and sustainable steps that members of the field can take in the short-term to begin to bridge the research divide and find effective ways to collaborate—ways that address the different professional contexts in which individuals work. Based on the interview data, we see two immediate steps:

- Identifying and using venues for sharing research with members of other segments of the overall field.
- Seeking out opportunities to collaborate with individuals in other areas of the field when engaging in research.

In the next sections, we provide suggestions for how to realize such courses of action.

Sharing research results across the field

Some of the concerns practitioners have about academic research can easily be answered with a better understanding of the work academics are doing. Some of the interviewee comments, for example, indicate a lack of awareness of current academic research that can address certain workplace concerns. (Certain responses also indicated a lack of understanding about aspects of academic programs in the field.) However, the sharing of academic research is a two-way street; that is, if academics take extra steps to share information with practitioners, practitioners should similarly be expected to take the time needed to read and consider such information.

While we (the authors, who are academics) understand the necessity and pressures of academic publishing, there are relatively easy approaches academics can use to better share their work with practitioners. For example, journals that provided mechanisms for highlighting how the work is applicable to practitioners were appreciated by interviewees who noted that such features helped contextualize academic research findings. As one interviewee put it: "I love the practitioner takeaway section in the TC journal. That's

Reflections on Research

very useful.” A number of interviewees also saw the value the academic approach could bring to certain aspects of research (e.g., “academic rigor” seen as an important research skill), and many noted the value of academic-practitioner collaborations in relation to research: “I see great potential for pairing practitioners with academics to leverage both research and practical experience.”

Additionally, several interviewees recognized the value of academic research in concept but considered the academic approach to writing up/sharing research results as not matching practitioner realities or needs. As one interviewee explained, a major perceived limitation of academic research was it lacked “[r]eal-world situations - participants who reflect real users (not just students, for instance) and practicable, usable results.”

In this section, we’ll discuss these items and provide suggestions for how to engage in and report research in ways that address the needs of both the academic and the practitioner segments of the field. The key is to share research results in a way that, in the words of one interviewee, presents them as “A form of discovery that provides not only an ‘academic’ perspective, but also a ‘practitioner’ perspective for the common person, who is not an academic, to gain value from the research presented.” To achieve this objective, researchers in academia or industry could use the following strategy when writing up/reporting research results:

Note takeaways/applications of results at the start of the entry As one interviewee explained, “Research must be reported in terms that practitioners, not familiar with the esoterica of the academic field, can nonetheless glean useful principles and guidelines.” To address this need, researchers should consider drafting manuscripts to include a section noting how this research can be applied in to workplace contexts, if possible. For those journals that already require manuscripts to include such an entry, authors should use those sections wisely (i.e., be explicit about such applications) to maximize their potential. As one interviewee noted, “I’d like to see more research that gives me tips I can incorporate into what I am doing now or might do in the future.”

Additionally, abstracts and/or introductions provide the best opportunity to clearly and directly note what application practitioners can take from an entry or where in the entry a discussion of such applications occurs (e.g., “A discussion of the applications of these results can be found in the section . . .”). As a number of interviewees noted, their time to read is limited,

and the more researchers across the field can do to let practitioners know where in an entry they can find information on how to apply research to industry contexts, the better practitioners can make use of that research.

It should be noted that these approaches are not an aspect associated with academics or practitioners. Rather, they represent an approach both groups should employ when sharing research through a particular venue—academic journals—open to members of the overall field for sharing information.

Have practitioners review manuscripts and suggest how to add such applications While academics and practitioners both appreciate that technical communication is highly contextual, there are also many opportunities to use research that is conducted in one context in another. In certain situations, academic researchers might not be aware of how their results apply to industry contexts, and the alternative (knowing the applications of industry research in academia) can also be true. In such instances, suggestions from other areas in the field (e.g., industry practitioners or academic researchers) can help address such items.

To assist with this process, editors of publications in the field should consider having both industry practitioners and academic researchers participate in the peer review/manuscript review process. The idea is that members of both groups could provide suggestions for how a manuscript might be revised to meet the needs and expectations of a broader audience within the field. Editors might also consider creating a reviewer pool comprised of academic researchers and industry practitioner who could provide insights on how research results might be applied in—or how the reporting of results in an entry might be revise to better address—different contexts.

Creating parallel reports across different venues As one interviewee noted, practitioners rarely have the time to read all of the research journals in the field (or are even aware of what they are). Academic researchers should thus not view journals as the only venues for sharing research results with the field. Rather, they should query practitioners to determine what other sources individuals in industry use to locate research results (e.g., magazines, websites, blogs, etc.) and design parallel research reports for those venues.

This is not to say academics should forsake publishing research results in academic journals in favor of more practitioner-oriented venues (e.g., a widely read technical communication blog). Rather, academics should consider drafting parallel (i.e., tailored to the expectations of different genres) reports of their research for dissemination via industry venues (e.g., magazines, blogs, or websites) or other channels (e.g., Facebook posts or Twitter tweets). As one interviewee put it, there is a distinct need for “Communication of the research results and inferences in academic venues and to practitioners [in their venues].”

Practitioners who conduct research should similarly take steps to share their findings (when possible) through venues such as trade publications and blogs that could provide academics with insights into what concerns practitioners are facing. Practitioners might also consider working with journal editors and professional organizations to share research findings—or present research problems or questions—via other prospective outlets. For example, the “Recent and Relevant” section of the STC journal *Technical Communication* is currently used to share brief (e.g., 250 words or fewer) summaries of research published in academic journals in the field with STC members; perhaps practitioners could share their own research through such venues. Similarly, practitioners could use options like podcasts—such as those the IEEE Professional Communication Society uses to share ideas and information (including how to apply theory or recent research) with members/engineers—to share research-related items with the greater field.

These suggestions are by no means comprehensive. They do, however, provide initial approaches that members of the field can consider that are practical, doable, and sustainable. By using such strategies, members of the field can make the results of their research more accessible across the field without having to sacrifice the more standard conventions of research reporting associated with their profession.

Working with/engaging with the greater field on research

All interviewees noted the need for research to facilitate industry practices. In some cases, the need was to obtain information to craft new practices; in others, it was to confirm existing practices were still effective. The key to making research “real” to interviewees was a matter of the topic being researched. As interview

responses reveal, “academic” research topics do not resonate with practitioner audiences. Rather, as one practitioner noted, academic research tended to focus on “arcane composition based theory & re-examines oft-examined questions.” Thus, using research to connect to practitioners involves a matter of the topic of the research itself.

To be clear, we are not advocating that practitioners or industry needs to set any academic’s research agenda—or vice versa. As academic researchers ourselves, we appreciate academic freedom and would encourage the multitude of ways other academic researchers choose research questions they want to answer. Similarly, industry practitioners need to focus their research on that which connects to the needs of their own jobs and workplace contexts. However, we are advocating for more awareness of and attention to the ways individuals in the field can share research in ways that are of use to a larger number of individuals in the field. Or, as an interviewee put it, “Research in the field of technical communications needs to expand and include industry needs and perspectives.” The challenge becomes determining what topics are of interest across the field so one might plan research accordingly/in ways that can benefit multiple audiences.

Doing so involves learning more about the needs and perspectives of the “other” segments of the field. For academics, the first and most important step in this process would be to regularly query practitioners to see what topics are of interest to them. This strategy seems obvious, but several interviewees seemed to feel this factor—a failure of academic researchers to reach out to practitioners to learn about such items—was at the heart of disconnects involving research in the field. As one interviewee succinctly put it in responding to the question *What approaches should we use to research these topics, questions or problems?* —“Talk to industry.”

For academics, it is important to remember that many of the interviewees specifically underscored they would welcome research done within their organizations. Moreover, there are models for fostering collaborations where academic researchers enter workplace settings to examine problems with specific industry contexts.⁵ The

⁵ *The original iteration of the University of Minnesota’s Corporate Affiliates Program is one example of such a research-based partnering. In this program, academic researchers meet with representatives of local industry to identify topics of interest to both parties and propose on-site/industry-based research projects of interest to both. Academics whose research proposals are accepted by industry representatives are then allowed to conduct research within the context/setting*

Reflections on Research

challenge becomes finding the opportunities and venues for such exchanges—such talking—to take place. As one interviewee put it:

I strongly believe in the value of an ongoing knowledge exchange between academia and industry. This is best achieved by constant engagement on a number of levels and in a variety of approaches and projects: corporate relations, joint research projects with students and faculty, work shops, speaker exchanges, event collaboration, recruiting/hiring practices, think tank level collaboration.

And there is a range of approaches academics can use to learn more about practitioner research interests and to engage in the interactions needed to pursue research agendas that benefit both parties.

Read both academic journals and trade publications/industry magazines regularly The simplest and quickest way to determine what topics are of interest to the “other” segment of the field is to read the same sources they do to remain current in their jobs, find needed information, and anticipate trends that might affect them. As one interview noted, the key to knowing what research topics practitioners were interested in came down to “Reading some of the business magazines to spot trends (Inc., Fortune, Fast Company, etc.).”

Use internship programs to learn about research interests Many educational programs in which academics work have internship programs or an internship requirement as a part of their curriculum. Such programs provide a direct link to practitioners and a mechanism that could be used to determine the kinds of topics or problems local industry sees as needing research solutions as well as connections to academics who might be doing research in an area of interest to industry. To this end, both academics and practitioners might consider revising approaches to internships to create mechanisms for learning about the research activities of the “other” group (e.g., having student interns report on how they used different concepts from

technical communication research to guide different internship activities).

Tap industry advisory boards Some academic programs have industry advisory boards—groups of individuals from local industry—that are often asked to provide input on programmatic matters. Such boards can also provide academics insights into research questions of interest to local industry and provide industry with insights into the research being done by faculty at the related institution. To this end, a regular activity of such boards could be to identify research topics of interest to practitioners in local industry and a summary of the current research activities/projects of faculty in the related program.

Attend conferences/meetings for members from the “other” part(s) of the field Academics and practitioners should consider going to each other’s conferences to gain a better understanding of the concerns, needs, and research that the other side is doing. Such attendance, moreover, needs to involve more than just attending presentations. It should also involve engaging in a range of informal discussions about research (both the research one is doing and asking about the research needs of others) and even presenting to gain suggestions and input from other audiences in the field.

Coordinate joint events/co-locate events Often, academics attend their conferences, practitioners theirs, and the two groups rarely have the opportunity to share information and exchange ideas on a broader scale across larger groups. By having coordinating joint or co-located academic-industry events and inviting participants from both sides to attend both, individuals can create an atmosphere where academics and practitioners can gain a better—and larger—understanding of each other and better explore prospective research overlaps. (An example of such a co-located event can be seen in the pre-conference the STC’s Academic SIG has hosted the day before the annual conference of the Council for Programs in Technical and Scientific Communication.)

Host a research symposium In comparison to a conference, a symposium is a smaller, more informal meeting in which individuals briefly present research results or ideas and then engage in discussions with other attendees. As such, symposia tend to be easier and less expensive to coordinate than conference, and their smaller size and more informal, discussion-based nature makes them a good venue for sharing ideas

of that industry partner, and the results of that research are both shared with the industry partner and developed for publication in technical communication academic journals. (See, for example, St. Amant, 2003 and Flint, Van Slyke, Starke-Meyerring, & Thompson, 1999.)

about research. Hosting such a symposium and inviting academics from local institutions and practitioners from local industry could be an effective way to begin exploring prospective research overlap in more open and in-depth ways. (An example of such a symposium is the annual Symposium on Communicating Complex Information/SCCI—open to both academic researchers and industry practitioners and designed to share research across the field.)

The approaches provided here are by no means comprehensive. In fact, the authors invite readers from academia and industry to provide suggestions on other prospective methods for fostering research-based collaborations or on how to modify or expand any of the strategies described here. What these entries do provide are suggestions for how to find common ground in approaches and areas/topics of mutual interest—topics that can guide research in ways that are meaningful to a wider range of individuals in technical communication.

Conclusion

Research is a necessary aspect of any field, and the interview responses from practitioners both support this idea and provide a current perspective of this topic. The question now becomes, how do we use these results? At this point, we know that while research is valuable, the practitioners interviewed feel a major divide between what is published in technical communication journals (i.e., academic research) and what they need for their own work in industry. Even though part of this perspective might be based on a lack of awareness on the part of practitioners of what academics do, it does point to the vital need to make academic research more available to practitioners and, more importantly, to foster more interaction between the two groups.

In some ways, the results of the research reported here confirm what past research has told us (e.g., Hayhoe, 2003; Spilka & Mirel, 2002): The two sides of technical communication—practitioners and academics—still live in a house divided. However, while the house may be divided, it remains our responsibility to find ways to engage one another in meaningful ways. The fact that 30 practitioners gave so much of their time and insights to provide rich and detailed data points to the potential and possibility of where the field goes next speaks volumes about the importance of this topic. The key now is for academic researchers and

industry practitioners to communicate and collaborate in ways that can help all members of the field exchange, appreciate, and benefit from the research done across technical communication writ large. By employing some of the approaches noted here, such sharing and synergy can both begin and be sustained in ways that will benefit the greater field both now and for the foreseeable future.

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