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Communication Design Quarterly

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Communication Design Quarterly

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The Coping with COVID Project: Participatory Public Health Communication

Kathryn Yankura Swacha University of Maine kathryn.swacha@maine.edu

ABSTRACT

This paper reports on The Coping with COVID Project, a qualitative study and public-facing platform that invited participants to share their experiences, via stories and images, with navigating COVID-related public health guidelines. The study revealed daily activities during the pandemic summarized in three themes: lived 'compliance;' emplaced, storied negotiations; and affective, embodied efforts. In light of such findings, this article outlines recommendations for a participatory, actionable story and visual-driven approach to public health communication that recognizes the various contexts—e.g., physical, material, affective, structural—which impact how such communication is interpreted and acted upon by people in their daily lives. A heuristic is included for communicators, researchers, and community members to use in enacting this approach.

CCS Concepts

Applied Computing

Keywords

Public health communication, Storytelling, COVID-19, Visual research

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INTRODUCTION

In the early phases of the COVID-19 pandemic, Newham, a borough of northeast London, experienced some of the highest rates of COVID-19 deaths in England: 328 deaths per 100,000 people. Public health officials attributed this rate to the prevalence of overcrowded, multigenerational housing in the area (Segal, 2021). To curtail this crisis, city officials announced in February 2021 that the local government would pay for people with COVID-19 to stay at a luxury hotel until they recovered from the virus. At another hotel, people who had housemates with COVID-19 could stay. The program was modeled on other initiatives across the globe, such as the COVID-19 Hotel Program in New York City.

A problem with the Newham initiative, however, quickly became clear: by March 2021, only one room at each hotel had been occupied. Canvassing in the area indicated that many community members did not trust the initiative. Undocumented residents, for example, were worried about deportation. Other residents, from Pakistani, Romanian, and Russian immigrant communities, did not trust that the program would truly be free (Segal, 2021). In short, large gaps existed between the program and community members' lived experiences. This program is just one example of an ongoing problem that the COVID-19 pandemic has made starkly clear: disconnects between public health initiatives and everyday life persist and disproportionately affect multiply marginalized communities (e.g., Carlson & Gouge, 2021; Healey, 2021).

Rhetoric of Health and Medicine (RHM) and Technical and Professional Communication (TPC) scholars have argued that such disconnects persist due to a reliance in medical and public health practice on the rhetoric of compliance. Such rhetoric places responsibility on individuals to improve, monitor, and maintain their health based mainly on biomedical information delivered to them by experts. By assuming that "with the right information delivered in just the right way patients can be prompted to 'do better'" (Gouge, 2018, p. 544), the compliance model does not account for other agential factors, contexts, and forms of knowledge that can affect any one individual's adherence to health-based recommendations (e.g., Bellwoar, 2012; McGarry & Hinsliff-Smith, 2021; Melonçon,

2018), nor does it adequately acknowledge 'compliance' as a spectrum rather than a dichotomy.

Specifically in terms of public health, RHM and TPC scholars have pushed against compliance rhetoric by arguing for increased dialogue between public health experts, communicators, and local communities (e.g., Ding, 2020; Kuehl et al., 2020; Lauer, 2020; Saffran, 2014). Such dialogue can expose other factors beyond individual responsibility and scientific information that influence health-based actions and outcomes, which can then contribute to public health initiatives more attuned with everyday realities in particular communities (e.g., DeVasto et al., 2019; Grabill & Simmons, 1998; Lauer, 2020; Stephens & Richards, 2020).

One way to encourage such dialogue and associated improvements is by embracing the participatory power of storytelling. Storytelling has increasingly been recognized in TPC as a valuable way to 1) understand people's lived experiences and design communication more attuned to those experiences (e.g., Jones, 2016), 2) expose injustices and inequities (e.g., Baniya & Chen, 2021; McGarry & Hinsliff-Smith, 2021; Moore et al., 2021), 3) amplify marginalized voices (e.g., Mangum, 2021), and 4) build knowledge together with users (e.g., Legg & Sullivan, 2018). As a research method, storytelling can particularly highlight participants' situated knowledges, which are often not rendered visible through more traditional methods of academic research or public health communication (e.g., Jones, 2016; Swacha, 2021). As the Newham hotel example above makes clear, even well-meaning data-supported public health initiatives can fail when community members' lived experiences are not considered.

Storytelling alone, however, is not enough. Stories may be solicited to create the appearance of inclusivity and dialogue, while those stories are actually not leveraged to alter health policy or practice in any meaningful way (Teston et al., 2014). Stories can also be used to promote stereotypes, misinformation, and anti-science related to health (Minser & Gibb, 2020). Further, researchers' requests for stories can obscure other ways in which participants may prefer to communicate (Swacha, 2021). Thus, storytelling as a method should not be employed without critical attention to both 1) why stories make sense for a given project and 2) how those stories will be leveraged generatively and ethically (Swacha, 2021). That is to say, we do not simply need *more* stories, but rather ethical, practical approaches to mobilizing stories *more meaningfully* towards improvements in public health communication, policy, and practice.

Responding to this need for a more actionable and ethical story-driven approach to public health communication, this article reports on The Coping with COVID Project (referred to simply as The Project hereafter). As both an IRB-approved study¹ and a public-facing platform, the Project invited participants from across the U.S. to share their experiences navigating COVID-related public health guidelines through stories and images from their daily lives.²

The majority of participants are in the college-aged demographic, which is thus the population focused on here. Findings from the Project suggest that 1) complying to public health guidelines is part of a lived continuum, 2) incorporating such guidelines into daily life involves emplaced, storied negotiations, and 3) such negotiations are deeply affected by embodied forms of knowledge. As the Project had the explicit goal to contribute to better public health communication for its participant demographic, these findings then informed the participant-led design of new COVID-related messaging. The Project thus serves as an example of how to facilitate a story and visual-based approach that is both participatory and actionable.

This article first details the study's methods and outlines its results. Based on these results, the discussion section presents an expanded heuristic for leveraging storytelling towards improved public health communication in practice. Researchers, communicators, and community members can use this heuristic to develop more effective, localized messaging during crises like COVID-19.

METHODS

The Coping with COVID Project began in August 2020 at a time when COVID-19 rates and deaths in the U.S. were steadily climbing and uncertainty regarding the coming fall and winter was high. Data collection for the study continued until May 2021, at which point public health guidelines changed substantially when the CDC lifted its recommendation for vaccinated individuals to wear masks in public (CDC, 2021).

The Project worked towards several interconnected objectives: 1) to better understand how people negotiate public health guidelines within their everyday contexts during crises like the COVID-19 pandemic; 2) to provide a public forum for participants to share their experiences through the Project's website; and 3) to leverage those stories to develop localized public health communication. Research questions included:

R1: How do people negotiate COVID-19 public health guidelines with other factors of their everyday experience?

R2: What stories do people tell about how they make sense of COVID-19 public health guidelines every day?

R3: What do these stories reveal about how people navigate public health recommendations within the larger contexts of their lived experiences?

Study Design

This study employed a living visual-voice method (Swacha, 2021) that asked research participants to document their daily experiences navigating COVID-related public health guidelines by creating any kind of visual(s) and writing a story to accompany them. Participants were minimally prompted with a series of questions designed to spur their thinking in relation to the study's research questions; however, the specific length and content of their stories and the type of visuals (e.g., photos, artwork, screenshots) they submitted was left up to them. Participants submitted these materials via a Google Form on the Project's public website. Participants were given the options to have their materials publicly included on that website and used in any associated public health materials either anonymously or with credit, or to have their materials analyzed for research purposes only.

¹ University of Maine IRB#: 2020-08-11

² COVID-19 related public health guidelines in the U.S. shifted throughout the pandemic, depending on case rates, politics, and emerging research. In general, during the period of this study, such guidelines included mask wearing in public places and/or when interacting with members outside of one's immediate household; quarantining at home when experiencing possible symptoms of COVID-19 such as fever or cough; social distancing by maintaining at least 6 feet of distance from people not in one's household; and frequently washing hands and sanitizing surfaces.

Living visual-voice (Swacha, 2021) builds upon other participatory visual-based methods used in TPC like photovoice (Wang & Burris, 1997), participatory video (Cardinal, 2019), and 3D interviewing (Shivers-McNair, 2017) by asking participants to share visuals from their everyday lives alongside stories of why those visuals matter to them. The method thus leverages the power of both storytelling and visuals to illuminate contexts difficult to capture through either words or images alone.

Storytelling has been found to reveal "networked ways of knowing," which is how people build various forms of knowledge in relation to their embodied, material, social, and cultural contexts (Legg & Sullivan, 2018). People tell stories about health-related phenomena and experiences that can impact their relationship to health providers, health recommendations, and their larger communities (Minser & Gibb, 2020).

As mentioned above, care must be taken that storytelling as a method leads to critical dialogue, generative action, and/or tangible improvements rather than exploitation or misinformation. Doing so requires embracing storytelling as a meaning-making and participatory process that can lead to positive change. As Legg and Sullivan (2018) have argued, storytelling can be participatory, in that both the 'teller' and the 'listener' bring their relevant frames to the story and, in turn, can create new meaning relevant to each. Storytelling thus becomes particularly generative when it places experts' and community members' knowledges into dialogue with an eye towards action. Such dialogue can reveal how public health recommendations are being interpreted by community members on a daily basis-e.g., where such recommendations are being followed, disregarded, reimagined, hacked, etc., and why. Communicators can then work with communities to design public health communication more attuned to local contexts and forms of meaning-making (e.g., Lauer, 2020; St.Amant, 2021).

By asking participants to include images from their lives alongside their stories, living visual-voice embraces both the aforementioned affordances of storytelling and the power of visuals. As other qualitative visual-based methods have shown, participant-generated images can 1) highlight overlooked material barriers that might prevent people from following certain public health guidelines (e.g., Bukowski & Buetow, 2011; Novek & Menec, 2014; Wang, 1999), 2) help researchers come to a greater understanding of community needs and/or assets (e.g., Catalani & Minkler, 2010; Del Hierro et al., 2019; Jurkowski & Paul-Ward, 2007; Oliffe & Bottorff, 2007), 3) lead participants to experience a greater sense of empowerment over their own and their community's health (e.g., Carlson et al., 2006; Del Hierro et al., 2019; Foster-Fishman et al., 2005), and 4) work towards generative social change (e.g., Haque & Eng, 2011; Kramer et al., 2010; Streng et al., 2004). Living visual-voice pushes the boundaries of other image-based methods by encouraging participants to define what both 'visuals' and 'voice' mean to them-for example by deciding what kind of visuals to share with researchers and how their visuals will be used (Swacha, 2021).

Living visual-voice was chosen for this study specifically due to 1) its affordances for highlighting possible gaps between official public health recommendations regarding COVID-19 and people's everyday experiences in attempting to follow those guidelines and 2) its emphasis on working with participants to mobilize their stories and images towards improved communication. The Coping with COVID Project enacted such a participatory and actionable

approach by involving participants throughout the project in the creation of COVID-related messaging for their communities, a process which will be described further in the discussion section.

Recruitment and Participants

Recruitment happened widely across the U.S. in order to gain comparative perspective on how people were experiencing the pandemic in different regions. Public health and social service organizations were contacted asking for their help in distributing the recruitment materials. The Project was also spotlighted in several community-based and campus-related media outlets in the author's geographical area in the northeastern United States. Participants included 62 people, an ample sample size for such visual-based research (Catalani & Minkler, 2010; Wang, 1999). A majority of participants (n=48) identified as college students belonging to the 18-29 age group; the examples analyzed in this report thus come from this demographic for consistency of analysis.

Although this participant pool may not represent the same type of social marginalization experienced by the Newham residents in the opening example, college students have experienced specific challenges throughout the COVID-19 pandemic, such as heightened rates of anxiety, depression, and even suicide, which demand critical and research-based attention (Hartocollis, 2021).

Limitations of the Study Design

The decision to recruit participants via a project-related website was an effort to foster a broad (and hopefully inclusive) recruitment process and to house both the study instrument (i.e., the Google Form) and participants' stories on the same public site. However, the fact that the majority of participants ended up in the college-age demographic (despite wide recruitment across U.S. demographics) could have resulted from a bias in this design, which required access to privileged tools such as computers, internet, and cameras. Further iterations of this study focusing on other populations will attempt to address this bias, for example by providing options for participants to create and submit paper-based materials.

When employed with attention to such potential limitations, this study's approach can usefully highlight contextual specificities of any given participant group. For example, when using this method with vulnerable communities, who may not have access to certain digital tools, researchers should take care to work with them when setting up the study design to ensure that it reflects participants' communication preferences and capacities (Swacha, 2021).

Analysis

Both visual and text-based data was analyzed using an iterative coding process (e.g., Scott & Melonçon, 2018), informed by grounded theory (Strauss & Corbin, 1990). This process allows themes and corresponding theoretical insights to emerge from the data as the study progresses rather than pre-determining categories. As participants submitted their stories and visuals via the project website, a research team of the author and several undergraduate student assistants posted the materials designated 'public' to the Project's website including multiple public-facing tags for each post (confidential materials were similarly tagged as they were submitted but were not posted to the website). Initial tags included a wide-range of descriptors such as masks, family, pharmaceuticals, college, kids, CDC, and stress, among others. The author then used Taguette, an open-source software designed for qualitative analysis, to organize all submitted materials by first using those initial tags as preliminary codes and then consolidating themes through several more rounds of coding. Each story and its corresponding images was reviewed several times and labelled according to these evolving categories.

This iterative coding process ultimately resulted in categories organized around broader activities of daily life during the pandemic (e.g., negotiating, trying) that then included subcategories related to specific people, places, or things (e.g., masks, pets, campus, gardens, video games) and affective experiences (e.g., anxiety, stress, and joy) involved in those activities. This categorization of ongoing activities revealed the interconnected, dynamic quality of embodied, material, discursive, social and other factors affecting people's daily actions.

RESULTS

Three major themes related to daily life and COVID-19 public health guidelines emerged in participants' stories: 1) lived 'compliance', 2) emplaced, storied negotiations, and 3) affective, embodied efforts. Lived 'compliance' indicates how participants navigated public health recommendations within the context of their everyday lives in ways that do not adhere to a strict dichotomy between 'compliance' or 'non-compliance.' *3 Emplaced, storied negotiations* refers to how participants carried out public health guidelines according to the larger narratives of their cultural contexts and to their sense of place. Finally, affective, embodied efforts suggests ways in which participants actively weighed their embodied experiences with public health recommendations and narrated those efforts to others. Overlaps across these themes will also be discussed.

Each section below begins with an unedited participant story. This approach highlights participants' narration rather than the researcher's editing, and thus underscores these stories as emerging from participants' larger narratives, contexts, and lives (Crawford et al., 2015; McGarry & Hinsliff-Smith, 2021). Implications of these results in practice will be discussed in the concluding section.

Lived 'Compliance'

"Untitled" by Anonymous

One image is of me on the top of Katahdin and I completed that hike in August, I was able to hike it cause of free time caused by COVID-19, another picture is of the letter E I did some DIY projects in my apartment that I picked up from Pinterest and Tik Tok during my time in quarantine and I figured it would be a fun time. The last picture is of my swearing into the Army, it was a very big moment for me that was changed slightly due to COVID-19, I was required to wear a mask during it as was everyone involved and my friends and coach who came out to support me. The whole wearing mask for me doesn't really do anything, if anything it almost ruins simple pleasures. Like I have a nice photo me in front of the American flag in uniform during my ceremony but I had to wear a mask and look stupid. Hiking Katahdin my friend and I chose a horrible windy rainy day to hike so no one else was on the mountain so we

didn't wear mask at all during our hike. We passed maybe two or three other couples and being out in the wilderness none of them had mask on either. Keeping six feet from people doesn't work either as the majority of people I hang out with in public when people would see me not wearing a mask or maintain six feet of social distance I also hang out with in my apartment, and I'm not going to wear a mask in my apartment or keep six feet from my friends there so why do I have to do it in public it makes no sense and COVID-19 guidelines just don't work they are scare tactics.

This participant, a self-reported 18-20 year old female who resides in Maine, clearly indicates some resistance to public health guidelines. As this story was submitted when a blanket mask mandate was in effect in Maine, her indication that she did not wear a mask when hiking could be read simply as non-compliance. Despite such clear resistance, however, this participant's story also shows her navigating public health recommendations within smaller decisions and moments of her daily life rather than completely rejecting them. Her indication that when hiking Mt. Katahdin she deliberately choose a "horrible windy rainy day to hike so no one else was on the mountain," for example, suggests some effort to follow social distancing recommendations.

Thus, rather than a strict dichotomy between compliance or non-compliance, this story reflects a 'fuzzy' area between those two extremes, an area that requires constant negotiation with other factors of everyday experience. For example, this participant's reference to COVID-19 guidelines as "scare tactics" could suggest a political leaning, while her suggestion that "it makes no sense" to wear a mask in public when she doesn't in her apartment could indicate a lack of understanding of the scientific rationales behind such guidelines, AND/OR an affective or social pressure that competes with any scientific understanding. In other words, how she approaches a public health recommendation like 'wear a mask' involves factors and negotiations beyond scientific information, as a deficit model of health communication would presume.

Such stories, then, suggest a form of 'lived compliance' through which participants indicated trying to figure out how to enact particular recommendations, and to find the limits of them, within their daily contexts. Another participant, Nate, who is a selfreported male Resident Assistant (RA) at a large public university in the Northeast, wrote in his story, "The College Try:" "It feels odd as an RA to be enforcing rules that hinder students in building interpersonal relationships. With that said, if being the buzzkill that asks students to pull their masks over their noses and sit farther apart is what it takes to keep [University] off the New York Times' list of college-town outbreaks, then so be it." While Nate does not show clear resistance to public health guidelines as does the author of "Untitled" above, he similarly suggests negotiating a lived space between strict compliance and non-compliance. While he partly seems to regret having to assume the position of social "buzzkill," he also navigates that feeling with his understanding of public health recommendations like mask wearing and social distancing, his job duties as an RA, and his larger social desire to maintain his university's national reputation as a campus with low case rates. His story continues:

Telling family and acquaintances around my home in [Name] county about my decision to return to

³ The term 'compliance' is often used as a measure of adherence to public health recommendations and is often viewed as a dichotomy between 'compliance' and 'non-compliance' (e.g., Arriola & Grossman, 2021; Byrd & Bialek, 2021; Sobol, Blachnio, & Przepiorka, 2020).

campus for my senior year as a resident assistant, I remember being met with concern and barelyconcealed disapproval...I read posts on social media from residents of [communities surrounding the university] expressing concern and alarm regarding the return of...students to the University. I wondered, I still wonder, if my decision to come back was selfish...[My university] is not a hellscape of booze and maskless debauchery, contrary to the way that some universities are (justifiably) being portrayed in the national media. Neither are our students the most well-behaved, conscientious folks on the eastern seaboard. They are not the bright, diverse, eye-smiling, maskwearing citizens skipping down the mall as if nothing is wrong that you might see in a university advertisement. They sit too close together, their masks fall under their noses, they go over to their friends' apartments, and some of them, god help me, still don't wash their hands. But as I sit here in the neutered reading room of [Name] library writing this, I don't see any of that. I see a bunch of barely adults doing about the most that I would ever suggest you ask of them: trying.

Nate's story shows how he balances explicit pressure from public health communications-e.g., "a university advertisement"with everyday life on a college campus, which is influenced by factors such as social pressures, culture, and the embodied, social experience of being "barely adults." His story also indicates that "trying" to comply with public health guidelines involves becoming aware of how his and his peers' personal daily actions are tied up with larger stories circulating about universities in the "national media" and in more local "posts on social media" from residents of surrounding communities. Nate incorporates the "frames" of these other stories into the "frame" of his own story to create meaning that influences his daily actions, an example of story as an ongoing, participatory, and everyday practice (Legg & Sullivan, 2018). He particularly contextualizes the vantage point from which his story is written by including a photo of where he sits as he writes (Figure 1). Similar to his story, the photo's frame emphasizes that his own vantage point, shown by his open laptop in the foreground, is situated within a larger community, as depicted by the university reading room in the background.



Figure 1: Photo submitted alongside "The College Try" that situates the viewer in the vantage point of the participant by showing an open laptop on a desk in the foreground against the backdrop of a library reading room

Nate's attentiveness to larger social stories in relation to his own story and daily actions indicates that enacting 'lived compliance' also involves 'emplaced, storied negotiations,' or decisions impacted by both a sense of place and other stories, the second major theme.

Emplaced, Storied Negotiations

"Busy" by Anonymous

Covid has kept us busy. Classwork takes longer, homework is harder, and everyone is stressed. Somehow I find myself in back to back zoom meetings, spending all day in front of the screen. When I'm done with meetings I am answering emails, writing papers, watching life happen outside my window. Imagine trying to apply to graduate school when you cant even go to the movies. Do I plan to move across the country? How are their numbers? Are they wearing masks? When I go to the store now I find myself counting how many people are not properly wearing a mask, or not wearing one at all. I try to go to restaurants but too often my skin starts to crawl. I wonder how well things are being cleaned, how effective their face shields are. Is this life now? Living in fear? But living in fear is still living, and if you are not careful Covid can take that away. So when people ask me how things are I say busy. I don't say that I'm always nervous, I don't talk about the anxiety. I just say things are busy. Because they are.

Like Nate's story above, "Busy" (submitted by a 21-29 year old female in the Northeast) indicates how participants enacted a form of lived compliance by weighing how public health guidelines fit within their larger personal stories and senses of place. This participant, for example, suggests that she navigates her plans to move away for graduate school—a part of her larger life 'story'with a localized daily decision like whether to go to the movies or to a restaurant. She 'stories' such large and small decisions by bringing her audience into her narrative frame and by juxtaposing the larger 'story' of COVID-19 in her everyday location with the place where she might move: "Imagine trying to apply to graduate school when you cant even go to the movies. Do I plan to move across the country? How are their numbers? Are they wearing masks?" Such concerns are deeply tied to her sense of place—due to the remote learning demands of the pandemic, she feels that life is happening "outside my window" and yet she finds it difficult to imagine moving to another place where she is not sure how the pandemic is transpiring. Like Nate's concern over telling people about his decision to return to campus, such negotiations become part of this participant's ongoing lived 'story,' as she considers how to narrate them to others by carefully considering which of her experiences to include: "when people ask me how things are I say busy. I don't say that I'm always nervous, I don't talk about the anxiety. I just say things are busy." She further emphasizes the 'story' of her busyness over other aspects of her affective experience by including only a photo of her workspace, which includes several cultural markers of 'busyness' such as two calendars, a to-do list, and a cup of iced coffee (Figure 2).



Figure 2: Photo submitted alongside "Busy" that depicts an open laptop displaying the participant's Google calendar, a white board with the heading "Grad School Board" depicting notes related to applying to graduate school, a cup of iced coffee, a second calendar white board, and a small piece of paper labeled 'To-do.'

This story thus illustrates not only the larger mental health effects of the pandemic, which have been extensively reported on⁴, but also the specific mental strain of navigating COVID-related public health guidelines within the larger story of one's life and narrating that story to others—a type of 'storied' strain also apparent in Nate's concerns in "The College Try" over both how his daily actions on campus were being told as part of both national and local media stories and how family and friends reacted to his decision to return to campus.

Such emplaced, storied negotiations are also evident in "Untitled," which opened the previous section. That story's author indicates being specifically opposed to wearing a mask during her Army swearing in ceremony—a significant life event that she describes as "a very big moment for me"—during which she feels that the mask then made her "look stupid" in front of all of her friends and her coach. She thus interprets the mask guideline in terms of its role in how she wants this important life event to be 'storied'—i.e., documented and remembered, such as through photos of the ceremony like one she submitted alongside her story (Figure 3).



Figure 3: Photo submitted alongside "Untitled" that shows the back of a man wearing Army fatigues taking a picture of two other people wearing fatigues standing on either side of an American flag in an open field

Participants indicated that part of making such 'emplaced, storied efforts' involved figuring out how to adjust their life stories, as they previously viewed them, into the new context of the pandemic. An anonymous participant, who is a 20-29 year old male attending a university in the Northeast, writes in his story, "Changes:"

Going into 2020, I was overjoyed to be heading back to [college town]. In the previous two semesters, I had been far away from the friends and memories of the "College of our Hearts Always," spending Spring '19 out of the state for an internship and Fall '19 out of the country to study abroad...By the time Spring '20 rolled around, I was fully ready to jump back into classes for my final two semesters, catch up with old friends, and of course most importantly: see some great hockey. The euphoria of returning was quickly torn away by the coronavirus, however...Most of my college friends have now moved on following "graduation" in the spring, and without the ability to spend the whole previous semester meeting new ones I feel that I have returned to campus in an alternate reality: the landscape seems so familiar, yet with the exception of a few occasional cases, I feel almost a stranger to my own college after effectively a year and a half away. I spend most days buried in work in an effort to graduate in December as previously planned. While I feel optimistic about my future and the opportunities that lie ahead, I can't help but feel that the gradual bareness of the trees as we near winter is symbolic of a personal college-era that is ending much more lifeless and void of color than it would at a brighter and warmer time. However, within this changing of the seasons comes strength. Each [location] winter forces us to bear down and persevere through the elements in whatever form they may come, and I feel that there is also symbolism here as it relates to our community's effort to get through these challenging times together. In this metaphor, 2020 as a whole has been winter, with its elements manifesting themselves as the largest global health crisis in the last one hundred years. But just like a [location] winter, we have grown stronger and more resilient because of it. Through continually adapting just like we would to the temperature drop between September and December, we have proven that even in the most dreary of times there is always something worth fighting for, and a light at the end of the tunnel that we refuse to abandon. Perhaps even more-so than my time away from campus, this semester has forced me to push outside my comfort zone and pursue new opportunities for the better. While the circumstances are the furthest from ideal, I feel little doubt that I have grown enormously during this time. And isn't that what college is all about?

He particularly stories his place-based experience with the pandemic by telling it through a classic U.S. coming-of-age narrative arc—beginning with a moral or social conflict (e.g. feeling like "a stranger to my own college"), followed by personal growth

⁴ Throughout the COVID-19 pandemic, there has been much reporting on its mental health effects, including increased anxiety and decreased life satisfaction for many people in studies conducted in developed countries (e.g., Jovancevic & Milicevic, 2020; Li et al., 2020; Wang et al., 2020; Zhou et al., 2020).

(e.g. "this semester has forced me to push outside my comfort zone and pursue new opportunities for the better"), and an optimistic denouement in which the participant ultimately feels that he has "grown enormously." Such tropes of personal growth, traditional in the U.S., appeared commonly across stories submitted to the study and suggest that participants tended to 'story' their experience of the pandemic with a bias towards positivity and individualism. This bias often appeared in tension with other indications of their lived experiences, for example the fear and anxiety expressed by the author of "Busy," which she then positively frames to other people as "just" busyness. Navigating such tensions showed up as a third major theme regarding how participants related to COVID-19 public health guidelines through 'affective, embodied efforts.'



Figure 4: Photo submitted alongside "Changes" that looks up at a cluster of barren trees against a clear sky over several campus buildings

Affective, Embodied Efforts

"Face Mask Décor" by Anonymous

Coping with Covid is not an easy task, and is not something I ever thought I would have to live through. We have such amazing technology to this day and are so ahead of our time, but yet I feel we have been set back with this pandemic. None of us are living, only trying to muck through and survive during these strange times. Coping with Covid is being too afraid to go shopping at your favorite store. It's not being able to go home to Massachusetts to visit your family. It's waking up with a sore throat one morning and freaking out if I could have it, and checking my temperature every hour. It's having to work from home, and not being able to remember the last time you left the house. It's having your anxiety and depression skyrocket and just having to deal with it, because you're too scared to go to the doctor right now. It's having to find a new hobby to pass the time and make life exciting again. It's not being able to go anywhere without your wallet, phone, keys, and mask, each as valuable as the other. Below is a photo that I took that reflects what coping with Covid means to me. I've started crafting and creating things because I found joy in it and it helps cope during covid. This is a photo of a wall sign I created to help keep my masks in one place. (I also thought the saying was clever, and very true!) Maybe this pandemic isn't all bad, it helped me find a hobby I absolutely love doing!

Stories like "Face Mask Décor," submitted by a 21-29 year old female, suggest that 'living out' compliance to public health guidelines involves the effort of navigating tensions between affective, embodied knowledge and experience and other forms of knowledge, such as scientific and cultural. Like "Busy" above, "Face Mask Décor" both speaks to the mental health effects of the pandemic and reflects a positivity bias in its conclusion. In particular, this story shows how mental health strains become manifest in specific embodied ways navigated within and/or against other forms of information or experience. For example, this participant interprets the public health guideline of temperature screening, which was recommended largely for people entering public spaces or 1-2 times/day for people who might have been exposed to COVID-19, into the anxiety-driven effort of "freaking out" and checking her temperature "every hour." This participant incorporates the general, data-driven guideline of temperature checks into her specific lived experience through an affective, embodied effort well beyond it (this action can be understood as another form of 'lived compliance' that takes 'compliance' to an extreme). A similarly embodied, affective manifestation of social distancing guidelines can be seen in "Busy," when the author describes physically feeling her skin "crawl" when she tries to go to restaurants.

Reflecting a storied 'affective, embodied effort,' the author of "Face Mask Décor" indicates that she weighs such public health information by considering both her immediate embodied experience (e.g., "a sore throat") and the larger 'story' of her health—"It's having your anxiety and depression skyrocket and just having to deal with it, because you're too scared to go to the doctor right now." Her decision to "deal with" increasing levels of anxiety and depression rather than "go to the doctor right now" shows that she has adjusted how she understands and narrates her larger embodied experience of mental health through an increased affective effort at handling it on her own, despite detrimental effects of doing so. This decision simultaneously is in tension with medical recommendations to continue seeking essential mental healthcare during the pandemic and shows a clear effort to follow public health recommendations to quarantine and social distance (i.e., this participant forgoes compliance to the former recommendation to uphold an extreme form of the latter, despite harmful repercussions for her mental health). The participant's decision to reconcile these seemingly incommensurate guidelines by "just having to deal with it" on her own, such as by cultivating new hobbies, reflects a form of 'pull yourself up by your bootstraps' neoliberal cultural logic, within which she makes a concerted effort to fit her lived embodied experience-e.g., "maybe this pandemic isn't all bad." She prioritizes that cultural logic by submitting only a picture of the wall sign she made through her new hobby. The sign includes a play on the cultural trope 'home is where your heart is' by displaying the saying 'home is where you can take your mask off' (Figure 5). By depicting only this sign, but not her body, the photo shows the participant's efforts at converging cultural and scientific knowledges through her daily activities, while downplaying the affective, embodied struggles that her story indicates are involved in doing so. In other words, the photo effectively erases her embodied experience in favor of emphasizing cultural tropes of positivity and self-reliance.



Figure 5: Photo submitted alongside "Face Mask Decor" that shows a wall sign displaying the saying 'Home is where you can take your mask off' and including two masks hung on nails

Such affective, embodied efforts at navigating competing logics are also reflected in how participants narrated the more mundane moments of their daily lives. Another untitled story by an anonymous 18-20 year old male participant from the southern U.S. reads:

This image of my bed represents a big portion of how I spent my time during quarantine. I spent many mornings, days, and afternoons laying in bed. Whether it be resting or just wasting time, my bedroom was one of the main places I was for most days, and was a welcome source of comfort for me...when I wasn't lying in bed, some days I was sitting at my desk getting work done. Fortunately I was also able to experiment with new computer programs, editing software, and video games throughout quarantine...

This story reveals a tension between this participant's affective sense of his bed as a "welcome source of comfort" and his sense that being there was often "just wasting time." Again showing how both a sense of place and dominant cultural knowledges affect how participants narrated their daily public health negotiations, this participant's bed seems to symbolize for him a place both of needed rest and of laziness—the latter being a symbolism consistent with U.S. cultural tropes (e.g., such as the saying 'get out of bed, you lazy head'). Like so many others, this story ends on the positive note of other activities that the participant was "fortunately" able to do during the pandemic. The embodied ways in which this participant carried out social distancing on a daily basis (e.g., by staying in bed) both appear in conflict with, and yet are couched within, dominant forms of cultural logic that prioritize working hard, keeping busy, and finding a silver lining. The participant prioritizes this cultural logic in his story by emphasizing "getting work done" and being "able to experiment with new computer programs..." and in his photos through a picture of his bed and workspace (Figure 6). As with "Face Mask Décor" neither photo depicts the participant's own body, thus overshadowing his embodied experience through the cultural frame of productivity. His bed, for example, looks as if someone just got out of it, emphasizing a choice to 'get work done' over resting. The picture of his workspace further emphasizes his efforts at productivity by showing an open Zoom log-in screen.



Figure 6: Two photos submitted alongside "Untitled" by Anonymous, one of which shows an unmade bed and another that shows a desktop computer displaying a Zoom log-in screen on a desk in front of a computer chair

In sum, participants like this one and the author of "Face Mask Décor" narrated their embodied experiences by relying on cultural tropes that prioritize staying upbeat, despite more subtle indications of how the pandemic was affecting their embodied experiences in more complex or negative ways (e.g., by increasing anxiety or tiredness). The deeply embodied, affective (and yet consistently downplayed) efforts that participants indicated making as they navigated/narrated daily life during the pandemic both further complicates what it means to live out compliance to public health guidelines (e.g., through culturally endorsed positivity) and shows how such navigations are embedded within personal and social stories and senses of place.

DISCUSSION

This study examined the lived experiences of people in the U.S. following COVID-related public health guidelines during the COVID-19 global pandemic through a participatory process that harnessed affordances of both storytelling and visuals. Its findings both extend arguments for using storytelling as a research methodology in TPC and inform best practices for participatory, actionable public health communication during such crises...

Implications for Research

This study emphasizes storytelling as a methodology that can help public health communicators to better understand (and enter into dialogue with) how people make sense of health information by incorporating it within larger cultural narratives, personal stories, and/or embodied, affective, and placed-based contexts. By specifically asking for stories, the study protocol could have biased how participants described their experience through a narrative arc. Yet there are numerous narrative arcs that a given story can take. The prevalence of the 'personal growth' and 'silver lining' arcs in participants' stories suggests that the U.S. cultural logics embedded in such narratives-e.g., positivity, individualism, and selfreliance—deeply affect how people in the U.S. are interpreting and acting upon public health recommendations. While such narratives have been circulating widely for some time in industrialized countries like the U.S., it could be argued that COVID-related public health messaging particularly leveraged such narrativese.g., through widely-adopted messages like "we will get through this together" (e.g., positivity) and "StayHomeStaySafe" (e.g., selfreliance)—which could have further influenced people to approach the pandemic by trying to remain upbeat and taking personal responsibility for adhering to public health guidelines.

Such a positivity bias can ignore the structural inequalities and detrimental mental health effects exacerbated by crises like the pandemic, leading to questions like-does such a bias avert some people from seeking needed help and/or inhibit resources from being communicated effectively to those that need them? Indeed, as has been argued with regard to other health/medical contexts, an overreliance on tropes of the individual's responsibility to remain positive and control their own health can overshadow deeply problematic material and social inequities or barriers to health, which are largely experienced by multiply marginalized communities (e.g., Lupton, 1995; Robvais, 2020; Rodriquez & Opel, 2020). Further, this finding begs questions concerning how people who do not share the dominant cultural logic of a particular region interpret and experience public health guidelines that are heavily couched within such narratives. Additional research could use living visual-voice to focus specifically on such marginalized communities' experiences. Future iterations of projects like this one could also be undertaken with populations that experience less material and social privilege than the college-student demographic focused on here. Finally, while this Project was limited to a U.S context, comparative work could be done to better understand how cultural narratives in other geographical areas of the world have impacted COVID-related messaging and to what effect.

This study's findings regarding the importance of place and the tensions between embodied, affective experience and public health guidelines push us also to consider public health communication beyond discursive questions of messaging. Other contexts—e.g., physical, material, structural—that impact how such messaging is interpreted and acted upon must also be considered. While this argument is not new to TPC (e.g., Arduser, 2017; Campbell & Angeli, 2019; Kessler, 2020), the language of messaging continues to be over-emphasized culturally. For example, a New York Times article reporting on the Newham hotel case, with which this article began, framed the lack of community buy-in for that program primarily as a problem of language, arguing that "the coronavirus has yet to produce an indelible slogan" and "the pandemic needs its Smokey Bear" (Segal, 2021). Studies like this one show that the language of a message is but one part of how people act on public health initiatives in their daily lives. A slogan can only go so far if it is not aligned with the embodied, cultural, or material realities of people's lived experiences, communities, and places, evidence of which we saw, for example, with Nate's indication that college students will not become "the bright, diverse, eye-smiling, mask-wearing citizens skipping down the mall as if nothing is wrong" that often appear in general public health communications. Similarly, overly positive messaging can create problems of overcompliance or the erasure of affective experience, as evidenced by the author of Face Mask Décor's decision to forgo mental health checkups in order to quarantine. This study shows how such embodied, affective experiences can come into tension with both larger cultural narratives and public health information, and yet are often overshadowed in how participants tell their own stories. Such findings suggest that public health communication should better account for other barriers and facilitators to health, be better situated within the local cultural context and stories of a particular place, and become more aligned with the embodied experiences of its audiences.

Implications for Public Health Communication in Practice

This study's findings lead to several important recommendations for how public health communication in widespread crises like the COVID-19 pandemic could be improved. First, health communicators can improve public health communication by recognizing the material and affective factors that affect it:

- Material Factors: Align messaging with contextspecific initiatives supporting people to follow public health guidelines, e.g., through material, physical, or social support
- Affective Factors: Recognize that following public health recommendations during such crises is difficult, that it is affectively and physically demanding, and that one does not have to go through it alone and yet we are not 'all in it together' in the same way (e.g., recognize commonalities AND singularities of embodied, emplaced experience)

Table 1 details these recommendations alongside guiding questions that communicators can use to guide their work and examples of how these recommendations and questions might be mobilized in specific contexts. This table is meant to serve as a starting place rather than a prescription.

Second, this study supports recommendations for approaching public health communication as lived and storied/participatory.

- Lived Factors: Embrace compliance as part of a continuum that is context-specific, which could include suggestions and options for what forms of compliance in a particular context look like and where their limits are
- Storied/Participatory Factors: Make public health messages resonate with both individual users' and larger communities' stories, by incorporating themes from community-based stories. This process should also include inviting community members into a story-telling process of what a given public health issue means to them.

Table 2 provides guiding questions and contextualized examples for these recommendations.

Recommendation	Guiding Questions	Contextualized Example	
Align messaging with context-specific initiatives supporting people to follow public health guidelines, e.g., through material, physical, or social support.	 Does the messaging consider the (un)availability of the material resources (e.g., masks, medicines, etc.) necessary to follow it? Does the messaging support or introduce other available, necessary resources, particularly in the local community? 	 A nursery school wants to create messaging that encourages parents to get their kids tested for COVID-19 before sending them to school, if they are experiencing any symptoms. How available or not are COVID-19 tests for these parents? What material factors might make it difficult for parents to obtain the recommended tests? (e.g., lack of financial resources, lack of time, etc.) 	
sociai support.	 Does the messaging take into account material or physical factors that might support or inhibit users? 	• Are there any resources available in the community that can help parents to obtain the necessary tests (e.g., free test distribution centers)? If so, how can the school ensure that its message effectively directs parents to those resources?	
Affective Factors Recognize that following public health	 Does the messaging consider its target audience's unique affective and embodied experiences? 	A university wants to design messaging targeted to students about new mask guidelines, which do not require students to wear a mask unless they are immunocompromised.	
recommendations during such crises is difficult, that it is af- fectively and physi- cally demanding, and that one does not have to go through it alone and yet we are not 'all in it together' in the same way.	 How might messaging be tailored to address such specificities, thus avoiding overly generalized messages? Does the messaging acknowledge potential affective experiences that might make it difficult for the audience to carry out its recommendations? 	 What are some possible affective reactions to these updated guidelines for students who are immunocompromised? (e.g., possible feelings of exclusion/frustration at the new recommendation). How might general messaging on this policy adversely affect those students, and how could care be taken to mitigate or avoid such adverse effects? How might targeted messaging or resources account for these affective experiences without singling out immunocompromised students or inciting feelings of blame/shame? 	
	 Does the messaging recognize potential affective barriers (e.g., fear or exclusion) that might make its recommendations difficult to follow? Does the messaging direct users to associated support? 	What potential mental health effects might this change lead to (e.g., anxiety for immunocompromised students) and how might the messaging provide resources to address those effects (e.g., by encouraging ALL students to continue wearing a mask to prevent their immunocompromised friends from feeling singled out or anxious, despite the official policy)?	

Table 1. Heuristic for Addressing Material and Affective Factors in Public Health Communication

Recommendation	Guiding Questions	Contextualized Example
Embrace compliance as part of a continuum that is context-specific, which could include suggestions for what forms of compliance in a particular context look like and where their limits are.	 Does the messaging indicate what 'compliance' means and what its limits are for its specific users' contexts? Does the messaging account for various ways in which it might be interpreted in users' everyday lives? Does the messaging communicate accurate scientific information, while also acknowledging the situated realities in which people will attempt to follow that information? Is the messaging contextually specific enough to provide clarity rather than confusion or misinterpretation? 	A college student notices that many of her peers are using their feet to press the ADA automatic door buttons because they do not want to 'spread germs' by touching the door handle. She worries that this 'hack' to opening the door will place more germs on the button for people who actually need to press it with their hands (e.g., students using wheelchairs). 56 • What public health guidelines are students attempting to 'comply' with when they press this button with their feet (e.g., 'stop the spread of germs' messaging)? • How is the students' (mis)interpretation of 'compliance' creating new problems? How could messaging make users aware of how their chosen form of 'compliance' creates new issues for people who actually need to press the button with their hands? • How could new messaging present alternative options so that students can reasonably 'comply' to 'stop the spread of germs' recommendations without adding additional germs to the button for those who need to use it (e.g., use a paper towel to push open the door; place hand sanitizer directly past the door)?
Storied/Participatory Factors Make public health messages resonate with both individual users' and larger communi- ties' stories, by incor- porating themes from community-based stories. This process should also include inviting com- munity members into a story-telling process.	 Does the messaging resonate with both individual users' and communities' stories? Does the messaging encourage audience participation, e.g., by inviting dialogue, leveraging users' stories, encouraging community members' input, or inviting the co-creation of materials with community members? What language or themes from shared stories could be incorporated into messaging? 	 A town council wants to create messaging that encourages youth to social distance to mitigate the spread of COVID-19 among youth. Many residents of the town are from Indigenous communities. What types of stories do youth in this area tell and connect to in general (e.g., stories with geographic or age-based resonance)? What themes from those stories might be included in messaging for the town's youth in general? How might tailored messaging incorporate stories or themes specific to Indigenous youth's cultural heritage? What messaging or stories already circulating in Indigenous communities might be incorporated(see NPAIHB, 2021 for some excellent examples)? How might youth from both Indigenous and other backgrounds be included in the process of creating such storied messaging (e.g., partnering with local schools)?

Table 2. Heuristic for Addressing Lived and Storied Factors in Public Health Communication

⁵ A special thanks to undergraduate student, Lauren Tibbits, for introducing this example in a class related to this project.

Practical Example

As a public-facing, action-based project, this study included several opportunities for participants to collaborate in creating public-health materials. Several university student-participants, for example, drew from early findings to create messaging specific to other college students on their campus. These student-participants engaged in their own participant-led coding of stories submitted to the study from the college-age demographic (Bay & Sullivan, 2021) and made public health messages corresponding to needs expressed in those stories that appeared in buildings across campus. For example, Nate, the author of "*The College Try*," developed a flier encouraging mask-wearing that was posted in residence halls across campus (Figure 7).⁶



Figure 7: Flier depicting the torso of a person wearing a blue graduation gown and holding a diploma, underneath a checklist of items to remember when leaving a dorm room—shirt, shoes, wallet, and mask—with each item checked off.

Each subsection below details how this flier embraced recommendations from Table 1, so as to highlight what this approach might look like in practice.

Storied/participatory

This flier uses themes from stories that resonate with the specific college-age community to which the designer, Nate, belongs, for example by emphasizing the cultural value for this community of walking at graduation. The flier's photo draws users into that community-based 'graduation' story by inviting them to imagine their own faces on top of the graduation gown depicted. Including Nate's name at the bottom of the flier emphasizes this message as participatory, peer-to-peer communication, by showing that the designer himself is part of the larger campus-community story of his target audience.

Lived and affective

The flier acknowledges that 'compliance' is lived by clearly indicating what it might look like on a daily basis for users in this specific context—i.e., 'mask' is included on a list of other items that college students typically would not forget to bring when leaving their dorm room. The flier thus communicates the scientific recommendation for universal mask-wearing that was in place at the time by defining 'compliance' to it as something that should become routine (read—it is not an option to leave behind your mask, just

as you would not leave behind your shoes). This flier is thus a good example of how recognizing compliance as 'lived' need not mean opening space for ambiguity or inconsistency, but rather clearly defining what 'compliance' might look like in a specific context and then supporting users to enact it—e.g., through some of the other recommendations outlined here, such as by providing necessary material resources and/or associated affective support.17For example, although this flier defines compliance strictly, it also acknowledges that it may be difficult for its audience—'This may be tedious.' The ethos of this acknowledgment is strengthened by the peer-to-peer "this is worth it" appeal that getting to graduation evokes for this community. A revision to this flier may have also included information at the bottom directing students to mental health resources on campus so as to support users through potential affective challenges in following its recommendation. Or, a hashtag may have provided students with a way to share pictures of themselves wearing their masks on social media, thus providing additional peer-to-peer social support.

Material

As disposable masks were provided at the entrance-ways of all college buildings during this period, near where these fliers were placed, it was not necessary for this flier to include information about where students could obtain a mask. However, another iteration of the flier may have included a reminder at the bottom of who to contact if these mask stations were empty, as a way to pay additional attention to the material resources required to follow it.

CONCLUSION

Such participatory approaches can be challenging to carry out, due to constraints of time, logistics, and resources. Rather than preclude such projects, however, these challenges can be viewed as further underscoring the need for public health communication research and practice to be viewed as a process of ongoing, participatory dialogue—or exchange of stories and corresponding action—between scholars, practitioners, and communities.

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⁷ Trying to recognize compliance as lived may at first seem too impractical, burdensome, or complex in practice. However, doing so can actually mean simplifying, rather than complicating, messages in certain situations. To provide another example: In summer 2021, the CDC changed its mask-wearing guidelines to recommend that people needed to wear masks indoors only if they lived in an area with a high COVID-19 test positivity rate. While this recommendation was based on sound science, much everyday confusion ensued in places with low populations, where even small numbers of additional cases caused positivity rates—and thus corresponding mask guidelines—to fluctuate day by day. In those places, the official CDC recommendation led to everyday, very context-specific questions on how to live it out, such as—how do I know what my area's positivity rate is? How do I find time in my busy day to figure that out? I didn't have to wear a mask yesterday, but do I have to wear one today? Do I wear my mask at the grocery store in my county but not at the gas station next door, which is right across the county line? In this case, recognizing compliance as lived could have meant continuing to recommend masks for everyone in those areas (even if not 'technically' necessary and seemingly less contextspecific) so as to avoid the everyday confusion created by asking people to check their area's positivity rate every day.

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ABOUT THE AUTHOR

Kathryn Yankura Swacha is an assistant professor of English at the University of Maine, where she also directs the English Internship Program. Her research employs community-based methods to explore how people navigate health-based rhetorics in daily life. Her work has appeared in journals like *Technical Communication Quarterly, Rhetoric Review*, and *Rhetoric of Health & Medicine*.

Exploring Healthcare Communication Gaps Between US Universities and Their International Students: A Technical Communication Approach

Akshata J. Balghare Texas Tech University akshata.balghare@ttu.edu

ABSTRACT

US healthcare is a complicated system not just for US-born citizens but also international students in the US. While universities inform international students about how US healthcare functions, these students still struggle with navigating healthcare owing to the cultural and technical challenges they face with the system. This paper investigates how US healthcare information can be conveyed effectively by universities so that international students navigate healthcare with fewer challenges. This research was conducted using qualitative methods with 12 international student participants at a US university. Using the collected data, the study provides recommendations to improve healthcare communication on campuses and insights to increase the scope of this study to further investigate international students' healthcare access challenges.

CCS Concepts

Social and Professional Topics

Keywords

International students, Healthcare communication, Health literacy, Health insurance, US healthcare

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INTRODUCTION

Much of the general healthcare research points out the various racial disparities that exist within the US healthcare system for reasons such as consumers' limited English proficiency, low health literacy¹, and cultural differences in care (Egede, 2006; Nelson et al., 2002; Paasche-Orlow & Wolf, 2010). The overall racial and ethnic diversity of the US has increased since 2010, according to U.S. Census Bureau analyses, and as it increases further, issues such as poor health literacy, inequity in healthcare access, and communication gaps between healthcare professionals and consumers will increase. Technical communication scholars St.Amant and Angeli (2019) explained that cultural differences in care in terms of when care is administered, where care is administered, who provides care, what constitutes care, and what is used to administer care can have a major effect on patients'/consumers' access to healthcare and create healthcare communication gaps. While research in healthcare access of minority and international populations has been conducted in technical communication (Gonzales et al., 2018; Rose, 2017; St.Amant, 2015), healthcare communication and access issues of the diverse international student population on US university campuses are yet to be thoroughly studied. Works by scholars such as Melonçon (2017), Agboka (2012), Rose et al. (2017), and Batova (2010) that focus on user/patientcenteredness when designing healthcare information help see that we can provide better access to healthcare and agency in healthcare through technical communication to international students.

For most US consumers, health insurance is the first concept that consumers need to be literate about so that they can handle healthcare situations efficiently to achieve good health outcomes. Studies show that "insurance" is one of the areas of concern cited by international students when accessing care, along with areas such as information about available campus healthcare services and patient/provider communication (Adegboyega et. al, 2020;

1 Health literacy is "the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others" ("What is health literacy?" Feb 2022)

Carmack et. al, 2016; Cheng, 2004; Mackert et. al, 2017). Some international students may have no experience using health insurance if they didn't have one in their home country, and this can cause difficulty understanding the complex health-related information, especially if they are non-native English speakers or multilingual speakers, potentially leading them to have low health literacy. Regardless of English-speaking proficiency, bureaucratic processes involved in the US system such as finding a provider, checking coverage, and figuring out claims can be complicated for these students (Adegboyega et al., 2020; Carmack et al., 2016; Sheldon, 2009).

International students receive healthcare information through their universities in forms such as orientation programs, international student meetings, and emails (Carmack et al., 2016). Here, I see that the way to improve health literacy of these students is by enhancing the information they receive through these forms of communication. The question then is "how can we improve this communication?" This question needs to be asked to those who are directly affected by it-international students-because they are the ones who must act on the messages received from universities. Being an international student in the US, I attended a healthcare orientation that gave me a brief overview of how my insurance works; however, later I still went through an arduous journey of navigating US healthcare because I did not have enough knowledge of how US healthcare works. Thus, here, I see the orientation programs and other campus communication channels as systems that are meant to train international students on US healthcare. This means that we must study students' experiences with such systems to investigate how these systems assist them in navigating US healthcare in terms of using health centers on and off campus, using health plan/insurance websites, getting help from customer service and other such healthcare areas. Particularly, health plan websites play an important role in providing healthcare resources to consumers during their journey of care, making it imperative to study how healthcare communication systems of universities are informing international students about the use of such websites.

Melonçon and Frost (2015) have argued that technical communicators are well positioned to solve health literacy issues by collaborating with healthcare teams to improve health information across a variety of media. Thus, here all campus communication channels can be considered as various form of media that disseminate US healthcare information, and I see myself as a technical communicator that assists campus healthcare communicators in improving the design of the various communication channels. Essentially, through my study, I investigate the healthcare communication practices at a university in the US as a case study to answer the questions: how is US healthcare information conveyed by health communicators of university campuses? And how can this information be conveyed effectively so that international students can navigate the US healthcare system with fewer challenges?

WHAT IS THIS STUDY DOING THAT PREVIOUS STUDIES HAVE NOT DONE?

Often, universities instruct international students about the US healthcare system and health insurance during new student orientation programs. From my experience of studying at two US universities for a total of six years, I can say that the healthcare talk at orientations lasts typically around thirty-minutes. That,

however, might not be enough time to explain intricacies of the US healthcare system to international students who are learning to navigate life in a new country. As a result, mere thirty-minutes of healthcare-related instruction can lead to these students having low health literacy. Here, there is a need to give a voice to international students by asking them about their experience with the orientation programs, a communication space which has not been thoroughly explored in previous studies (Adegboyega, 2020; Carmack, 2016; Cheng, 2004; Sheldon, 2009), as orientations potentially set a foundation for healthcare choices that international students make during their school term.

Further, Redish (2007) has helped us see that healthcare is a complex system, and this means that there are several areas in the system that need to be investigated to learn about the various challenges students face. Thus, apart from orientations, an area that has not been explored in the previous studies is the health plan website where students would download their insurance cards, look at their benefit plans, pay for care services, find a provider/ specialist and navigate other such processes. These websites are typically websites of the companies that provide health insurance to consumers where consumers create their accounts so they can access their healthcare information. Then, the question is how many international students are aware of such websites? How are orientations informing students on the use of such websites? What challenges are students facing navigating through these websites? Questions like these have not been addressed previously. St. Amant (2020) has illustrated that such health plan websites are a part of an individual's journey of care—"the process by which individuals move to and through spaces when accessing and receiving care" (p. 126). This makes us realize that we need to study how informed international students are about these websites.

Universities have a responsibility of informing students about all such healthcare processes involved in the journey of care, most of which happens during orientations. While these websites can be a common aspect of the journey of care for those that have lived in the US for a long time, they might be an unfamiliar area for many international citizens who have experienced a different healthcare system. Redish and Barnum (2011) asserted that technical communicators can assist in making complex interactions, such as those present within the US healthcare system, understandable and usable to users through user-centered principles. Thus, to conduct this research from a user-centered perspective, I observed international students perform healthcare-related tasks on the health plan websites to understand their challenges when interacting with the complex systems within US healthcare. This eventually helped me learn how universities can assist students better in understanding the use of such websites.

In all, to understand the wants and needs of international students, along with interviews and focus groups, I observed students perform tasks on the health plan website to triangulate the data. Still and Crane (2017) stated that we must collect as much observable or performative data as possible because it will help come across those wants and needs of users that weren't as obtainable through self-reported data such as interviews and focus groups. Hughes and Hayhoe (2009) asserted that "observed behavior (watching what people do) has higher credibility than self-reports" (p. 79). Dumas and Redish (1999) believed that watching users struggle has a much greater impact as it aids in correcting our assumptions about what users want. For this reason, this study incorporated an observation method along with interviews and focus groups

because watching students struggle with navigating the website or them recalling their first experience with the website was not possible through interviews and focus groups. In this observation method, participants were tasked to navigate a health plan website that the university provides international students and speak about their live experience performing tasks on the website, which eventually helped me see how aware the participants were about the website being a part of the journey of care. To clarify, this observation method was not a usability test of the website although health plan websites may or may not have usability issues like poor interface, non-functioning tabs, or broken pages. However, it cannot be emphasized enough that poor health literacy can also prohibit users from successfully navigating health plan websites. As a result, this method was used to investigate how one campus provides access to US healthcare through the use of such websites.

METHODS

This research was conducted as a part of my doctoral dissertation, in the technical communication and rhetoric program, that explored the cultural and technical challenges international students face when navigating the US healthcare system. This research was conducted at a public research university, which has around 2000 international students, in the Southern United States. In this study, I used qualitative data collection methods to address my research questions. Data were collected in three phases: one-on-one interviews (phase I), one-on-one task observations (phase II), and focus groups (phase III). This section describes the participant recruitment criteria and the process and methods used to conduct the research.

Participant Recruitment

The criteria for participant recruitment for this study was that the participants were undergraduate or graduate international students and must be enrolled in the health plan provided by the university. The US Government requires all international students to be enrolled under health insurance to enter the US. At this university, all students on F-1 visa are automatically enrolled under a university-provided insurance when they register for classes. Some students on J-1 visas that come under the Fulbright program are enrolled under a different health plan, not provided by the university. I was more familiar with F-1 visa regulations and so for this study only F-1 students were recruited. J-1 students were not recruited to avoid the complexity of figuring out whether they were enrolled under university insurance or some other. Thus, this was more of a convenience sample.

University Institutional Review Board approval (IRB2021-624) was obtained prior to initiating any data collection. A recruitment email was sent out on the university's listserv system, and out of the 2000 international students, 15 responded to the email initially, mentioning their interest. I then sent additional details about the study including consent forms to these 15 students, and 12 of those 15 students agreed to participate and signed up for this study. Participants were asked to commit to all three phases of data collection but were allowed to discontinue the study at any point. These 12 participants had resided in the US for 2 months to 15 years for education pursuit. Each participant was assigned a pseudonym. Participants include:

Chinaka: undergrad student from Nigeria Sophia: undergrad student from Colombia Tanish: grad student from India

Ariana: grad student from Iran

Maya: grad student from Philippines

Jiya: grad student from India

Kyong: grad student from South Korea

Madhav: grad student from India

Rifah: grad student from Bangladesh

Farhan: grad student from India Samira: grad student from Iran

Ajay: grad student from India

Total 12 participants completed phase I and 11 participants completed phase II. Next, 10 participants completed phase III, where two focus groups of 5 participants each were conducted. For phases I and II, I spent 45 minutes with each participant. Similarly, the time I spent with each focus group was 45 minutes. I conducted all three phases virtually via Zoom and recorded audios/videos for these phases via Zoom recorder.

Data Collection

Phase I: Individual interviews

I conducted semi-structured interviews because they provided the flexibility to adjust questions according to each participant's unique experience with the complex US healthcare system. First, participants were asked about their experience with the new student orientation program that informed them about the US' journey of care (including the use of health plan websites). Then, participants were asked what kind of healthcare information they received from campus communication channels other than orientations. Finally, participants were asked if the campus healthcare communication had been useful to them in understanding and navigating US healthcare. The interviews provided a forum for probing the healthcare communication that happens on campuses, and eventually helped see how the information can be centered around students' expectations and requirements.

Phase II: Task observation

This method was conducted as a combination of task observation and an elicitation interview. In an elicitation interview, "through the embodied process of playing with visual materials, participants may provide a more realistic response than the one collected through words only [like interviews]" (Tracy, p. 150). In phase II, participants were tasked to navigate the health plan website provided by the university. Interviewing participants as they navigated through the website helped see their health literacy better than what self-reported data provided. Overall, the website provides information and resources on benefits coverage, optingout of insurance, submitting claims, accessing insurance card, costs of plans, customer care service number, and coverage information for dental and vision among others. Figure 1. shows a screenshot of the homepage of the website with eight main tabs.

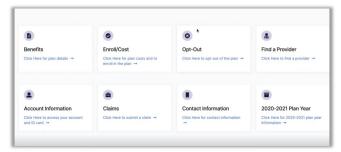


Figure 1. Home page of the health plan website

In this phase, I measured participants' health literacy in terms of: how aware they were about the health plan website being a part of the journey of care in the US, and how aware they were about the resources available on the website. During this phase, I provided participants with the website link and asked them to share their screen with the website and then asked questions about their understanding of the website as they performed tasks on it. Also, participants did not have to accomplish all tasks by themselves; I guided them through the tasks as I assumed participants would require extensive amount of time to finish the tasks by themselves given their cultural unfamiliarity and the complexity of the healthcare system. If I asked participants to find an in-network provider through the website, the task was less about how successfully they found the provider, but more about do they understand the meaning of "provider" or "in-network". As participants performed tasks under my guidance, I asked them what according to them was the meaning of "in-network provider" and "claims" and "deductible" and other such concepts. Their responses to my questions and their definitions of the concepts helped me to see how informed students were about such concepts, where they had learned these concepts from—personal experience or orientation—and this gave me more insight into their health literacy. If a participant could not explain a concept at all or gave a wrong definition, then it was a cue about what basic concepts and processes should be explained to international students. Participants were not asked to log into any portion of the website. All tasks and questions were based on what participants could see and access on the website without having to login. A list of elicitation questions and tasks was created for phase II. Some of the questions that participants were asked include:

How familiar are you with this website? How did you know of this website already? How did you find it the first time you accessed it?

If one needs to download their insurance card, where would they look for it? Can you please show me where you would go to download your card from this website?

If one had to check whether their health plan covers a specific health condition or how much is the coverage for a health condition, how would they find this information? Can you please show me how you would look for that information on this website?

Participant performance in phase II helped learn what assistance and information international students would want about health plan websites from universities through orientations and other communication channels.

Phase III: Focus groups

In phase III, focus groups were conducted in the form of member checking. For this phase, data were analyzed from the first two phases to determine the healthcare communication problems that existed between universities and students. The analyzed data were then transformed into a PowerPoint report of "Issues of health information communication" and presented to participants in two focus groups where they were prompted to reflect on the data analysis and comment on it. Hughes and Hayhoe (2009) have asserted that "member checking" helps in soliciting participants' views of the credibility of the findings and interpretations. While member checks are common, I felt a special need to do focus groups to ensure that I personally don't bring in any bias and use feedback from my international community to shape the analysis in an unbiased way.

Coding

The larger study of my dissertation was done using a mix of the coding techniques discussed by Saldaña (2013), such as emotion coding, descriptive coding, process coding, and provisional coding, using the software ATLAS.ti. Emotion coding represented participants frustrations and their challenges with navigating US healthcare; descriptive coding was used when I found that a topic came up repetitively in participants' responses; process coding represented healthcare processes that were mentioned at orientation, that students themselves navigated prior to this study, and those that students navigated during my study; and provisional coding was used when I could anticipate topics that would come up in participants' responses.

After first round of coding, I consolidated the codes into categories using axial coding that Saldaña describes as a technique used to "reassemble data that were split or fractured during the initial coding process" (p. 218). My codebook for this paper is presented in the table below.

First-round codes	Type of codes	Second-round codes	Final-round codes
Phase I			
COVID (how covid affected orientations)	Descriptive: basic topic of a passage of qualitative data (Saldaña, 2013, p. 262)	Modality of orientation & acculturation	Information communicated at orientations: grad and undergrad, in-person and online
Attention to orientation (student engagement)	Descriptive		
Lack of guid- ance (in navi- gating health- care during orientations)	Descriptive	Communication gaps at orientation	
Insurance card info (and web- site information given at orienta- tion)	Process: simple observable activities, more general conceptual actions (Saldaña, 2013, p. 94)		
Phase II			
Frustrations, challenges, surprises with US healthcare communication: finding specialist/ emailing officials/ accessing benefits plan/insurance card	Emotion: emotions recalled and/or experienced by the participant, or inferred by the researcher about the participant (Saldaña, 2013, p. 263)	Communication gaps between universities and students	Overall experience with US healthcare
In-network, Out- network (meaning of jargon)	Process	Technical jargon & usability issues	
Deductible (meaning of jargon)	Process		
Glossary (participants' request and ideas for incorporating glossary)	Provisional: anticipated categories or types of responses/actions that may arise in the data yet to be collected (Saldaña, 2013, p. 144)		
Previous knowledge (of US healthcare)	Provisional	Previous experiences with US healthcare	
Previous experi- ence visiting health plan web- site of university	Process		
Phase III			
Problems with orientations	Provisional	Participants' thoughts on problems with the content and modality of the orientations	What can be done so that students pay attention at orientations? & How to promote town hall meetings so more students attend?
Orientation redesign ideas		Participants' thoughts on how to design orientations in a better way	
Health plan website		Participants' thoughts on how to train them on the website	What are some ways students can be made aware of the health plan website?

Table 1. Codebook for phases I, II, and III

RESULTS

Through my dissertation research, my overall results showed me that international students felt a lack of control when it came to handling healthcare in the US, which has also been found in a previous study by Cheng (2004). Thus, these students need to be taught how to advocate for themselves as healthcare consumers in order to "manage" their journey of care, if not "control" their journey. Further, my other significant observation was that universities need to promote healthcare websites through orientations and other communication channels so that all students, international and domestic, can benefit from them. Finally, I also found that health plan documents such as those that discuss the plan benefits need to be better designed so that they meet the needs and expectations of international students. In this paper, I provide some of the noteworthy results I collected from Phases I. II. and III to discuss how orientations can be designed better, and how and why universities should promote health plan websites. This results section provides results from phases I and II. First, I provide information on what I learned about orientations on campus from phase I. Then, I describe experiences and thoughts of participants with campus healthcare that I obtained through phases I and II. Data collected from phase III, focus groups, has been used to write the discussion section of this paper.

In terms of quoting participants, I have used their quotes verbatim but removed excessive filler words such as "the", "like", and "um".

Types Of Orientation at This University

This university provided three different new student orientations:

Undergraduate student orientation

International student orientation

Graduate student orientation.

Undergraduate students are required to attend the undergraduate student orientation and undergraduate internationals are encouraged to attend the international student orientation. Graduate students are only required to attend the graduate student orientation. There is no required orientation for international graduate students and the university did not offer one, probably because these students are assumed to be more mature than undergraduate students.

I was also able to access recorded videos of the undergraduate as well as the graduate student orientation, which were uploaded under the university's website and YouTube page. These orientations covered topics such as adjusting to the US life, understanding university policies, navigating the US healthcare system, navigating the US tax system, avoiding falling for scams, understanding immigration policies, and campus safety resources.

After interviewing participants, I found that the university had conducted some orientations virtually due to COVID-19 restrictions between the years 2020-2022. Of the total 12 students, 10 had attended virtual orientations since they had started school during the years 2021 and 2022. Two students had attended in-person orientations since they had started school pre-COVID. Apart from the orientation programs, one of the participants also attended a town hall meeting organized by the international office of the university. The town hall covered several topics that international students should be aware of along with the topic of US healthcare.

Information Communicated at The New Student Orientation

In phase I, all participants were asked what they could recall about the US healthcare information from the orientation. From the responses I received, it seemed that the orientation had failed to make an impression on 8 of the 12 participants as they could not recall much beyond the fact that health insurance was a mandate. It is also possible that passage of time from when these participants attended the orientation affected their retention of information. Four participants provided me some examples of what was told at their orientations; for example, cost of insurance in Fall, Spring, and Summer semesters, and service provided by the student health center on campus. Also, at the undergrad orientation, the speaker had a PowerPoint and a video, going on their screen, explaining health insurance.

Participant Farhan, who attended the graduate student orientation virtually, could recall much more than other participants about the healthcare talk from the orientation. Farhan mentioned that one session during the virtual orientation was from the student health center, which lasted around 30 minutes. Farhan recalled:

There was a lady who explained us about this [healthcare] stuff. She didn't explain it that well. But she did say about copay, deductible. She did say that everything in the student health center is like free unless and until you go to the university hospital, then you have to pay over there. But if the student health center refers you to the university hospital, then it's also free for you.

Farhan further said:

There were a lot of international students like me, they were writing so many questions [in the chat], and she couldn't keep up with the questions. Everyone was like, oh, is this free? Is that free? Is eye care free?

He further explained that the overall orientation consisted of talks from several departments of the university. He said:

I skipped some of the departments like the tax department. I skipped it because it was too technical. I couldn't understand anything. Yeah, I skipped the library one as well, I think. But I stayed for this health insurance one.

I asked him if students were asking questions using their microphones. He responded:

No, we couldn't unmute ourselves. We just had to ask through the chat because there were a lot of students, all the international students...based on the chat box it was like, so many questions. It was obvious people still didn't get it. That session and the tax session. Both were, you know, full of questions. Still people couldn't understand.

Farhan added that the speaker couldn't keep up with all the questions in the chat. He explained:

Because she was just one person and everyone was asking so many questions. And yeah, I'm sure she couldn't, you know, get through all the questions.

She had to end the session because the next session was going to begin.

I asked Farhan if he asked any questions through the chat, to that he responded, "no, because I know she, she wouldn't be able to answer [because of time limit]." He added that he didn't have too many questions because he already knew a lot about US healthcare because he had researched it while he was in his home country. Farhan said he was aware of the complexity and cost of healthcare in America from his relatives who live in the US. I then asked him if students were provided any health plan documents during or after the virtual orientatio. He replied, "they didn't. But they gave us the link to the health plan website and said we can download it from there." Farhan also told me that recordings of the sessions were available on the university website and university's YouTube page and that's how I got access to some of the orientation videos.

Farhan's responses show that international students are given a plethora of technical information such as health care and taxes on the same day, while they are still adjusting to life in a new country. Given such a structure of orientations, this could be one reason why it must have been difficult for students to recall what was told at orientations. Further, because it is not possible for communicators to answer all questions, students are then left to find out information by themselves, or email school officials with questions hoping they receive some answers, as happened below in Samira's case.

Samira, another graduate student, said the healthcare talk at her graduate student virtual orientation was probably only five minutes. She said the healthcare talk "wasn't too special, it didn't give me any details." She asked the speaker, "how can we know more about our health insurance?" And she was answered, "you need to go to the website and will find an explanation."

Samira said that after the orientation session:

I just emailed them, and asked, so would you please explain more about health insurance, and they just sent me a link. And it is the health insurance website, but I couldn't find anything in that link.

Samira said later she learned how to download her insurance card by asking her friends.

I noticed that there was clearly a difference in how information was communicated at undergrad orientation versus grad orientation. I watched video recordings of the undergraduate and graduate student orientations, that Farhan told me about. At the graduate orientation the speaker provided most information verbally and some through chat. The speaker did not share their screen with any visual materials or presentation, like that done at the undergraduate orientation. The key point I found from the recordings and above responses is that simply providing links to the website through chat at orientations might not be as helpful as sharing screen to pull up the website and going over some of its functionality with students. Not all students could be as mindful as Farhan or have enough time to research about US healthcare before coming to the US. For someone international who is encountering the complicated US healthcare system for the first time, can we simply give them a health plan website link and expect them to figure out what they need to learn from the website? In the case of Samira, she had the right resource, the website link, but she couldn't find what she was looking for.

Redish (2000) provided three helpful questions that must be considered when designing orientations: with the information provided at orientations, will students find what they need, understand what they find, and use what they understand appropriately? St. Amant (2017) added that healthcare communicators may provide tools of care (such as the health plan website link) to international audiences; however, the usability of those tools often depends on the audiences' understanding or previous experience with the tools (p. 67). This leads to the question, how many students might have experience using such health plan websites in their home countries? Some students might have zero experience because they didn't have to use a health plan website to "administer care" (St. Amant & Angeli, 2019) in their home countries, making it hard for them to find what they are looking for on the website. This necessitates that communicators explain the use of the website by going over some parts of the website using a screen-sharing software. Houts et al. (2005) strongly believed that along with verbal information, visuals "markedly increase attention to and recall of health education information" (p. 173), which points out that having some sort of visual on the screen during orientations to explain students their health insurance can go a long way.

Overall Experiences of Participants with US Healthcare

In this section, I provide the most significant experiences of participants in terms of the new healthcare spaces they had to enter during their journey of care. These experiences of students accessing healthcare information helps see what universities can do to better assist them in their journey of care. This section describes students' experiences with accessing insurance card, accessing health plan information, and finding a specialist. Finally, I also explain how some students' past experiences with US healthcare helped them be well-informed.

Accessing the insurance card

The insurance card is an important document that one must carry if living in the US, given the bureaucratic structure of US healthcare. However, this card might not always be a necessity in countries outside the US where insurance is not a mandate, which makes accessing the insurance card a new space for some students. Following I provide encounters of three participants with accessing their insurance card.

I asked Farhan if at the orientation they explained anything about the website such as how to navigate it or where to find information. He responded, "I think they might have but it was not that well explained because I had to do everything myself. And it took me a lot of time to register and get my insurance card from the website."

Rifah had attended the graduate student orientation virtually in Fall 2020 from Bangladesh as a distance education student due to the COVID-19 pandemic. Rifah had problems accessing her insurance card when she moved to the US in Fall 2021. She mentioned that she had to go back and forth with school officials over email as she asked them how she could access her card. It took her three months to obtain her insurance card because the replies she got over email, according to her, were not helpful at all. Rifah said, one of the personnel wrote to her that her health card will be sent to her physical address; however, she did not receive the card. Rifah told me that "it was wrong [information]. They actually don't send us the card; you have to download it and print it if you want."

Tanish had to buy prescribed medicines from a pharmacy where he was asked for his insurance card, which he had not downloaded. At that time, he first searched for the card on the university website but failed after trying to enter his information on some webpages. This made him think that school's officials might have missed enrolling him in the health insurance system. Finally, he reached out to a school official to access his insurance card.

Above responses indicate that at orientations, communicators might fail to clearly show students the path to download the insurance card from the website. Most importantly, not all students could be aware of how important it is to keep the card at hand in the US, and thus they might go through challenges later when they need to download it.

Accessing and understanding technical health plan information

Similar to accessing insurance cards, accessing benefits documents can be a new space for some international students. Second, even if they have access to the benefits document, understanding the technical jargon can be a task.

When Maya found the benefits document for the first time through my study during phase II while navigating the health plan website, she said to me:

Oh, good thing. You taught me about this because I didn't know the coverage part and rate. All I know is that it is being charged in our tuition fee every

term. That's what my friends told me.

She further said, "Is it okay, if I just skim through the document?" as she wanted to genuinely look at the document amidst the study. She also downloaded the document to store in her computer saying, "oh, I need to download this one. Thank you for giving this to me. I appreciate it. Just quick. I didn't know about this." She skimmed through the document and said, "I'm just scrolling up and down, because I'm interested to know. Thank you. It's a useful document."

Maya had once tried to find out if pharmaceutical drugs were covered under her plan before my study. When she found the drug coverage information through my study, she exclaimed, "oh, I'm frustrated now, because I wish I had learned this before." She added, "I could share this with other new international students because many are asking for information about the health plan because they are not aware that we have a website actually about that." She added, "they [new international students] usually don't know about this. I have a classmate in one of my courses. She just came from China. And she is asking me a lot of questions about it [health insurance]."

Maya also emphasized:

The university must promote that we have this kind of reference or resources for students. Because I only learned about this specific information about the health plan from you. If I hadn't talked to you, I would never learned about it. And now since I know about it, I can share it with other students.

Participant Sophia had been unsuccessful in finding her benefits document stating that "I had to ask my friends what was included in the health plan. And like, until this date, I still am not sure what is in my health insurance." Sophia added that she emailed the student

health center asking them if certain things were covered in her health plan coverage. She said:

I emailed them. And exchanged like five emails. And, and like, each time I was talking with a different person, they were like, I'll send this email to another person to help you. And then that person told me to check this website. And I was like, I already checked that website, but it didn't help. And they were like, I'm not sure what you're asking for. I was like, alright, I just want to know what's included in my health plan. And she sent me the web page again, so I was like, okay, so I kind of gave up.

When she finally learned how to access the benefits plan through my study during phase II, she said "they [university] should tell you like, like you told me how to get there, like they should tell us." As she looked at the benefits document, she exclaimed, "this is what I needed!" I asked her if this was the information she needed from the student health center initially. She responded, "Yeah, I never found [it then]. Well, you helped me find it."

A third participant Jiya believed that it wasn't too hard to figure out the technical language in the health plan. However, when I asked her what a deductible meant, she probably took the word "deduct" literally and said "Deductible [is] like for every individual how much it is going to decrease in the money," indicating that deductible is the amount the insurance company subtracts from your bill.

The response from Jiya shows that some students might not realize the importance of getting to know their insurance or learning about US healthcare sooner. Given the current era of the COVD-19 pandemic, it is vital that universities take efforts to stress the importance of getting to know their health plans to students. Next, from Maya's and Sophia's experiences, it seems that students might not be aware that there is a comprehensive document about coverage-related information that they can access to find out their benefits. This necessitates that universities clearly show the benefits documents during orientations when they go over the website, and not assume that students will figure out what the website provides.

Knowing the difference between in-network and out-of-network

Finding network providers can be a new space for some international students who have experienced walk-in doctor visits without any conditions for insurance requirement in their home countries. In phase II, participants were asked to find a network provider on the website. Maya told me she always googled for in-network doctors and then called them up to ask if they accepted her insurance. She was unaware of the find-a-provider feature on the website before this study. When Sophia was performing tasks, she asked me what in-network and out-of-network exactly meant. She wanted to know whether providers outside campus were considered in-network or out-of-network. Like her, Rifah was unaware of what in-network and out-of-network meant. Further, when I asked Rifah where an international student would go to see a doctor if they were sick, she replied, "I don't know, I literally don't know. That's the problem. I want to [know] that but." In such cases, my task observations turned out to be pedagogical interviews (Tracy 2012) as participants were looking for answers from me. For Rifah, the challenge could be that she started grad school from Bangladesh during COVID in 2020 and moved to the US in 2021. As a result, she attended the orientation from her home country, which could be one reason she may not have a lot of knowledge of US healthcare as she was in a whole other setting during the orientation, which probably affected how much she was able to retain from the orientation. This emphasizes that universities need to consider how they can improve the student onboarding experience for such students when they move to the US.

Getting a referral for a specialist

Samira an Iranian student, who told me it was easy to find specialists in her home country, had a very challenging time finding one in the US, thus proving that finding a specialist can be another new space for international students.

Samira said she learned a lot about healthcare by asking her friends and searching more resources on the internet by herself and learned nothing from the orientation. To explain how she had to help herself in navigating the US healthcare, Samira mentioned:

So, I've been searching for an ENT specialist for one month and a half. So first I visited the physician [at] the student health center of our university and they couldn't refer me to the appropriate ENT specialist and they just wasted my time. And I called them back to refer me to a specialist. And they couldn't. I don't know why. I think it's not a big deal [to refer to a specialist], but they couldn't refer me to a specialist. And after a lot of back and forth, I just called the number on my insurance card. And they told me how I can find an in-network specialist. So, I just called the specialist myself...So after a lot of attempts, I could visit an ENT.

I asked Samira how she figured that calling the number on the card would benefit her. She replied:

I really needed to visit a doctor. And they couldn't help me in the student center. And nobody could help me. And I also walked to the university hospital because I don't have a car. And I asked at the hospital, what is the procedure to see a specialist? And nobody told me what I can do to visit a specialist. And it was really weird for me. I'm new here, and I didn't know many things, and nobody, even in the medical system, could help me. I was really disappointed. And, you know, I was just feeling the pressure. And I got stressed because of that. And I needed to do something. So I decided to call that number.

Calling the number on her insurance card was the last option Samira had, which eventually solved her problem. This indicates that during orientations students also need to be told about calling customer service and advocating for themselves when finding a provider/specialist, figuring out claims, or looking for coverage-related information.

Previous experience with US healthcare

Some participants already had experience with US healthcare; as a result, they seemed prepared to answer my questions. Madhav was the only participant who had attended the town hall meeting arranged by the international office. Madhav who attended this session said he was surprised to see there were very few international students in attendance. He said, "there probably were 35 students, which is a very small number given that TTU has around 2000 students." Madhav had studied at another US university and so he had previous experience about how healthcare works in the US. As a result, he chose to attend the town hall meeting stating that he wanted to know if the policies or the information was different from his previous university as he didn't want to fall in trouble in the future or didn't want to be surprised with new information. This previous experience also led him to downloading his insurance card sooner so that he could have it at hand.

Participant Chinaka had attended orientation sessions multiple times because he was a campus global guide and as part of his role he was required to attend orientations every semester so that he could direct international students to the right place when they asked him questions. Chinaka, being a global guide, was thus aware of the health plan website for international students and knew the exact web link because he remembered the website being mentioned at several orientations. A third participant Kyong, who had experience of living in the US for 15 years, responded to my interview questions well and also performed tasks on the website smoothly.

This shows that having some experience with US healthcare generates mindfulness about healthcare choices, like it did for Madhav. Past experiences with healthcare can help reduce the challenges and shocks that one might encounter in the future. Above all experiences signify that being a global guide, having stayed in the US longer, and having an awareness of the complexity of US healthcare made some of the participants more health literate than others. Further, we see that even though students reached out to university officials by email, they had trouble figuring out health care processes. This indicates that accessing insurance cards, accessing coverage information, finding a provider/specialist and other processes need to be taught to these international students. Next, I also noticed certain usability issues with the website during the task observation phase of my study. Some participants had trouble locating health plan documents on the website because the titles of the locations where these documents were placed either seemed misleading to them or the formatting of the title wasn't user friendly. Some of the participants suggested that technical jargon like deductible and copay needs to be explained somewhere on the website. I had to show these participants the glossary that was already on the website. After seeing the glossary, some participants complained that the title of the location where the glossary was placed was misleading and they would not have clicked it. Overall, I observed that orientations mention the health plan website and some of its functionality but not so explicitly and not in a detailed manner, and students either don't remember website-related information because there wasn't much emphasis on it during orientations or they were not attentive during the orientation.

DISCUSSION

From phases I and II, I noticed that the most significant issues with healthcare communication on campus were: participants' not remembering much from orientations; attendance for the town hall meeting, which discussed US healthcare among other topics, was too low; and participants were either unaware of the health plan website or couldn't make good use of it because the information on the website seemed unclear to them. I discussed these three issues with participants during the focus groups, and the results of which

I explain in this section. I have categorized this section using the following questions:

Why can't students remember much from orientations? What can be done so that students pay attention at orientations? Especially during the healthcare talk.

What could be some reasons the attendance at the town hall meeting was too low? How can we ensure more students attend it?

What are some ways students can be made aware of the health plan website?

What Can Be Done So That Students Pay Attention at Orientations? Especially, During the Healthcare Talk?

Farhan, who was the most knowledgeable and mindful about US healthcare, suggested that "since healthcare and health insurance is very important, they should have a standalone day for this, they should not club it with the tax guys, the library guys." To this Maya added:

I agree with Farhan when he said that we need to have a standalone, you know, like presentation or orientation about healthcare services. Because during the time that I attended the in-person orientation...I think I got a lot of information overload. There are lots of speakers who present in that orientation. And then I think I almost forgot what the speaker of the health services mentioned. I think it's because of the information load.

Another topic that came up during this conversation was about the modality of orientations. Ariana pointed out that because orientations were virtual, they weren't as engaging and students probably put on their earphones and scrolled through their phone, instead of paying attention to the orientation. Ajay further argued that orientations are held during the first few days when students are new to the country and so some of them might not even have internet. Kyong added, "people are still getting adjusted to the city, or even just the US in general. So, it's kind of stressful to like, Okay, I'm gonna get on Zoom, when I don't even have internet."

These responses suggest that international students go through acculturation stress when they are new to the US. Being new to a country may make these students feel scared, distracted, or not at their learning best, and per Osborne (2006) mental states of audiences can prohibit them from processing technical information. Thus, universities need to consider this acculturation stress when designing orientations so that students are not burdened with information.

Further, the factor of information overload points out that students can get overwhelmed with too much technical information, such as US healthcare. Moreover, if the information is new, it can be a lot to take in for these students. St.Amant (2015) has helped us see that for these international students being exposed to the healthcare system of their home country for a long period of time can affect how they perceive the healthcare of US. "The cultures in which we are raised expose us to different prototypes for genres over time" and these prototypes act as mental models of how individuals perceive certain matters (qtd. in St.Amant, 2019, p. 467). Meaning, international students might carry a mental model of what a healthcare system

looks like, based on their experiences in their home countries. And so, if the new healthcare is different or complicated than that of their home country's healthcare, these students may not find the new system fully credible because they have a different prototype of healthcare in their mind. This might further preclude students from accepting any information they receive about healthcare and tax, which they receive on the same day, as trustworthy or worth paying attention to. This then leads them to having poor health literacy and defeats the purpose of orientations. Thus, universities can consider splitting orientations on different days to understand if that helps students pay more attention and take away helpful information from it. Additionally, students can be asked to fill out a post-orientation survey to learn about their experience with the orientation and get feedback on what can be done better.

What Could Be Some Reasons the Attendance at the Town Hall Meeting Was Too Low? How Can We Ensure More Students Attend It?

Even though the town hall meeting was not a required session for students to attend, I noticed that most participants were unaware of the meeting. I asked participants if they ever saw an email regarding this meeting.

Chinaka explained that students probably don't open and read such emails if the subject line does not get their attention. Further, Ariana argued that sometimes she looks at those emails but they always look the same and so there is nothing new. Rifah added that because the emails went in her "Other" inbox, she didn't look at those town hall meeting emails. Ajay said he checks his social media often and comes across the posts of the international office through social media first. Samira pointed out that "the topics of emails are not so specific. Maybe they could write the topics better."

One way to improve health literacy of international students through town hall meetings can be making such meetings mandatory, which will ensure all students attend and learn something from it. Regardless of the mandate condition, it is still important that these events be advertised in emails in a way such that students recognize the value of attending such events. Other than emails, Peruta and Sheilds (2017) have reminded us that many millennial students frequently turn to social media to gather information, and so colleges should use their social media to communicate with students and build a connection with them. Universities can reach out to students through social media to explain US health care to students through posts like infographics or short videos. For example, universities can upload short videos on social media that explain technical jargon such as deductible and copay.

What Are Some Ways Students Can Be Made Aware of The Health Plan Website?

Samira and Sophia, who wrote to campus officials asking how they can learn more about US healthcare, were prompted to the website. Similarly, Rifah reached out to campus officials asking how she could access her insurance card. But none of these three students found email communication useful. While it is possible that website usability issues may have prevented participants from finding the information they needed, emails, however, need to be written in such a way that prompt students to investigate the website and not abandon it. Maya suggested, "maybe it could be more useful if

there is email for the students that has a specific subject line about the website and how to use it and how to navigate on it." Similar to Maya, Samira recommended there be a screen-recorded video of how to navigate the website. She said:

I think the Video, like a screen recorder of, for example, how to reach a specific part of the website and how to find, for example, a specialist doctors... they should just show us exactly what we should do with that information. Where should we look for the information of health insurance, because for me it was so difficult to find my insurance card, and I just asked my friends, and nobody told me in the orientation.

Improving student health literacy should not be only about giving them access to the website, but about informing them how "to engage with the materials and use the information to make better health decisions" (Renguette, 2016, p. 367). Thus, a video about the functionality of the website can help student users learn how to make good use of the website when it's specifically designed for their benefit.

Further, Tanish proposed that students should be asked to do mandatory training on US healthcare where they are required to answer a questionnaire. Farhan added that there should be mandatory online training that prompts students to download their insurance card, rather than waiting till they get sick and then figuring out how to download their card. Such online trainings can be designed for both domestic as well as international students so that they always have their insurance card at hand.

Having the health plan website link accessible seems to be the most important point here. During the pilot of phase II, I asked the pilot participant to pull up the health plan website by searching it on their computer. However, this participant pulled up a website which was not provided through this university. Thus, during the actual study, I provided the link to participants as I realized some of them would have no idea about this website and would take a long time to pull it up. Further, as mentioned previously, universities can consider using their social media to improve the health literacy of international students through informational posts about how to download insurance cards or access coverage information, thus promoting the health plan website. Moreover, universities should test these health plan websites for usability by recruiting international students as user participants. Usability tests of such websites can help reveal how such websites can be designed per the needs of an international population. "Health information websites are notorious for using overly complex and scientific language that makes the content difficult to understand and use" (Egbert & Nanna, 2009, p. 3). Particularly, non-native speakers can get left behind in the digital age as they struggle with using online healthcare documentation when institutions fail to provide assistance (Cleary & Flammia, 2012). Finally, such websites also need to be tested using health literacy assessment tools (Gazmararian et al., 2010) designed for making health plan materials, such as websites and print documents, user centered.

LIMITATIONS AND FUTURE SCOPE

This study represents a very small sample of the international student population from one US university, and so the collected data cannot be generalized for all international students on this campus or other university campuses. A larger sample size can help answer some foundational research questions of technical communication: In terms of campus healthcare communication, what design practices include international users? How can healthcare communication function as an agent of knowledge making, action, and change? (Rude, 2009, p. 176). Further, there is scope to investigate various other healthcare information channels provided by this university. For example, the student health center's website and the international office's website provide information on US healthcare. Although there is so much information available through the university, students still rely on friends, or don't know where to look, or say no one could help them with their healthcare situations. Thus, these websites can also be usability tested for the information they provide. Moreover, it might help to study if and how these websites are being promoted. Next, because the US healthcare system varies from state to state or university to university, the data collected in this study might not be applicable across the entire US. Nevertheless, the data give insight into the complex system of healthcare on college campuses and shows the various areas of healthcare communication that can be investigated such as the intermediary genres that communicate about the university's healthcare: healthcare-specific emails, international student meetings, question-answer sessions at international student meetings, campus health center websites, post-orientation surveys and so on. Finally, this study can be extended to J-1 international students and also domestic students to promote overall public health on campuses.

CONCLUSION

The international student population has to take care of various situations, such navigating new educational systems, learning new rules and laws, managing finances, making new friendships and communities, managing anxieties of language proficiency, etc., when living away from home. This acculturative stress gets even worse as the international population must learn and unlearn various ways of how certain systems work in the US, example, red-tape-heavy healthcare systems. As a research area, healthcare communication is a valuable site for technical communicators to promote the disciplinary goals of advocacy, and we can use our expertise to advocate for international students when they face challenges navigating US healthcare. Meloncon (2016) has asserted that technical communicators have the ability to contribute to healthcare research because "the skills we bring to any communication problem can move easily across technical domains" (para. 1). A technical communication lens in this research can bring in more insights into the healthcare communication problems that occur on campuses and provide practical solutions to bridge the communication gaps between universities and students.

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ABOUT THE AUTHOR

Akshata J. Balghare is a doctoral candidate in the technical communication and rhetoric program at Texas Tech University. She has a master's in technical and professional communication from Auburn University and a bachelor's in electronics engineering from University of Pune, India. Akshata has professional experience working as a technical editor for engineering and scientific documents. Her research interests include healthcare communication and user experience design.

Questioning Neoliberal Rhetorics of Wellness: Designing Programmatic Interventions to Better Support Graduate Instructor Wellbeing

Sam Clem Utah State University sam.clem@usu.edu

Beth Buyserie Utah State University beth.buyserie@usu.edu

ABSTRACT

Previous research has recognized the neoliberal trends that permeate the rhetorics of academic wellness, placing the responsibility for wellbeing on individuals rather than institutions and systems. In this study, the authors implemented a participatory action research (PAR) project to collaborate with different stakeholders in one university writing program and develop programmatic approaches to support the wellbeing one subset of academic faculty: graduate student instructors. Along with an account of how we adapted our PAR methodology to align with the wellness needs of our participants, we also provide a description and analysis of the intervention developed collaboratively in the PAR group. We end with five takeaways that researchers and stakeholders in graduate student education can apply to developing programmatic interventions that better support graduate instructor wellbeing: 1) research methodologies should adapt to foreground wellbeing; 2) productive conversations about wellbeing should start by acknowledging and validating the lived experience of graduate instructors; 3) students want to be involved in programmatic processes and procedures that support their wellbeing; 4) facilitating (but not requiring) non-productive social interaction among grad students can support GI wellbeing; 5) the work of supporting wellbeing is never fully done—we call on administrators, faculty members, and students to continue this work.

CCS Concepts

Social and Professional Topics

Keywords

Wellbeing, Participatory Action Research (PAC), Graduate students

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INTRODUCTION

In the wake of the COVID-19 pandemic and the trauma it has caused, academic instructors and administrators have had to reassess their approaches to self-care and wellbeing and how they communicate those approaches to stakeholders. Many academic resources marginalize non-tenure track instructors (Simmons et al., 2021), including graduate instructors. For graduate students, this academic marginalization compounds with other stress-inducing situations like frequent evaluations, high workloads, financial difficulties, pressure to publish, and peer pressure (Schmidt & Hansson, 2018). As a result, there is strong and growing evidence of a mental health crisis in graduate education, with graduate students reporting levels of depression and anxiety six times higher than the general population (Evans et al., 2018). Indicators of ill-being are higher in underrepresented graduate student populations like trans and gender-nonconforming students (Evans et al., 2018), women (Devine & Hunter, 2017; Evans et al., 2018), and students of color (Osorio et al., 2021). This is a problem not only because these are real people with real suffering, but also because these high levels of ill-being contribute to the very high rates of attrition, particularly among doctoral students, with up to 50% of students who start doctoral work not receiving a PhD (Gardner, 2008; Jiranek, 2010; Lovitts & Nelson, 2000; Schmidt & Hansson, 2018). Problems with graduate student wellbeing not only affect the students but also the institutions where they study. Poor mental health leads to reduced quality and quantity of research outputs, lost productivity, and poor degree progress (Scott & Takarangi, 2019). All of these factors have led scholars to conclude that the current state of graduate student wellbeing is "bleak" (Scott & Takarangi, 2019, p. 20), to the extent that "wellbeing and academic perseverance cannot coexist simultaneously" (Shavers & Moore, 2014, cited in Schmidt & Hansson, 2018, p. 11).

Neoliberal universities, while claiming to support wellbeing, often frame wellbeing as an individual endeavor, one that places the responsibility for mental and physical wholeness with the graduate student or faculty member (Hurd & Singh, 2021; Smith & Ulus, 2020). As Hurd and Singh (2021) noted, these approaches separate personal and academic wellbeing, reinforcing binaries of academic productivity as somehow removed from work/life balance (or the person as a whole being). These institutional discourses and programmatic communication, rather than addressing the sources of ill-being, instead profess to care for the person while simultaneously

privileging academic output. But research in graduate student and faculty wellbeing repeatedly emphasizes the need for interventions to be institutional rather than individual (Devine & Hunter, 2017; Evans et al., 2018; Hurd & Singh, 2021; Osorio et al., 2021; Ryan et al., 2021; Schmidt & Hansson, 2018; Scott & Takarangi, 2019; Shavers & Moore, 2014; Smith & Ulus, 2020).

The authors of this paper represent different roles in one university writing program: author 1 is a graduate student in the program and at the time of writing was the graduate student representative. As the representative, author 1 was often the contact person between department administration (e.g., the Director of Graduate Studies and curricular chair) and graduate students and served on the department's Graduate Advisor Committee. Author 2 is the Writing Program Administrator (WPA), whose responsibilities include training graduate student instructors (GIs). Recognizing the concerning national trends of graduate student ill-being and calls for institutional interventions to better support academic wellbeing, the authors developed and implemented a participatory action research project that, in collaboration with GIs in the writing program, seeks to question neoliberal rhetorics of wellness and identify programmatic approaches toward GI wellbeing. Therefore, the following questions guide our research: What should be the role of programs in supporting and facilitating graduate student wellbeing? How might programs engage in collaborative practices that promote wellbeing? How can programs best communicate the goals and purposes of wellbeing in graduate student education?

LITERATURE REVIEW

Recent conversations in the rhetorics of health and medicine (RHM) have emphasized that organizational and institutional discourses have a "powerful ability" to impact individuals' conceptualizations of wellness (Derkatch, 2018, p. 155). University programs are one such example of an organization that influences the language of wellness (Stambler, 2020). We extend this scholarship by investigating the rhetorics of wellness in one university writing program. Like many writing programs, this program relies on the labor of graduate student instructors to teach first-year writing and introductory technical communication courses.

While much current research has focused on instructors fostering the wellbeing of their students, there is a limited but growing vein of literature that explores how to cultivate the wellbeing of academics (e.g., Smith & Ulus, 2020). This recent discourse originates in the field of management, and it provides frameworks for applying RHM to institutional settings. These conversations emphasize that our understanding of academic wellbeing must shift from a neoliberal, individualistic focus on self-care to an institutional mitigation of mind-body harm (Hurd & Singh, 2021; Smith & Ulus, 2020). Most of this scholarship, though, is still theoretical; it recognizes a need for change but does not yet offer practical suggestions on how to work toward an institutional culture that communicates and cultivates the wellbeing of academics.

Although research on the wellbeing of academic faculty is currently sparse (Hurd & Singh, 2021; Smith & Ulus, 2020), presenting an opportunity for future research, there is an existing large strand of literature related to graduate student and PhD student wellbeing. GIs hold dual—and often competing—identities as both students and faculty. These competing roles can lead GIs to complicated sense of "identity whiplash" as they navigate in, around, and between their student identity, instructor identity, and other personal

identities (Simmons et al., 2021). Within this liminal space that GIs occupy, both the literature on faculty and student wellbeing is relevant to their experiences and roles at the university. Like the limited literature on faculty wellbeing, much of the scholarship on graduate student wellbeing focuses on a lack of wellbeing by measuring things like stress, depression, burnout, exhaustion, and sleep problems (Schmidt & Hansson, 2018, p. 5). This literature also emphasizes the role that programs and institutions must play in creating meaningful and impactful interventions in wellbeing, for example, through policy, procedures, and communication (Devine & Hunter, 2017; Evans et al., 2018; Osorio et al., 2021; Ryan et al., 2021; Schmidt & Hansson, 2018; Scott & Takarangi, 2019; Shavers & Moore, 2014). The majority of research on graduate student wellbeing originates in the fields of education and education research (Schmidt & Hansson, 2018, p. 3), leading to calls to expand that research into other fields (p. 10). This study responds to that call by exploring graduate student wellbeing within the context of writing programs.

While all of the above cited research on graduate student wellbeing involves graduate students as research participants in some fashion, only one, Ryan et al. (2021) has invited graduate students to actively participate in designing suggestions for wellbeing interventions. This gap in participatory design is one that technical communication scholars are well positioned to fill. In analyzing the rhetorics of wellness in a university employee wellness program, Stambler (2021) has suggested that "directly involving [employees] in the research and design process" is necessary (p. 179). Beyond the specific context of rhetorics of wellness in university programs, other technical communication scholars like Spinuzzi (2005) have emphasized the importance of participatory design in technical communication research, particularly for research with social justice aims (Rose, 2016).

RESEARCH DESIGN AND METHODOLOGY

Participatory Action Research

In response to calls from research in graduate student wellbeing for change "to occur at the institutional rather than individual level" to improve graduate student well-being (Scott & Takarangi, 2019, p. 20), we intentionally chose participatory action research (PAR) as our methodology. As a methodology, PAR foregrounds critical theory, social justice, and transformative action or praxis (Brydon-Miller et al., 2011; Chilisa, 2012; McIntyre, 2008). Additionally, PAR intentionally involves the local program, community, or stakeholders as an inherently necessary part of the methodology and project design (Brydon-Miller et al, 2011; Chilisa, 2012; McIntyre, 2008). Therefore, PAR allows us to foreground the experiences and expertise of graduate students in our local program, as we believe their insights are critical for a project on graduate student wellbeing.

PAR's roots in social justice—which examines structures of power, oppression, and resistance—are also essential to our research design. According to McIntyre (2008), PAR "includes an emphasis on equity, oppression, and access to resources for research participants" (p. 5). Because we agree that neoliberal institutions place most of the responsibility for wellbeing on the individual, PAR's roots in critical theory and social justice allow us to examine, foreground, and respond to the *structural* challenges to wellbeing

within our local context. As such, PAR allows both researchers and participants to act on their commitments to equity and social justice, and to collaboratively shape programmatic approaches to wellbeing.

Technical communication scholars committed to social justice also recognize participatory action research as a valuable research methodology. As Jones (2016) has explained, participatory approaches to research "allow technical communication scholars to engage in critical dialogue and influence action that supports social justice outcomes" (p. 335). Crabtree and Sapp (2005) utilized PAR to "encourage the creation of partnerships . . . with groups who are most marginalized" (p. 10) and to enact change in communities, including those affected by globalization and colonization. Agboka (2013) has relied on action research to challenge "unidirectional" communication practices (p. 30) and to question participatory approaches where the researcher's design does not align with the needs of the participants. Collectively, scholars in technical communication who are committed to social justice recognize PAR as a beneficial methodology for sharing power among researchers and program/community members, for questioning the limits of the research, and for communicating and solving problems at local and structural levels.

Study Design

Within our writing program, we have already engaged in a number of conversations on mental health and wellbeing in the classroom, including discussions on the rhetorics of mental disability in the graduate pedagogy seminar (framed by scholars such as Price, 2011); a professional development session on mental health and trauma-informed pedagogy, led by a graduate student; and multiple informal conversations with graduate students regarding wellbeing, managing the workload, and creating work-life balance. Additionally, our School of Graduate Studies has recently called for a greater focus on graduate student wellbeing as part of its strategic plan. Therefore, we knew that the program as a whole was invested in mental health and wellbeing, creating an ideal space for a PAR project. Based on these collective community-driven interactions and dialogues, we asked the following three research questions:

What should be the role of programs in supporting and facilitating graduate student wellbeing?

How might programs engage in collaborative practices that promote wellbeing?

How can programs best communicate the goals and purposes of wellbeing in graduate student education?

Recruitment

Our potential participants included all graduate instructors in the program, though we were specifically focusing on the approximately 12 Master's and Ph.D. graduate students who would be continuing on to the following year. To reduce the possibility of coercion (author 2 serves as the GIs' supervisor), a colleague outside our department sent a recruitment email to our graduate instructor listsery. We recruited participants in the Spring semester, so that we could work on the project in the summer out of respect for graduate student wellbeing and workload during the regular academic year. The timing of recruitment was important: we wanted GIs with at least one semester of experience in the writing program because they would have a more developed sense of the ways in which the program is—and is not—supporting and communicating wellness. Because of our inclusion criteria, the timeline of our

study was necessarily short. As most of the graduate students in the department are master's students on a two-year plan, we designed the study to last less than one calendar year so that it would start and finish before second-year students graduated. Author 1's status as a graduate student on a strict timeline to graduation also led us to design a study that would be completed in under a year.

Out of approximately 12 graduate students who were continuing on the following year, three gave consent to join the study. PAR does not privilege quantity in terms of participants, but rather values collaboration with those who are full members of their community and have the desire, time, and energy to work toward change. Rather than having a large number of participants, as might be desirable with other research methods, we wanted participants who were most involved and most interested in our research topic. In this case, we had three volunteers who had deep ties to the graduate community, both through administrative positions and graduate student organization representation. Our small group size provided opportunities for deeper and more specific insights to programmatic wellbeing, as well as for greater collaboration between all of the participants. PAR's focus on community engagement "provides a space within which community partners can come together and a process by which they can critically examine the issues facing them" (Brydon-Miller et al., 2011, p. 387). Therefore, three participants in collaboration with two researchers, all of whom have a commitment to the program, had the potential to affect positive change in our local context.

Despite the importance of wellbeing, we recognize that the topic of wellbeing itself may be triggering for some, including those who are experiencing moderate or severe distress in terms of mental and/or physical health. As we continue with this work, we will need to navigate the fact that some graduate instructors will chose not to participate—not because they are not interested in wellbeing, but because the subject itself can be difficult to discuss. Therefore, in our study's current iteration, we understand that we are likely missing the perspectives of key members in our community; a PAR project on wellbeing needs to find ways of responding to all community members' needs, not just those participating in the research.

Methods

To begin, we administered a survey via Qualtrics that consisted of a combination of 10 multiple choice and open-ended questions regarding graduate student wellbeing. We asked participants to provide their own definition of wellbeing; to describe what responsibility the writing program should have for student wellbeing; to identify what aspects of the program—including grading, student and faculty collaborations, and professional development sessions—both supported and/or challenged their wellbeing; and to give preliminary suggestions for how the writing program could better support graduate instructor wellbeing.

We also designed and implemented a series of four PAR groups to 1) gauge how and in what ways wellbeing is currently being communicated to GIs, 2) collaboratively develop additional definitions and strategies for enhancing wellbeing, and 3) create action steps toward communicating program-supported wellbeing. The first three PAR sessions provided opportunities for all participants and researchers to engage in PAR's "process of questioning, reflecting, dialoguing, and decision-making" (McIntyre, 2008, p. 6). For each PAR session, author 2 facilitated the discussion while author 1 took observation notes. To engage

in member checking (Creswell & Poth, 2016; Saldaña, 2013), we sent the observation notes to all participants after each session; participants had the options of clarifying information and identifying sections of the conversation that they preferred we not share outside the PAR group.

While our original study design involved four discussion sessions involving just the PAR group, during our second meeting, the group decided explicitly communicating wellbeing in a face-to-face setting to the incoming cohort of GIs was a top priority. The group wanted to actively partake in implementing the wellness communication strategies that we were developing. In response to that decision, the final PAR session took place at the new graduate instructor orientation at the beginning of the following academic year.

Reflective Revisions to the Study Design

While we as researchers are committed to PAR, we learned new insights about the need to connect participatory methodologies with participant wellbeing. A PAR study on graduate student wellbeing must not only privilege community partnerships, but also attend carefully to participant wellbeing-something that we had not explicitly considered in previous PAR projects. Although our participants had expressed initial interest in the work, we quickly realized that the participants (and the researchers) were overwhelmed with the stress of completing the semester. Additionally, we were collectively still trying to cope with the ongoing pandemic, increased cost of living, and environmental stress due to the regional drought, as well as our state's recent attacks against critical race theory and transgender athletes. These individual and structural stressors significantly impeded our ability to begin the project. Notably, only one participant responded to initial recruitment emails. Admittedly, as researchers we initially experienced stress when we realized that our study might fail due to lack of participation—and due to the pressures to publish, we briefly valued the need to research over the need to attend carefully to our collective wellbeing. Ultimately, however, we chose to prioritize both the wellbeing of the participants and the needs of the program over the external pressure to complete the study quickly and publish our research. Below, we highlight three revisions we made to how we as researchers communicated wellness in our research design and communication with participants.

Revising language in email communications

As we were drafting our reminder email to participants, we initially had a sentence that urged participants to complete the survey while taking care of their wellbeing. However, we realized that the common (implicit and sometimes explicit) message of "We care about your wellbeing, yet please still complete the work" was problematic, particularly for a voluntary study on wellness. Therefore, when we reminded the participants about the survey, we revised our initial message to write "As a reminder—and we mean this—if it's not helpful to your wellbeing to continue with the project, please remember that you can opt out of the study at any time." We briefly went on to provide options for the participants in how they might or might not engage in the study. While we do not presume that revisions such as these automatically enact wellbeing, we stress that researchers should carefully analyze how they frame wellbeing in their communications to participants: is simply stating that the researchers care about wellbeing enough? What other messages in the communication might unintentionally detract from

the focus on wellbeing? Additionally, comments like "take care of your wellbeing" might still place the crux of the responsibility for wellbeing on the individual. Therefore, we considered how we might redesign our study and our communication with participants so that we were acknowledging participant stressors and taking more responsibility for participant wellbeing (or at least not increasing ill-being).

Questioning action

In critiquing neoliberal-based rhetorics of wellness, Derkatch (2018) has exposed how "wellness [when framed by profit-driven institutions] is an aspirational state that prompts constant activity even to maintain the status quo, regardless of where one falls on the wellness spectrum" (p. 144). This critique of the rhetorics surrounding wellness forced us to question how the need for action, which is inherent to participatory action research, might at times harm wellbeing rather than support it. While we are not opposed to action—and are dedicated to action that promotes social justice—Derkatch's critique forced us to reflect on how neoliberal institutions utilize the rhetoric of action to place responsibility for action mainly on the individual. Action, in the neoliberal context, is equated with always needing to do more in order to satisfy external pressures for ever-increasing productivity. Instead, we ask how action might also involve concepts like pausing, doing less, prioritizing self- and community-goals over institutional goals, focusing on quality over quantity, reflecting on priorities, and saying "no" to requests. Therefore, in our redesign, we slowed down the pace of our study; while initially we had planned on holding the four PAR sessions in a relatively short span of time, we spread out the sessions to give participants time to restand to process previous sessions' discussions. We had originally planned on having participants read 3-4 scholarly articles, but given the general exhaustion, we summarized key scholarship and/ or asked participants to read only brief excerpts of the articles; we provided flexible options, so participants could also choose not to read the excerpts and prioritize their own lived experiences and thoughts during the PAR group discussions. To clarify, we did not completely reject PAR's commitment to action grounded in social justice—vet the project allowed us to reconsider the connections and tensions between action and wellness, choosing in this study to slow down participant action in favor of wellbeing. We believe that these changes helped communicate our commitment to the participants' wellbeing.

Communicating wellbeing in PAR meetings

We also reflexively considered how to communicate wellbeing during our PAR group meetings. Author 2 had recently attended a workshop given by healer and scholar-activist Della V. Mosley, who prioritizes wellbeing, "particularly [for] Black people and all queer and transgender People of Color" (Mosley, 2021). In Mosley's workshop, she/they prioritized self-care by calmly stressing that participants could always turn off the camera, take breaks, listen, and/or choose to leave—whatever they needed to do to take care of their wellbeing. Mosely also emphasized that if staying in the space and engaging with the topic was healing, then we as participants were encouraged to stay. Author 2 intentionally cited Mosley's practice to begin the PAR focus groups and encourage multiple forms of wellbeing throughout the PAR sessions.

RESULTS

In designing our study, before recruiting or participating in the PAR groups, authors 1 and 2 had an expected product in mind for what

we wanted to develop through the study: a list of communication strategies that the writing program could implement to better support the wellbeing of its GIs. We had imagined an 8- or 9-point bullet list titled "How programs can better communicate wellbeing to GIs." But as we had to adapt our research methods to the contours of the situations and participants of the study, we also had to accept and support when the PAR group determined that an alternative product would be most useful and meaningful for them and the program. Rather than listing ways the department could better support GI wellbeing, the group wanted to enact those methods. The decision to create a wellbeing intervention presentation at the new GI orientation and the decisions about how to communicate wellness during that intervention were part of the generative and creative process of our PAR research. In the sections that follow, we present first descriptions of our participants as their understanding of wellbeing shifted throughout the study, arriving by the end of study at an understanding that they had a role in communicating wellness to other GIs. We then present the communicative decisions made by the PAR group in our presentation at the GI faculty development orientation.

Processing Wellbeing through PAR Group Participation

To demonstrate how the PAR group members participated in a process of critically examining the topic of graduate student wellbeing within the constructs of PAR, we provide here thick descriptions (Creswell & Poth, 2016) of the participants' experiences through the pre-PAR group survey and PAR group participation. Just as each participant's conception of wellbeing affected the group's understanding of programmatic approaches to wellness, so too did the group's conception of wellbeing affect each participant. In this way, the culminating wellbeing intervention can be understood as our PAR group's collaborative understanding of when, where, why, and how to communicate wellbeing in our writing program.

Josephina

In response to the survey question asking what initial thoughts the participants had about the potential relationship between wellbeing and equity, Josephina responded,

The first thing that comes to mind are the students that are discriminated against because of mental illness. It is hard for me to know if I should disclose my mental illness to professors because their responses can vary so much and don't often lead me to get the support I need. Sometimes when I disclose, professors are so concerned with consoling me that they don't address how my mental illness might affect my grade. Other times, professors assume I'm grubbing for accommodations rather than trying to communicate my experience. If I don't disclose, professors automatically assume that I'm intentionally not meeting their expectations and must be reminded to prioritize those expectations above my own mental health. So whether or not I disclose my mental health, I can't have a productive conversation about how my mental health is affecting the class.

It is important to note that this comment came from a student who reported feeling "somewhat supported" by the program in their wellbeing, rather than "neither supported nor unsupported," "somewhat unsupported," or "extremely unsupported"; that is, even within the context of feeling somewhat supported, the student was still uncomfortable with and unwilling to discuss issues of wellbeing with the faculty in the program. This student's comment encapsulated the exigence for this research—to better support GIs and develop equity in our program.

From the beginning of the study, Josephina indicated that programs have a lot of responsibility in supporting the wellbeing of GIs, but she added an important hedge: agency cannot be taken away from individuals when dealing with wellbeing. For her, then, the objective for programs is to "create an environment where someone can feel comfortable communicating and being vulnerable," but it was still the responsibility of the individual to seek help and to support their own wellbeing. In her experience, programs often do not achieve supportive environments because productivity, grades, and success get emphasized over mental health; they get expressed as "the only things that matter." Here, before engaging in research or discussions on the neo-liberal trends in graduate education and wellbeing, she had already begun to recognize tendencies for programs and institutions to value production over all else.

Between responding to the survey and our first PAR session, Josephina read selections from Hurd & Singh's (2021) critique of neo-liberal approaches to faculty wellbeing in the academy. In our first PAR session, she was the first to comment, and it was with a thoughtful reflection about how productivity, wellness, and the academy become intertwined: "Even when the university accepts that your wellbeing is important, it's because they are worried about the productivity of the employees, which seems counterproductive." In this comment, she recognizes the ability of wellbeing to be coopted by institutions for their own benefit. She continues throughout the session to identify ways that she has navigated wellbeing in her role as GI and considers if and how a program might be able to institutionalize those strategies. For example, she describes how important connections with cohort members was and how vital those social connections have been for her wellbeing. For her, the program integrating more cohort collaboration and social time at a programmatic level would be "a way for the administration to recognize that wellbeing is important" and "for the program [to say] community matters." By starting with her individual tactics and moving them into programmatic spaces, and by reiterating how much of a role individuals have even in programmatic approaches to wellness, this participant complicates the idea that interventions into GI wellbeing can be entirely programmatic or individual; instead, they are two necessary parts of a whole. For authors 1 and 2, who came in to this study armed with neo-liberal arguments and research on the necessity of programmatic intervention, this was a humbling and reflective consideration.

Genevieve

One major theme that carried throughout Genevieve's participation in the study was connecting the experience and positionality of GIs with the experience and plight of workers in the workplace. In response to the question, "What is the responsibility, if any, of a writing program in contributing to graduate instructor well-being?", Genevieve responded, "Any workplace should care for the well-being of their employees, colleagues, and peers. Writing programs are no different. If anything, the contingent nature of graduate instructor work may make a focus on well-being even more important." Here, and in other comments throughout the study, Genevieve centers GIs' position as a worker over that of a

student. As workers, GIs require support from their employers—universities.

Within this context of GIs as employees, Genevieve often comes back to idea of productivity and how productivity is framed and valued within the program. For example, in one of our PAR sessions she lamented that "There isn't a discussion about what productivity is and what it means." In her experience in the program, she finds that only one model of productivity has been modeled to her by the faculty, one in which graduate students should emulate the professional paths of highly successful tenure-track faculty in the department. But this model did not fit with her professional goals, leading her to suggest that our program needs to acknowledge various professional paths and definitions of productivity. While her perception of the program's prevailing concept of productivity felt burdening to her, it did not keep her from imagining something different: "Sometimes I think in the academy we are as tied to productivity as any corporation or business. But what if we had time just to be, and to be with others, in ways that felt restorative, even if we didn't 'learn' something specific?" For Genevieve, reconnecting with peers and faculty in less-structured activities that focus more on creating social connections than producing something could help programs better communicate and support GI wellbeing.

Alex

In her responses to the survey and participation in the PAR sessions, Alex was quick to point out the existing trope of graduate student illbeing. In line with the findings of Osorio et al. (2021), Alex indicated that the requirements of her GI position were unrealistic:

I think that graduate students are expected to not be well while they are graduate students. I don't think it's realistic to be taking several classes, working on independent research, and teaching 45 students, do all of those things well, and also prioritize ourselves over that work.

For her, these unrealistic expectations are particularly concerning within the context of stagnant GI stipends that have not reflected the recent drastic increases in cost of living. While perhaps a constraint of participating in the PAR group with representatives of writing program, Alex frames the issue of grad student illbeing as an issue in academic culture broadly: "I think that academia culture expects graduate students to just survive 'the grind."" With all of these factors, she believes that it is very difficult for GIs to be well.

One theme that Alex came back to a number of times was if and how GIs can say "no." Concerned about high workloads, coupled with the high emotional labor of tending to her undergraduate students' wellbeing, she thought that GIs needed to be taught and modelled different strategies for saying "no." Alex recognizes how power dynamics between professors/GIs/undergraduate students play a role in her understanding of when she can say "no" and to whom; as a result, those power dynamics affect her wellbeing. For example, in discussing how GIs can practice self-care by not engaging too deeply in their undergraduate students' mental health concerns, Alex commented, "As a grad student, it can be hard to say no to a professor who has far more power than you; as a grad instructor it can be difficult to say no to your own students." In this comment, she describes how saying "no" is difficult for her in both her role as student and as instructor. As a group, we discussed the importance of positionality and how GIs' dual role as both student and instructor often complicate that positionality and perceived

power. Importantly, the GIs' perceptions of their positionality, privilege, and power (Walton et al., 2019) would come to weigh on their decisions about what they were capable of communicating in terms of wellness and how.

Building on and dialoguing with these individuals' contributions, the PAR group developed a programmatic intervention to GI wellbeing, which was enacted during their last PAR session.

Intervention at GI Orientation

To enact their understanding programmatic approaches to communicating GI wellbeing, the PAR group decided to create and implement a presentation to the incoming GI cohort. The content of the intervention reflects the group's understanding on how programs can best communicate wellbeing. The rhetorical decisions about who, what, where, when, why, and how to communicate wellness to the new GIs give us important insights into the design of wellness communication.

When: Every year the WPA organizes and implements a one-week, 40-hour faculty development orientation that helps new GIs to understand and prepare for their role as graduate instructors. The orientation takes place the week before the start of the fall semester, usually mid-August. The exact day and time of the presentation (Wednesday from 11:00AM-12:00PM) was mostly determined by availability in the orientation schedule; so, rather than collaboratively decided as the best day and time within the orientation, the day and time was decided by the WPA and then presented to the group for approval.

The timing of this orientation (the week before school starts), the length of the orientation (with scheduled activities from 9-4 most every day), and the content of the orientation (which ranges from lesson planning, to introductions to pedagogy, to accessibility, and much more) lead many GIs to feel that GI orientation is a very stressful event. For example, Alex, in discussing the content of the intervention emphasized that we needed solid closure to our presentation because "It is a stressful, full week." Yet, this was the timing that the group determined most effective for an intervention. Orientation is often the GIs' first interactions with the department in their new role as GIs, and the group thought it important that wellbeing be *explicitly* addressed among those first interactions.

Where: Aside from room changes for lunch or short break-out sessions, GI orientation is held in one classroom in the English department building. The PAR group intervention was held in the same classroom where the GIs had been participating in the rest of the orientation, in one of the English department classrooms. Although we had no explicit discussions about where the PAR group participants would position themselves, the three participants sat in desks at the front of the room near the board where the PowerPoint was projected. Author 1 sat behind the computer also at the front of the room, and the WPA sat in the back of the room among the new GIs. The new GIs were seated in desks that were in no particular order but that all faced the front of the room. Each of the PAR group members, including the researchers, positioned themselves as standing at the front of the room facing the new GIs during their presentation.

Rather than at a local hang out or more programmatically 'neutral' space, the intervention was held in the English department building. For a programmatic intervention, this space might be apt for demonstrating that wellbeing literally has a place in the English department. That said, it can also bring with it institutional

understandings of how to operate and 'be' in that space, as observed by the participants naturally positioning themselves separate from and in front of the new GIs.

Being in-person was also a large consideration for the PAR group, all of whom had spent a large part of their graduate education in the wake of COVID-19 and the frequent transition of GI events to virtual spaces. Alex, for example, described her desire for programmatic events to return to in-person delivery and how neoliberal concepts of productivity weigh on that desire. In reflecting on the writing program's last professional development event, which was the first one held in-person in almost two years, Alex said, "I felt like I was entering a community. When I enter Zoom, I feel like I'm starting a meeting; I have to be productive. Whereas in person doesn't have that effect." The group's strong agreement with this comment helped lead to the decision for an in-person intervention.

Who. The intervention was presented to a group of 11 new GIs, the entire incoming GI cohort of that academic year. All of the PAR group participants and the researchers participated in presenting the intervention. Each of the topics were divided up and tasked to a particular person or pair of persons. Most often, the topics that each person presented aligned with their interests and their themes of discussion throughout the study. For example, Josephina created content that attempted to form social relationships between participants, and Alex tapped into the trope of graduate student illbeing. The researchers were not sure if and how they should participate in the intervention, but as the content of the intervention was developed, it became clear that their participation was encouraged and necessary. As mentioned in the methodology section, while our original study design involved the participants engaging in scholarship on graduate student wellbeing, the researchers ended up summarizing much of that research to save participants' time and energy. As such, researcher 1 was the person who had done the most research and had the deepest understanding of current academic scholarship on GI wellbeing. The group thought that this information was important to present to the new GIs and considered that researcher 1's familiarity with that scholarship made them the best candidate to present that section. Additionally, the group determined that the participation of researcher 2, as WPA, was invaluable in communicating the program's commitment to GI wellbeing.

What. The PAR group designed a one-hour intervention with an accompanying PowerPoint made up of 13 slides. The content of this intervention can be understood as the group's collaborative understanding of how to best communicate wellbeing to GIs. To begin, Josephina and Alex asked the new GIs to list adjectives that come to mind when they think of graduate students. The list included: busy, stressed, burned out, underpaid, scattered, frustrated, (emotionally and academically) intelligent, creative, tired, romantic(ized). At after the first six responses, one of the new GIs recognized that all of their answers were very negative and prompted the group to consider positive aspects of being a GI. In this activity, the group established prior knowledge about what it means to be a GI.

After creating this list to get an understanding of the new GIs concepts of living as a grad student, Alex and Josephina presented memes (Figures 1 and 2) that depict the stress and physical anguish of being a graduate student, identifying a trope of graduate student ill-being. As indicated by the list of adjectives created by the group,

and the chuckles in response to the memes, even as not-even-started-the-first-day-of-school GIs, the group was well familiar with this trope. Alex, who had meditated on the theme of graduate student illbeing many times during the study, led the development of this portion of the intervention. This part of the intervention taps into cultural understandings of the graduate student experience, making explicit and analyzing what are often tacit conceptions about what being a graduate student entails. By taking a moment to address and assess what is really getting communicated (and normalized) in these memes, the GIs start to recognize the discourse that currently surrounds GI wellbeing.

someone: "maybe i should do a PhD"

current grad students:



Figure 1. Meme used to present the trope of graduate student illbeing.



Figure 2. Meme used to present the trope of graduate student illbeing.

With this baseline understanding of popular rhetorics surrounding graduate student illbeing, Josephina and Alex then prompted the new GIs to answer the following questions: "What is wellbeing and what role do departments and programs play in supporting GI wellbeing?" These were variations of questions that the researchers had asked the participants directly in the survey. We understand that those questions were useful enough in encouraging the PAR group's reflections on wellbeing that the group felt they were adequate to present to the new GIs as well. By asking these openended questions and engaging in dialogue with the new GIs, the PAR group continues the work of developing collaborative understandings of the concept of GI wellbeing with the new GIs: they offer the new GIs an opportunity to participate in and collaborate on a programmatic understanding of wellbeing and the program's role in that wellbeing.

After a 5-minute discussion on those open-ended questions, researcher 1 provided the new GIs with a brief overview of recent scholarship related to GI wellness, including definitions of wellbeing and trends in graduate student illbeing. Researcher 1 is the person who found the articles and information that we discussed in the PAR groups and had done previous research on GI wellbeing. The group thought that synthesizing researcher 1's understanding of current scholarship on the topic would be useful for the intended audience. There were two important changes that research 1 made to presenting that information, though, based on their participation with the PAR group. (1) After presented existing definitions of wellbeing, like that of the WHO (cited in Hurd & Singh, 2020), researcher 1 added the caveat that definitions of wellbeing might assume normativity, potentially excluding folks with some mental disabilities like depression and anxiety. (2) While programs and institutions play an important role in effective interventions to support graduate student wellbeing, individuals have agency in their own wellbeing. These changes better reflect the group's perception of wellbeing rather than simply reiterating existing scholarship on the topic. The decision to include this information in the intervention was based on the group's understanding that engaging with academic scholarship around the ideas and terms related to GI wellbeing gave GIs a useful context and vocabulary for interrogating their own program's approach to GI wellbeing.

In the next part of the intervention, researcher 2 presented wellbeing resources available to GIs and what actions the writing program had already taken with the objective of supporting GI wellbeing, like re-designing first-year writing courses to involve less grading. The group insisted that researcher 2, as the WPA, present this information to demonstrate that there is existing programmatic support for GI wellbeing. After engaging in our PAR sessions, the group also included a caveat to this discussion that while the program is doing different things to support GI wellbeing, not all interventions will work or will work as effectively for all GIs.

Genevieve led the next section of the intervention, which prompted GIs to consider what kinds of questions they might ask to support their wellbeing, who they might ask those questions to, and how they might ask those questions. Particularly in the 2nd PAR session, the group talked about how difficult it can be to navigate the GI experience, for example when working with faculty, choosing committee members, or engaging undergraduate students, particularly given the dual identities of student-faculty member that GIs hold. The group recognized that we could not know all of the questions that new GIs might have, but we could identify groups of questions and model how to ask some kinds of questions. At

this point, the new GIs were directed to an existing programmatic document that indicates who GIs can contact with different kinds of questions (e.g., pedagogical questions should be directed at the WPA; questions about degree completion should be directed at the DGS; etc.).

From there, the PAR group split the new GIs into small groups for discussion. Each PAR group participant participated in one of the small groups so that the new GIs could ask questions or bring up a topic of conversation. The group thought these small groups would be less intimidating for some new GIs and give them the chance to ask the PAR group more specific questions related to GI wellbeing. Additionally, it provided the setting for new GIs to meet and get to know GIs with more experience in the program, which was important for the PAR group's goal of facilitating personal connections between GIs.

Finally, reflecting one of the PAR group's understandings that programs can help grad students form social circles, and that individuals maintain agency in their own wellbeing even amid programmatic interventions, the orientation ended with a gettingto-know-you activity where the GIs drew pictures about what things they do to support their wellbeing. After drawing, the GIs moved around the room to look at each other's pictures. This activity reflected two of the group's understandings: 1) The writing program could and should help GIs develop social communities, but it should not force them into doing so. By having students draw activities that are important to them, and allowing the opportunity for peers to observe those drawings, the program facilitated peer connections by allowing GIs to recognize common interests among themselves. In this way, the program can facilitate social connections without forcing social events and activities on to the already full schedules of GIs. 2) As highly influenced by Josephina, this activity demonstrated how individual approaches and agency related to well-being can be encouraged even within programmatic interventions; that is, while rejecting the neo-liberal assumption that wellness is an entirely individual endeavor, programs can still make space for individuals to develop their own wellbeing.

CONCLUSION

While Derkatch (2018) rightfully has critiqued rhetorics of wellness that require individuals to continually improve themselves to be "well," we argue that programs should continually monitor and support wellbeing. We must recognize the role that institutions and programs play in the wellbeing of faculty and revise institutional and programmatic communication about wellbeing in light of that recognition. In this paper, we have provided a PAR model to collaboratively engage in conversations of wellbeing with graduate instructors. In foregrounding the structural care of graduate students, we ask programs to replace rhetorics of individual responsibility with communication practices that actively promote and support both academic progress and graduate instructor wellbeing. This is not to ensure wellbeing or to claim that we have "fixed" wellbeing for all graduate students at all times. Rather, it is to recognize that programs have a responsibility for the wellbeing of their graduate students; simultaneously, programs should also humbly collaborate as partners with graduate students in working toward wellbeing. However, we recognize the tension of working against neoliberalism from within a neoliberal institution like higher education. While working toward the greater wellbeing of graduate students may result in gains for the institution (for example, through better retention and graduation rates), benefiting

the institution was not our main objective with this study. Instead, our objective was to support the humanity and wellness of the people in our program, including ourselves. In this case, authors 1 and 2 took on the additional work of developing and implementing this study, but our goal was not simply a permanent increase in our individual workloads. Rather, we hope that by starting more dialogues about the role programs play in wellbeing, and through research methods like PAR, we can encourage the formation of larger coalitions of actors who can take action to mediate graduate student illbeing.

As a PAR study designed to foreground the wellbeing of graduate students in our local context, we do not pretend that our study is necessarily generalizable to all contexts. However, we believe our model of developing programmatic approaches to communicating wellbeing, our understanding of the need to foster wellbeing in a subset of faculty that is often marginalized, and our emphasis on foregrounding wellbeing in our PAR study design can be applied to multiple programs. Furthermore, our PAR group's decisions about when, where, how, and why to communicate wellbeing to GIs can inform future work and research related to communicating wellness in programs.

Walton et al. (2019) offered technical communicators committed to social justice a heuristic to review our model and ongoing work. Walton et al. have urged all technical communicators to recognize, reveal, and reject injustices-and replace those "unjust and oppressive practices with intersectional, coalition-led practices" (p. 134). In engaging in a PAR project on wellbeing, we have strived to recognize, reveal, and reject structural factors that impede or harm wellbeing, while providing suggestions on how to replace those injustices with communication practices that foreground graduate student wellbeing. Importantly, the communicative strategies presented here are limited to what the graduate students participating in our study believed was within their power to enact. Most of their strategies focused on revealing the injustice of graduate student illbeing to incoming generations of students rather than rejecting or replacing the practices that they understood to harm their wellbeing. From the results of our study, we offer five takeaways from our project that we hope are valuable as other graduate programs attend more consciously to their own graduate instructor wellbeing:

Research methodologies should adapt in order to foreground wellbeing. This was our most unexpected takeaway from the project. PAR foregrounds community engagement, but PAR fails if the wellbeing of the participants is not considered. If graduate programs are striving to communicate wellbeing, we need to do so not only through our programs, but also through our research designs, methodologies, and methods, both qualitative and quantitative. In our study, that meant changing the language of our emails, reducing the workload of participation, and re-inventing the product of our research.

Productive conversations about wellbeing can start by acknowledging and validating the lived experience of graduate instructors. The GIs in our study began their intervention by connecting to the tropes and experiences that surround graduate student life. They used a medium that was familiar and approachable to GIs—memes. While making moves toward more equitable, supportive programs is our objective, we must first stop and take stock of where we are now. Importantly, graduate students themselves need to be involved in that process of taking stock.

Students want to be involved in programmatic processes and procedures that support their wellbeing. During this study, we had to re-invent the product of our research from a written strategic plan for how to communicate wellbeing in grad programs to a GI-led intervention into the wellbeing of an incoming GI cohort. The participants of the study wanted to effect immediate change rather than wait for the often slow process of writing, approving, and disseminating policies. To support GI wellbeing, programs can identify ways in which they could more actively include (and compensate!) GIs in the design of their programs.

Facilitating (but not requiring) non-productive social interaction among grad students can support GI wellbeing. Productivity was a term that was often brought up and criticized in our PAR sessions for its perceived value in the program and its insistence on constant action. The GIs in our study insisted that institutional pauses and moments to connect with other graduate students were an important part of their wellbeing. In their intervention, that meant dedicating 10 minutes to social connections at the end. Programs can consider how they define productivity and how to integrate opportunities for students to connect with other students and with faculty without GIs feeling the need to 'produce' something at all programmatic events

The work is never fully done, but continues. In following Walton et al. (2019), technical communicators and program administrators need to reveal and replace injustices, and continuously reflect on what might be working and what injustices still need to be addressed. We urge other programs committed to wellbeing to consider how they, too, might question neoliberal rhetorics with programmatic approaches that better support graduate instructor wellbeing as part of larger social justice efforts, even within neoliberal institutions like higher education. While this takeaway might initially seem at odds with our previous critique of the neoliberal value of action, we frame this takeaway as a reminder that social justice and equity work can never be done, as injustice and inequity constantly shifts and takes new forms. We believe that by opening dialogue, reconsidering our communicative strategies, and revealing injustice, we can challenge the neoliberal institutions we are part of. To do this, we need coalitions of people and programs so that the responsibility for wellbeing does not fall solely on the shoulders of individuals like WPAs and graduate students. As we make this call for ongoing work, we are critically aware that we also need to continually recognize, reveal, reject, and replace injustices that negatively affect wellbeing. Our work of challenging neoliberal structures is also ongoing and never complete.

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ABOUT THE AUTHORS

- Sam Clem (she/they) is a PhD candidate in Technical Communication and Rhetoric at Utah State University. Their professional interests focus on the intersections of language, identity, and localized knowledge-making, particularly as they relate to technical editing and faculty development.
- Beth Buyserie (she/her) is the Director of Composition and Assistant Professor of English at Utah State University. She draws on queer theory and critical race theory to examine the intersections of language, knowledge, and power in writing program administration, composition pedagogies, and professional learning.

Constructing Structured Content on WordPress: Emerging Paradigms in Web Content Management

Daniel Carter Texas State University dcarter@txstate.edu

ABSTRACT

Web content management systems (WCMSs) are widely used technologies that, like previous writing tools, shape how people think about and create documents. Despite their influence and ubiquity, however, WCMSs have received exceedingly little attention from scholars interested in social aspects of technology. I begin to address this gap by analyzing the development of WordPress's content creation experience through the lens of structured content. Based on this analysis, I contribute to ongoing discussions of content management by first suggesting that concepts such as structured content need to be understood as the contingent products of technical lineages and technical and social relationships and by second drawing attention to emerging paradigms of content creation, such as the merging of content creation and arrangement and the conflation of visual and abstract representations of content objects.

CCS Concepts

Information Systems

Keywords

Content management, Content strategy, Structured content

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INTRODUCTION

Recent industry data suggest that more than half of all websites are created using an identifiable web content management system (WCMS) (Historical Trends in the Usage Statistics of Content Management Systems, 2022). Further, as of February, 2022 sites built using the WordPress WCMS are estimated to account for roughly 43% of all websites. As such, WCMSs, and WordPress specifically, play an important role in shaping how communicative documents on the web are created. However, like previous writing technologies such as the typewriter (Kittler, 1999) and the word processer (Kirschenbaum, 2016), WCMSs are not neutral; they place constraints on content, provide specific affordances and—especially when adopted at scale—put forward new paradigms that become standardized through widespread use.

More than specific features, these paradigms can outlive any particular implementation in a technical system. For example, regardless of the interface through which it is implemented, the merging of writing and editing represented by the word processor was, as many scholars have noted, a profound shift in the way we think about composition (e.g., Poster, 1990; Sullivan, 2013). One of the reasons that current WCMSs are particularly compelling objects of study is their ongoing negotiation of such writing paradigms. In the following sections, for example, I discuss the transition away from previously ubiquitous what-you-see-is-what-you-get (WYSIWYG) editors to emerging paradigms centered on the concept of moveable, standardized blocks. Studying these paradigms offers the chance to better understand contemporary communication on the web, as well as to better prepare students to understand and think reflectively about their own content creation.

Despite their importance in shaping communication, specific WCMSs such as WordPress have received strikingly little attention from scholars working in academic disciplines interested in the intersections of technology and communication, although scholars within the field of technical communication have discussed, more generally, content management (e.g., Batova, 2014; McCarthy et al., 2011) and content management systems (e.g., Pope, 2011), and practitioners in this field have led discussions of related concepts

such as structured content and component content management.

However, without critical analysis of specific software systems, it is difficult to identify salient aspects of WCMSs or to understand the relevance of specific moments in their development. More broadly, there is a lack of academic theory related to many concepts that are core to understanding WCMSs. Searches in academic databases for terms such as inline editing and WYSIWYG editing, both of which become relevant in the history presented below, return very few results, the majority of which are descriptions of specialized technical systems (e.g., Auer et al., 2006; Khalili et al., 2012).

To address these challenges, in this article, I follow software studies scholars in conceptualizing software as a heterogenous mixture that, as Mackenzie (2006) noted, "solidifies at some points, but vaporizes at others," sometimes foregrounding itself as a material object comprised of code and work practices and at other times fading away to be treated as an abstraction, "something more like a social convention or rule" (p. 2). Indeed, researchers have pointed to all of these aspects, with scholars focusing attention on the materiality of disks (Kirschenbaum, 2008) and databases (Dourish, 2014), as well as elements of the production process such as "white papers, engineering specs, marketing reports, conversations and collaborations, intuitive insights and professionalized expertise, venture capital (in other words, money), late nights (in other words, labor), Mountain Dew, and espresso" (Kirschenbaum, 2004).

As Gehl and Bell (2012) argued, software engineering is the work of bringing into association and holding together such a collection of both technical and discursive elements. Their analysis of the construction and subsequent dissolution of the "Windows Vista Experience," for example, relied methodologically on tracing the associations of objects as diverse as Intel chipsets, interface elements, retailers and even stickers adhered to computers. Elsewhere, Gehl (2014) used the metaphor of reverse engineering to describe this movement from the observation of software objects back to the sociotechnical configurations through which they were constructed. Reverse engineering draws on a variety of data sources (including interface designs as well as "white papers, user manuals, press releases, blog posts, and news stories") to connect specific aspects of technical systems to the abstract ideas and goals of those who created them; as such, the methodology can be used to critique systems but also to develop genealogies that reveal how technologies and concepts are connected by those preceding them (pp. 10-12).

Following these methodological patterns, in this critical essay, I use the concept of structured content as a lens through which to think about the content creation paradigms put forward by contemporary WCMSs. Structured content is a core concern that has been consistently articulated by technical communication scholars and practitioners; at the same time, as the background below indicates, the unique features and requirements of the web make the implementation of structured content in that context a non-trivial issue. To understand how this issue has been negotiated, I focus on a specific WCMS, WordPress, and look to professional literature and commentary as well as to technical documentation, developer discussions, prototypes and observed interfaces to trace the associations that have shaped the development of the system's approach to content creation.

This critical analysis contributes to discussions within the technical communication community by highlighting WCMSs as a relatively understudied class of objects and situating them within the existing

literature on structured content. This work is needed for two reasons. First, it establishes within the academic literature a vocabulary and history that is, for the most part, otherwise lacking and that can serve as the basis for future work on related topics. Second, it identifies emerging paradigms such as the merging of content creation with arrangement and the conflation of visual and abstract representations of content objects. As I argue in the conclusion, these paradigms suggest both directions for future research as well as opportunities for instructors to better prepare students to understand and communicate using contemporary WCMSs.

BACKGROUND

In this section, I begin by defining structured content and reviewing how that concept has been reflected in and shaped by discussions specific to publishing on the web. I then provide an overview of how the concept of structured content has been implemented within technical systems, focusing on standards based on Extensible Markup Language (XML) and on various classes of Content Management Systems (CMSs). This section establishes a set of concerns such as the granularity of content components and the labor and expertise required to customize content models that are used to guide the subsequent analysis of how WordPress's content creation experience has developed over time.

Defining Structured Content

Broadly, structured content refers to content that adheres to predefined rules related to semantics and structure. This implies that content is broken into components and that these components have meanings and relationships to each other that are explicitly defined in a way that allows for content to be manipulated, generally using software, in order to meet business requirements (Day, 2014). Related concepts include content types (Colman, 2014), which define the components that make up a specific kind of content and the structural rules for how they relate, and content models (Gibbon, 2014), which describe the content types and relationships that exist within an organization or in relation to a project.

For example, recipes are a common type of content produced by media organizations focused on food and cooking. Creating a recipe adhering to the concept of structured content would entail first creating a set of rules related to the pieces of a recipe (e.g., a list of ingredients, a series of steps and additional information such as the time needed to complete cooking) and their relationships (e.g., the list of ingredients must precede the series of steps).

As Hart-Davidson (2005) argued, within the technical communication community, the rationale for producing structured content (or for pursuing "object-oriented publishing") has most often been ascribed to the need for single sourcing, or the use of one repository from which content can be published in multiple formats or on multiple platforms. Baker (2013) similarly cited single sourcing as a primary motivator for adopting structured content and points to a canonical technical communication context, product help manuals. Single sourcing increases the efficiency of producing manuals in multiple formats such as PDF, printed manual and webpage by facilitating the reuse of text; however, these efficiencies are most realizable at large organizations (Hart-Davidson, 2005, p. 28).

In addition to facilitating content reuse, however, structured content also supports the technical communication goal of transforming content to increase its value for specific audiences. Drawing on concepts from the user experience field, Hart-Davidson (2005,

p. 29) argued that transforming content in response to audience characteristics is especially important on the web, where content is expected to be dynamic, customized, granular, linked and interactive. Structured content facilitates these expectations by allowing the components that comprise documents to be rearranged in response to an audience's situation, and Hart-Davidson gave the example of an FAQ system that could dynamically display different answers to questions in response to the audience's professional role.

The sharp rise, in the early 2010s, in the use of smartphones to access the web (Pew Research Center, 2021) further emphasized the need for content transformation, as device characteristics such as screen size and touch capabilities became increasingly diverse. The rise of mobile browsing underscored the need for content transformation—as McGrane (2012) argued, to manage experiences across diverse devices, content must not only respond to the size of the devices but must be delivered by a system that can adapt and reconfigure content. Adaptive content, McGrane argued:

- is created with the goal of reusability.
- is structured in a way that allows it to be displayed differently on different devices.
- is created independently of information about its presentation.
- includes metadata that allows content to be queried and displayed optimally for different contexts.
- is created through an interface that encourages users to focus on creating individual content elements that will be combined into pages rather than on creating full pages (p. 46).

Influential early examples of the adaptive content paradigm emerged from large publishing companies, where developers argued that the problem of multiple device formats was not only related to content presentation but also, and primarily, to content creation and storage (Goodman, 2013). The most frequently referenced example of this is NPR's Create Once, Publish Everywhere (COPE) system (Jacobson, 2008, 2009a, 2009b, 2009c, 2009d). As with McGrane's description of adaptive content, core principals of COPE include separating content from information about its presentation and dividing content into discrete components that can be recombined as needed. For example, Daniel Jacobson, Director of Application Development for NPR at the time of COPE's creation, described the need to store information about images separately from information about the stories that might include those images (Jacobson, 2009c). This decision relates to both presentation and reuse: storing images within the article content creates problems related to displaying that content on different devices, and it also prevents the creation of other content types, such as lists of recent images, which were desirable for the organization.

McGrane (2017; see also An Event Apart, 2016) articulated the critical distinction between adaptive and non-adaptive content when she discussed the difference between what she refers to as "blobs" and "chunks." Blobs, in McGrane's terminology, are pieces of content that are differentiated only by their appearance. The body field of a blog post is typically an example of blob-like content, in that it might contain a recipe or similar, semantically meaningful content, but the meaning of that content is only captured through visual features such as labels or formatting. As McGrane argued:

The challenge here, the problem here, is that the styling information that this content creator embedded in this blob, that has meaning attached to it. Sometimes developers will say "Oh yeah, you've got to go in and strip all that out when you want to take it to another platform." Strip all that out? That content creator intended something when she took that table of contents box and floated it to the right. She wanted that to convey that this was an aside or some sort of information that was set off from the document. But unfortunately the only tools that she had to communicate that came through what she wanted that document to look like rather than what that actually meant. (An Event Apart, 2016)

Although McGrane's articulation of adaptive content, for the most part, has repeated core tenets of structured content that had been discussed previously, she has added to discussions of structured content a focus on CMSs and, specifically, on the user interfaces and workflows that content creators use (e.g., McGrane, 2013), arguing that choices related to the tools or techniques with which structured or adaptive content is implemented are not "purely technology decisions [...] purely the province of IT" (Zeldman, 2013). If CMSs are not easy to use and do not provide workflows that mirror content creators' mental models, as she has suggested, the value of structured content cannot be realized.

Implementing Structured Content

Structured content is most commonly stored using either 1) XML or a standard based on XML or 2) named fields in a database (Day, 2014). Most discussions of structured content focus on the former and specifically on the Darwin Information Typing Architecture (DITA). DITA was created by employees at IBM and designed to support the publication of technical documentation such as product manuals and help content (Day et al., 2005). Within the standard DITA architecture, content is broken into topics that are declared as either concepts, tasks or references. Topics are then gathered into documents for specific delivery contexts, supporting goals discussed above such as reuse and transformation.

As Clark (2016) noted, the structure entailed by DITA often aligns with the work of technical communicators but fails to align that work with broader organizational goals (p. 8). Indeed, the creators of DITA recognize that a universal structure is not feasible, and the standard can be modified or extended to allow for the creation of more specialized content types such as recipes or encyclopedia entries (Day et al., 2005). However, such modification is labor intensive, and though DITA is the default in many enterprise contexts, it has been criticized for its complexity and difficulty of use even at the enterprise level (see, for example, the emphasis on DITA in Rockley and Cooper (2012), as well as criticisms in the same).

The use of DITA has been particularly questioned in relation to publishing on the web. As with the articulation of adaptive content, discussion of DITA on the web have been spurred by the rise of mobile browsing and the uptake of responsive design, which reduces the need for separate mobile interfaces but highlights the need for content transformation.

Johnson (2013) argued that DITA presents challenges on the web when it is necessary to publish in formats that diverge from standard such as Microsoft Compiled HTML Help. Among these challenges Johnson lists the need for special expertise (and associated labor cost) in order to transform DITA or other XML-based content into

a custom web layout; the growth of responsive web layouts that reduce the need for a separate mobile interface; and the tendency of the web to serve as a primary, always-up-to-date source of information that replaces other formats such as eBooks and PDFs. Broadly, Johnson argued that the web context reduces the need for a conventional single sourcing model in which a CMS stores content in a format such as DITA and then routes that content to multiple outputs. Instead, Johnson advocates the use of WCMSs such as WordPress that use database fields to structure content without requiring the additional step of translating from DITA or another standard.

Subsequent debate questions some of Johnson's points and elaborates on ways that publishing on the web entails distinct requirements. For example, though O'Keefe (2013) rejected the claims that publication formats such as print and PDF are less relevant for organizations that publish on the web and that the costs of translating content from DITA or another standard into customized web templates is prohibitively expensive, it is also clear that her models are large enterprises such as hardware manufacturers and pharmaceutical companies that have different needs and capacities than smaller organizations.

Baker (2013) went beyond the challenges of implementing a standard such as DITA on the web and focused instead on the diversity of web content and the need for a structured content model to include content types that reflect a site's topic area. For structured content to achieve its full potential on the web, Baker argued, it's important for authors to be able to create content types such as recipes or car reviews that are broken into chunks that add meaning and value to a website's content. Specifically, Baker focused on the inadequacy of content types such as concepts, tasks and references—which are standard to DITA—to express topical content in ways that would allow for unrealized benefits of structured content such as automatically creating links (e.g., Baker, 2011).

Regardless of whether structured content is stored in an XML-based format such as DITA or in named database fields, content creators almost exclusively use software tools to create, edit and arrange such content. These tools include structured editors, which are similar to text editors or word processors but understand and enforce the structural rules defined in a standard such as DITA, and also CMSs that provide similar functionality but also capabilities such as segmentation, versioning and access control (see Rockley & Cooper, 2012, pp. 284–293).

CMSs are generally classified as component CMSs, enterprise CMSs and WCMSs, with the latter two focused, respectively, on the needs of large organizations with many departments and on managing content intended primarily for the web (Rockley & Cooper, 2012; Urbina, 2014). Component CMSs differ from other CMSs in that they are oriented to components more granular than the page or the document, and, as Rockley and Cooper (2012) noted, this means that some WCMSs function as web component content management systems (WCCMSs), whereas others that do not separate content at a level more granular than the page would be classified as web content management systems (WCMSs). However, the authors also noted that the developers of most WCCMSs tend to refer to their products as WCMSs (p. 297).

The separation of content from presentation is central to both discussions of WCMSs and structured content more generally. Though in the broad context of web development, this separation generally refers to the separation of content, stored as HTML, and information related to the visual display of content, stored as Cascading Style Sheets (CSS), when used in the context of WCMSs, it can take on several meanings, and the divergence of these begins to indicate tensions around structured content that will be the focus of the following section.

As Clark (2007, p. 45) argued, what is meant by separating content from presentation is contingent on how content is conceptualized. One use of the term sees content as a complete unit or document (such as a blog post) that is placed within a presentation frame that includes site navigation and other components that appear on each page of a site. Common WCMS features such as the ability to change a site's theme, for example, support this conception of separating content from presentation by allowing users to modify the frame around a piece of content. A notable development in relation to this version of separating content from presentation was the what-you-see-is-what-you-get (WYSIWYG) editor, which gave content creators formatting tools similar to those found in word processors and thus allowed them to visually style the content that was stored at the page or document level.

The competing conception of content that Clark (2007, p. 45) described aligns more closely with the goals of structured content, in that content is not seen as a complete, indivisible unit but is instead divided into components that align with the semantic rules of a preexisting model. Presentation, in this context, is more than just a frame around content and extends to decisions about how the components of content are arranged to form documents. As Clark argued, this arrangement allows for the creation of new document types that are responsive to organizational needs, a value that echoes Baker's (2013) highlighting of the web's need for more topically specific content models.

The above discussion draws a clear distinction between W \CMSs that are oriented to a complete document and those that support a component focus and thus advance the goals associated with structured content or adaptive content. However, the following section presents an analysis of the development of WordPress's content creation experience in order to question this easy separation by exploring ways that the structuring of content is contingent on the complex relationships between technical constraints and social values. By tracing the associations that come to constitute various implementations of structured content on WordPress, I identify trends in content management that do not always align with the scholars' and practitioners' descriptions of structured content but that, due to the ubiquity of WordPress, merit further attention.

CONSTRUCTING STRUCTURE IN WORDPRESS

In this section, I review and analyze the ways that various conceptions of structured content have been implemented within WordPress. In building this review and deciding which moments and features to include, I look primarily to the WordPress documentation and discussions among the designers and developers who create roadmaps and implement new features, as well as blog posts and presentations from developers who use WordPress and have discussed its content creation capabilities in ways that most clearly align with the above discussions of structured content.

A common theme throughout the following sections is that, though WordPress has supported various techniques for breaking content into components that are more granular than the page or the document, these features have often been restricted to advanced users with programming abilities or have been supported through an ecosystem of third-party plugins that extend the system's default functionality. The following sections, for example, trace a history that begins with core features that meet many of the goals of structured content but are only available to advanced users. As I describe, third-party plugins were developed to give lessskilled users access to more flexible design options; however, the paradigms associated with these extensions often move away from the goals of structured content, and the subsequent developments continue to negotiate between these two poles by shifting how content is conceptualized and who is able to access specific content creating and editing function. Tracing these associations and the attendant discussions of how and for whom structured content is defined allows for a broader discussion, in the following section, of what it means to create and edit web content and how this meaning might change over time.

Custom Post Types and Page Builders: Structured Content for Advanced Users

The earliest way that structured content was implemented in WordPress was through the use of custom content types, which became accessible to developers in 2010 (Register post type() | Function, n.d.), and custom meta fields, accessible in some form since 2007 (Add post meta() | Function, n.d.). In many ways, these features strongly resemble the descriptions of structured content presented above, as they extended the WCMS's base functionality to allow authors to create content types that had associated components. In this way, custom content types and meta fields allowed WordPress users to move away from creating what McGrane (2016) referred to a "blobs" and to instead to produce granular content pieces that typically have no presentation information attached to them. For example, if a website published reviews of albums, a custom review content type might include fields for the creator of the album and the review score, allowing these components to be presented in various ways across the site rather than being restricted to presentation only as part of a complete page or document.

As Kräftner (2020) argued, a major drawback to the use of custom post types and meta fields was the need for web developers to create these features and modify templates to display the associated structured content. Where large organizations had teams with the skills required to implement these features, for smaller organizations and individuals, the need to write PHP code meant that other paradigms became dominant. Specifically, plugins referred to as page builders became a popular way for authors to increase control over the appearance of their content. Page builder plugins typically replace the standard WordPress content creation interface with a drag and drop system that allows users to insert and manipulate predefined content elements such as headings and images but also more complex structures such as columns or callout boxes.

In this way, page builders function as WYSIWYG editors with expanded functionality. Though authors have additional tools to give content the appearance of structure, that content is still stored at the document or page level and in a format that encodes presentation information, preventing the content from being repurposed in the manner associated with structured or adaptive content. For example, the Elementor page builder, which remains popular (*Plugins Categorized as Popular* | *WordPress.Org*, n.d.), currently gives users the ability to insert a price table. Although the

content produced appears structured, in that a product or service is associated with additional information such as price, these associations are not represented within the WCMS in a way that would allow for their manipulation of reuse.

Project Gutenberg: Creating the Experience of Structure

The most radical change to WordPress's functionality, since the WCMS's initial release in 2007, has been the development of Gutenberg, a new editing interface that began development in 2016 and became WordPress's default editing interface in 2018. As Kräftner (2020) argued, the development of Gutenberg was a direct response to the popularity and diversity of page builder plugins (as well as the growing popularity of website builders such as Wix and Squarespace), which were fracturing the core WordPress editing experience. Matias Ventura, the lead architect for Gutenberg, echoed this argument, noting that the growing popularity of page builder plugins signaled a user need and, in some ways, served as a model for the design of WordPress's solution (Gutenberg Times, 2018).

In many ways, Gutenberg functions the same way that page builder plugins do. It replaces the previous WYSIWYG editor with a drag-and-drop interface that allows authors to create and manipulate predefined content elements (referred to as blocks) such as headings, image galleries and columns. As Eaton (2021) argued, these drag-and-drop interfaces—which have become common in many popular WCMSs, including WordPress but also Squarespace and Drupal—"turn the editing experience in to a 'pattern-assembling' or 'block-stacking' experience."

In some ways, this "block-stacking" experience feels more structured than previous WYSIWYG experiences because it treats content elements as granular chunks of content that can, for example, be dragged and repositioned. However, specifically in relation to WordPress, the transition from WYSIWYG to block-based editing must be negotiated within a system that has been developed in accordance with specific values and ways of working. As Ventura (2017a) posted to the project's development blog in relation to the difficulties of making this transition to a more structured experience:

Content in WordPress is, fundamentally, HTML-augmented text; that is to say, it has no inherent data structure. This has been a very important aspect of WordPress and a force for the open web—it speaks to the sense of ownership and freedom WordPress gives you, since it's always easy to get the full content of your publications—yet the lack of structure gets in the way of the goal to treat content as composed from individual pieces.

Ventura's statement indicates the practical ways that the debate over structured and unstructured content plays out within system constraints and in relation to conceptions of use. Consistent with the WYSIWYG paradigm of content creation, WordPress historically stored the entire content of posts and pages as HTML-formatted text in a single database field. This design decision allows authors to create meaning through visual formatting (e.g., by centering the title of a book) rather than by creating explicit structure (e.g., by inputting information into a field for the book title). Because all content essentially has the same structure and

is stored in one database field, the code to generate the site's user interface does not need to change in relation to the kind of content created or its (implicit) structure, in contrast to the more technically challenging solutions involving custom post types and meta fields, described above. The choice also mirrors WordPress's philosophy of "designing for the majority," which promotes a conception of authors as "non-technically minded" and uninterested in complex content modeling or template revision (WordPress, 2018).

When Gutenberg was developed, the design pattern of storing post content within a single database field was preserved in order to ensure content portability and to retain the existing field as a single "source of truth." A core challenge was then how to format the content that would represent blocks—or, as Ventura (2017a) phrased it, how to format HTML in a way such that it can be experienced by authors as having structure without producing code that becomes "gibberish."

The adopted solution stores block content as HTML using specially formatted comments to demarcate blocks and hold relevant attributes as needed. When stored in the database, content takes the form of serialized HTML that remains in a single database field and behaves as an unstructured blob in the sense that blocks cannot be manipulated using conventional relational database operations such as querying for all quotes that are attributed to a specific person. However, during the content creation process, the serialized HTML is parsed into a structured JavaScript Object Notation (JSON) format that does allow blocks to be manipulated as discrete "chunks" of content (see Figure 2). In this view, content authors can, for example, drag blocks into new orders, nest them in hierarchies and change specific attributes.

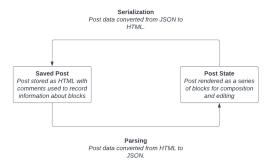


Figure 1. Diagram representing the transformation of block content from serialized HTML stored in a database into a structured tree view that is experienced as structured by a content author using the visual editor.

The WordPress documentation uses the analogy of the printing press to describe this arrangement, comparing the unstructured HTML content to a set page of type and the temporary, JSON-formatted data to the individual metal blocks that are arranged to produce the page (Key Concepts | Block Editor Handbook, n.d.). Though acknowledging the hybrid nature of content as both structured and unstructured, the documentation also makes clear that the system gives these different priorities: "What matters is the printed page, not the arrangement of metal type that produced it. [...] The metal type is just an instrument for publication and editing (but more ephemeral in nature), just like our use of an object tree (e.g. JSON) in the editor" (Key Concepts | Block Editor Handbook, n.d.).

Although Gutenberg was developed in part as an attempt to consolidate an editing experience that was becoming fractured through the use of third-party plugins, reviews have indicated that many users found the new editing experience cumbersome or had established processes that made switching non-trivial ([Gutenberg] Reviews | WordPress.Org, n.d.), and the decision for WordPress to officially support a plugin that restored the previous WYSIWYG editor reenforces the need to consider WCMS content not only through core features but also through associations and relationships (Pendergast, 2018).

Reusable Blocks and Dynamic Blocks: Bringing More Structure to the Gutenberg Editor

Though the decisions behind the core Gutenberg experience produce content that, at times, behaves as granular components and, at other times, as an unstructured blob, existing features and ongoing extensions to WordPress create content that more closely aligns with the ideals of structured content, albeit in ways that are again unevenly available to content authors.

Reusable blocks have been implemented since the original release of Gutenberg and reflect two of the attributes associated with structured content in that they are, by definition, reusable and, to a lesser extent, are created through an interface that privileges the creation of granular components that are combined into pages. Unlike other blocks that are combined to create pages and are stored, as described above, in a single database field, reusable blocks are stored in their own database fields, allowing them to be reused in multiple locations and for changes to be reflected globally (Meadows, 2019). For example, an author might create a reusable newsletter signup block that would be placed in many locations across their site (Bringmann, 2021). Reusable blocks can be edited from within a page where they appear, somewhat deemphasizing their standalone nature, as well as through a separate interface section that, in contrast, brings together all reusable blocks regardless of where they appear on a site.

Another block type, dynamic blocks support the goals of structured content by interacting with information that is not contained within the block. For example, the latest posts block, included in the original Gutenberg release, displays a list of recent posts that will update dynamically. Additional options such as the ability to specify a category for the posts emphasize the role of querying in structured content, as does the more recent addition of a query loop block, which adds additional options for selecting the posts that are dynamically displayed.

Eckman (2018) outlined a more ambitious vision of dynamic blocks, explicitly addressing the Gutenberg editor's retention of a primarily unstructured paradigm. Rather than only accessing default content such as posts, Eckman proposed using dynamic blocks to display structured content that is created as a custom post type and that would contain custom meta attributes. The example given is a block that would display structured album information such as title, creator and cover art within, for example, a post representing an album review. As with reusable blocks, in Eckman's demonstration, editing of the structured album information could take place either within the interface used to create the album review or in a separate view specific to album information. He described this arrangement as an optimal blending of "the editing experience of a blobby system" with the "structured content utility of a chunky system (in terms of how data gets stored and can be reused)." Though it is possible for an experienced developer to implement a system similar to this one, it is still a customized solution that, like the custom post types and meta fields, described above, is for the most part not accessible to individual authors or smaller organizations.

A final extension of WordPress's implementation of block-based editing that includes some aspects of structured content is represented by a set of proposed features related to what is being called full-site editing (*Full Site Editing* | *Block Editor Handbook*, n.d.). In addition to new dynamic blocks such as the query loop block, discussed above, this set of proposed features includes expanding the use of blocks to all areas of a site (such as the header and footer) instead of restricting them to the content areas of posts and pages.

Third-Party Plugins: Negotiating the Need for Customization

The content creation solutions described above are all based on existing or proposed functionality that is part of WordPress's core system. However, with the exception of Eckman's exploration of more advanced dynamic blocks, which require programming expertise and are thus inaccessible to many users, WordPress has implemented only some features typically associated with structured content. Most notably, though the content creation process has been modified to feel less unstructured and some amount of reusability is now foregrounded, content relationships remain difficult to implement in WordPress largely because the WCMS is intended for such diverse uses.

Hane and Atherton (2017), for example, introduced the concept of structured content in relation to construction projects and the engineers responsible for them. Here, the relationship between a project and an engineer is core to what makes content structured, but because such relationships can vary widely and attain substantial complexity, it is clear that any general purpose CMS will require considerable customization in order to represent this kind of content, a challenge which the authors of the DITA standard, for example, also acknowledge (Day et al., 2005).

Several third-party plugins attempt to make possible complex content types and relationships in ways that give less advanced users access to these functionalities. Here, I focus on the Advanced Custom Fields (ACF) plugin in detail because 1) it was released in 2011 (Touesnard, 2021), making it one of the earliest plugins to support structured content and 2) it remains one of the most oftenused plugins with over one million active installations, more than other plugins that currently offer comparable functionality (*Plugins Categorized as Popular | WordPress.Org*, n.d.).

ACF allows users to add meta information to WordPress posts, pages or custom content types. This is similar to the functionality of meta fields, with the exception that ACF provides an interface for creating fields (where WordPress does not, by default, include the ability to create these without writing custom code) and provides functionality specific to different field types, including relationship fields. Although the plugin allows users substantial flexibility in creating content types, designing templates that display the created fields and relationships still requires some programming abilities.

A notable feature of the ACF plugin is its extensibility. There are currently over 170 third-party extensions that integrate with the plugin, with functionality ranging from modifying the user interface or enabling new field types to integrating with additional services and plugins such as the Elementor page builder. Additional plugins provide users with the PHP code to display custom fields

in template files; however, these still require users to have some knowledge of HTML and are likely to only be useful for very simple use cases.

CONTENT CREATION PARADIGMS

In this section, I draw on the concepts related to structured content and the WordPress developments detailed above to discuss emerging content creation paradigms. Though I've argued that, due to its widespread use, WordPress likely plays an outsized role in establishing new ways of working with content, describing these paradigms allows for comparison with other WCMSs and for future explorations of the ways that platforms interact to shape content creation. Specifically, I point here to 1) a merging of processes for creating granular content with processes for arranging that content into documents and 2) a conflation of visual and abstract representations of content objects.

Merging Content Creation and Arrangement

The evolution of WordPress's content creation interfaces described above strongly associates content with the pages on which it appears and suggests that (or reflects the preference that) users will initiate the creation or editing of content objects as part of the same process that they use to arrange content objects to form a document or page. This contrasts with assumptions around structured content, in relation to which users are imagined to conceptualize content objects as existing, in some most meaningful or primary way, as separate from their representations as part of documents, pages or other aggregates. From the conventional structured content perspective, content creators perform two distinct roles: 1) they first create structured content by filling in the various fields related to an object (for example, in NPR's COPE system, by entering meta information associated with a photograph) and 2) they create documents or pages by arranging representations of those objects (for example, by arranging previously created photographs within a news article).

The developments described above challenge this separation of creation from arrangement as both the core WordPress functionality and that provided by many relevant third-party extensions increasingly imagine that content will be created and edited through interfaces that are not specific to individual content objects but instead represent a page composed of multiple objects.

The broad idea that content creators would work within an interface that resembles the frontend of a website is not new; the concept of inline editing grew in popularity between 2000 and 2010 (see Figure 3), for example, as its meaning shifted from the ability to edit within a line of text to the ability to modify web content in place, as the editor navigated the frontend of a website. In an early use of the term in relation to web development, Hoekman (2002) referenced Google's Page Creator (shut down in 2009) and noted that its implementation of inline editing deviated from an established editing paradigm, in which users expect to first leave a page in order to modify its content.

WordPress's current system, however, represents a modification of the previous inline editing paradigm. Most notably, though the current Gutenberg editor does present content in a manner that is visually similar to how it will appear on the frontend of a site, it still maintains a clear separation between an area used to manage the site and the site itself, as experienced by visitors. Further, the

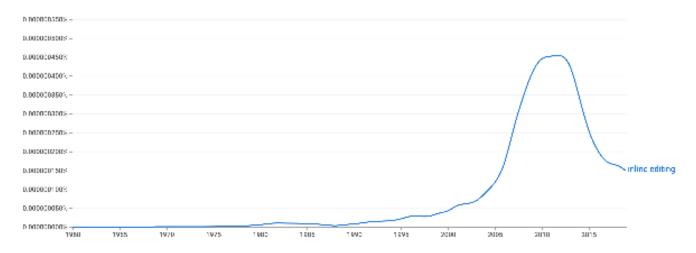


Figure 2. Google ngram results show an increase in usage of the phrase "inline editing" as web usage grew and web publishing gained popularity.

Gutenberg editor at least points toward or makes available the possibility of working toward the structured content paradigm in ways that inline editing, as previously practiced, does not. The potential to create structured content through the same interface that is used to compose such content, for example, is a new challenge that appears unresolved, as it both appears to be a desired user experience (evidenced by Eckman's album review example) and also a site of conceptual confusion for users, as discussed below.

Conflating Visual and Abstract Representations of Content Objects

Although the inline editing paradigm clearly influenced the development of page builder plugins such as Elementor (Pines, 2017), as well as the Gutenberg editor and WordPress's proposed full-site editing functionality, existing features such as the ability to add custom meta information to content and to create dynamic blocks suggest ways that emerging paradigms warrant rethinking as either alternatives to or meaningful extensions of inline editing. Specifically, once the content that is created and edited in place represents a content object composed of structured data (as with Eckman's album review example), the user is, in a much more meaningful sense, presented with a visual representation that stands in for a more complex entity (that could, for example, be represented in multiple ways).

This contrast becomes clear when statements about inline editing are contrasted with those referring to the paradigm of structured content. Williams (2012), writing about the Medium platform's implementation of inline editing, for example, argued that in this paradigm there is nothing to abstract from the visual representation of content (emphasis in original):

As I'm writing this, I see not just a WYSIWYG editor, I see the page I'm going to publish, which looks just like the version you're reading. In fact, it is the version you're reading. There's no layer of abstraction. This is a simple (and old) concept, but I haven't seen it in any other publishing tool—unless you count Google Docs and the like, where you're basically always in editing mode (versus

always in viewing mode). It makes a big difference. Having to go back and forth between your creation tool and your creation is like sculpting by talking.

In these moments of leakage or breakdown, users' mental models are challenged, as the created abstraction actually stands in the way of fixing the problem. Conceptualizing content created in an interface that suggests (as William's statements regarding Medium argue) no meaningful separation between content and its visual representation results in a situation in which users are less able to address problems related to markup or data storage. As Eaton (2012) argued, this mismatch of mental models is especially relevant when thinking about the goals of structured content, which emphasize that content be created in ways that are purposefully not exhausted by any single visual representation (emphasis in original):

If the primary editing interface we present is also the visual design seen by site visitors, we are saying: "This page is what you manage! The things you see on it are the true form of your content." On certain sites, that message is true. But for many, it's a lie: what you're seeing is simply one view of a more complex content element, tailored for a particular page or channel.

Eaton emphasized that, despite ways that block-based editing, and the Gutenberg editor specifically, nod toward the ideals of structured content by foregrounding the chunked nature of content elements, such interfaces also have features that strengthen earlier web content creation paradigms, such as WYSIWYG, which attempt to mimic desktop publishing's mirroring of the composition and editing environment with the final product.

One challenge created by the emerging hybrid paradigm is the difficulty of understanding the scope of content elements. With the description, above, of dynamic blocks that would represent albums, for example, users need to understand that they are editing both a visual representation of content and also a complex object that likely appears in other locations. Developer discussions of WordPress's proposed full-site editing functionality have acknowledged the challenge of communicating scope to users and proposed various solutions (e.g., epiqueras, 2019; mapk, 2020),

including the implementation of different editing modes (Ventura, 2019). However, these negotiations are ongoing and, because the core WordPress functionality does not emphasize custom content types and more advanced dynamic blocks, need to be understood in relation to the broader ecosystem of third-party plugins and competing WCMSs.

CONCLUSION

In the above sections, I first review how structured content has been discussed within the technical communication community, as well as the ways that it has been implemented, largely through component CMSs and XML-based standards such as DITA. I then analyze the ways that WordPress's content creation experience has evolved and argue that attempts to support structured content on the widely used WCMS are, first, contingent on the technical knowledge of users and the staffing resources of organizations and, second, that the meanings of fundamental concepts such as content creation and structure are constructed in relation to technical features such as legacy database structures and also by the complex relationships that surround contemporary technical systems. Based on this analysis, I draw attention to two related, emerging paradigms in web content creation: the merging of content creation with the arrangement of components on a page and the conflation of visual representations of content objects with the structured data that underlies them.

These paradigms warrant attention in large part due to WordPress's ubiquity. With the exception of systems such as web-based email or social media, WordPress is likely one of the most common ways that content creation is experienced on the web, and this is certainly the case for the creation of complex content such as pages that contain text, multimedia and other elements. For technical communication scholars, the paradigms identified here suggest productive avenues for future work that could link established concepts such as structured content with the messy ways that these are implemented in systems and experienced by a large number of users. For example, though the analysis presented here draws primarily on system design and the perspectives of developers who have negotiated content creation, the question of how users experience or understand the paradigms described remains open. A corollary to viewing concepts like structured content as constructed through their implementations within specific technical systems is that communicators' understandings of and experiences of these concepts will be likewise contingent on the systems they use.

For educators, this analysis provides an overview of recent developments that can help guide curriculum decisions. On a basic level, understanding emerging paradigms for content creation, whether they align with the goals of structured content or not, is a core need for students, many of whom will use WordPress or a similar system in conducting their work. Further, it's important for students who will assume leadership roles in which they make strategic decisions to understand the ways that skills and resources impact the creation of structured content in organizations of different sizes. In addition to understanding that XML-based implementations such as DITA can be prohibitively expensive to customize for smaller organizations, it's also useful to understand the possibilities currently available in WordPress and the ways that advanced skills make possible or preclude some features. Becoming an effective, reflective practitioner entails more than understanding the conventional meaning of structured content or the benefits it holds for organizations; it additionally means

understanding how technical decisions such as which WCMS to use or which relationships to form can impact how structured content is conceptualized. With that objective in mind, setting the goals of structured content as an abstract concept against observations of specific technical systems, as presented here, can help students to understand that the choice is not whether to implement structured content or not but instead which choices to make in pursuing and promoting various conceptions of structured content.

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ABOUT THE AUTHOR

Daniel Carter is an assistant professor in the School of Journalism and Mass Communication at Texas State University. He studies how technical infrastructures shape knowledge production and communication.

Book Review

The Profession and Practice of Technical Communication Yvonne Cleary

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Anthony DeGenaro Ohio Dominican University degenara@ohiodominican.edu

Yvonne Cleary's *The Profession and Practice of Technical Communication* (2022) offers a narrative survey on communication design/technical communication as an academic field of study but also builds bridges between academic work (both pedagogical and research-oriented) to work environments and practitioners in the professional realm. Because of the book's organizational structure and approachable text, Cleary is highly successful both in her research and the presentation of it, creating a valuable resource for students and providing insight for field practitioners.

In Part one, Cleary offers a survey of "The Profession" with an exploration of "the nature of the technical communication profession, education and training opportunities, and the communities and professional organizations that support technical communicators in their work" (p. 1). Not only does opening the book with this particular part provide a thorough context for discussions of practice and theory to come, but it also offers a practical application of this text to readers who are current students in communication design or technical communication courses, eager to find a career to apply skills learned from their schooling. Chapter One, "The Nature of Communication" offers a thesis statement on the book, which is to provide "research-based insight into the technical communication profession and its practice ... [to] explain what the content implies for the strategic direction of the profession" (p. 19). Further, Cleary offers a specific guide for potential audiences including early-career industry practitioners, lateral entrants to technical communication, educators, and

academic and industry researchers. However, she states that "this book is specifically targeted toward undergraduate and graduate students studying technical communication" (p. 19–20). In light of this, the second chapter fully focuses on educational contexts in which communication design/technical communication courses are taught. This institutional history/historical narrativizing of the field is an important and fascinating opening because as Part One goes on to discuss Technical Communication Communities (Chapter Three) and Technical Communication Activities (Chapter Four), readers have that necessary context to understand the pedagogical imperative of the field and how it connects with professional life. While I am mostly imagining this book as a textbook for a communication design or technical communication course, I imagine this content would be compelling to any reader.

In Part two, "The Practice of Technical Communication," Cleary details "common activities and typical workplaces" in technical communication (p. 83). The first chapter in this section, "Technical Communication Activities, Tools, Genres, and Artifacts" could easily connect the content and learning outcomes of a communication design/technical communication course to practical workplace applications. For student readers, this would be an invaluable bridge between schooling and professional life. For instructors, a streamlined heuristic to focus course design. For practitioners, this chapter might help establish a knowledge base they may expect early graduates to have. For example, Cleary provides a table (4.1: Competencies and skills required in technical communication) that offers quick, keyword-driven definitions of concepts like "Writing and rhetoric" ("the ability to use language clearly, correctly, and precisely in a style that is appropriate"), "audience analysis" ("the ability to determine, evaluate, and respond to the needs of content users"), and "Usability and user experience" ("the ability to gather, evaluate, and use information about how people interact with products, services, or texts") (p. 88). The chapter goes on to elaborate on these key concepts. Elsewhere in the section Cleary includes vignettes that narrativize a typical day in the life of a technical writing professional and look to visuals from virtual workplaces and job advertisements as sites of analysis. The section concludes with a thorough reflection on the future of

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the field, including an all-too pressing analysis of COVID-19's impact on work and technical communication. I could imagine chapter six ("Technical Communication Futures") being valuable for any instructor, not just of communication design or technical communication, finding support in their development of online and hybrid teaching.

In Part three, "Theories and Methods," The Practice of Technical Communication lays out the theoretical and methodological frameworks Cleary utilized in the creation of the book: "This section is important because it demonstrates that the study of technical communication in industry is connected to broader studies of professions and practice" (p. 183). Connecting the very academic work of theory and research methodology to practice not only supports the claims of the book, but also "encourage[s] you to consider strategic directions for your work, your professional development, and your profession" (p. 183). Despite these goals, this section seems most useful for readers who are students, providing an excellent example for how to model a research project of their own. Drawing conclusions in Chapter Nine, Cleary lays out three long-term goals this book works towards: strengthening the professional identity of communication design and technical communications, forwarding research of/with/within international contexts to accommodate for the global reach of the field, and, practice- and practitioner- focused engagement. Of the three, building bridges between practice and practitioners is the most conscious goal and, I believe, most successful; that quality is what makes Cleary's text so valuable to its many audiences.

Cleary appeals to three audiences: practitioners, who "know [their] practice, engage with communities, and negotiate shifting labor market patterns" who "want to get involved in research projects"; students, who Cleary "hope[s] you see this book both the exiting potential in your future career and how your contributions can support, develop, and sustain your profession and practice"; and teachers or researchers who Cleary "hope[s] this book has encouraged you to explore the possibilities of engaging with industry practitioners and professional associations in setting collective research and strategic agendas" (p. 232). It is a great strength of the book that so much emphasis is placed on the pragmatic utility this discipline has for students, and to address audiences from the academic and professional world which both bear on student success.

Practitioners and academics in the fields of communication design and technical communication have much to gain from this book; despite Cleary's accessible and readable prose, users of this text are free to browse the three-part structure that is core to *The Profession and Practice of Technical Communication*. Sections read autonomously, though it is informative and rewarding to progress through the book linearly. I believe a best use for this text would be in an upper-level communication design or technical communications course putting theory and practices of the field in close conversation with the profession. Students of communication design and technical communication would benefit from the connection Cleary draws between Parts Two and Three with Part One.

ABOUT THE AUTHOR

Anthony DeGenaro is an assistant professor of English at Ohio Dominican University, where he primarily teaches first-year composition courses on writing and rhetoric. Anthony is also a

poet, and occasional teacher of creative writing at the University as well as with community literacy and youth education programs. His research interests include technical and professional writing, the intersection of creative writing and composition instruction, and equitable pedagogies. Anthony completed his Ph.D. at Wayne State University in 2021, find his creative and academic work at www.tonydegenaro.com

Book Review

Everyday Dirty Work: Invisibility, Communication, and Immigrant Labor Wilfredo Alvarez

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Meng-Hsien Neal Liu University of Illinois at Urbana-Champaign mhliu3@illinois.edu

Wilfredo Alvarez's (2022) Everyday Dirty Work: Invisibility, Communication, and Immigrant Labor premises its thesis around "the vital relationship among work, social and cultural integration, and language acquisition" (p. 3) for many multiply marginalized immigrants in the United States, particularly Latin Americans. In his case study of Latin American immigrants who served as janitors at a predominantly white public institute—Rocky Mountain University (RMU)—and their interactional, intercultural, and organizational communications with their patrons (e.g., university faculty, students, or staff), Alvarez theorizes how facets of social identities, communications, languages, and workplace settings are intimately intertwined to generate and reinforce public imaginaries and readings of marginalized immigrant individuals and communities.

Commonplace social contexts such as workplaces, particularly in service sectors, are frequently overlooked for their socially informing influences on intersecting matrices of discrimination faced by multiply marginalized immigrants working in long-established institutional organizations. Alvarez (2022) delves into a less-researched-yet-mundane communicative context—that is, organizational workspaces—to carve out a neat breaker from highly-profiled and highly-theorized communication and institutional contexts (such as those of classrooms) and suggests a pressing need for communication scholars to heed those undertheorized arenas in which communication patterns may have not yet garnered too much scholarly attention.

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Harnessing empirical qualitative data composed of field observations, informal exchanges with janitors, and three types of qualitative interviews (i.e., informant, respondent, and ethnographic interview) to theorize intersectional identities (p. 31), Alvarez (2022) makes a cogent case for how the public imaginary of Latin American custodial workers interactively shapes the discourse of social, interactional, communicative, and identity patterns. Drawing on the framework of intersectionality (Crenshaw, 1991) to conjecture Latin American immigrant janitors' social identities, Alvarez (2022) aptly demonstrates that within established organizational spaces and practices, subaltern subjects who occupy lower rung of institutional hierarchies (e.g., minoritized workers) encounter the reality of an interlocking axis of injustices and discriminations imputable to language use, socioeconomic status, and immigration status.

Some significant findings arise in Alvarez's inquiries. First, per Latin Americans' racialization, many Latin American janitors are still subject to "racially [and ethnically] prejudicial sentiments" (p. 59) from their supervisors—whether white or not (pp. 59-60). This situated pattern, however, epitomizes a larger societal discourse, according to Alvarez (2022), in which marginalized immigrants in everyday workspaces and environments are endowed with less linguistic and discursive capital to bargain for equal communicative treatments. Next, hallways and breakrooms are buffers where many Latin American janitors find solidarity—or in Alvarez's (2022) analysis, "affirming relationships" (p. 61) or "discursive enclaves" (p. 64)—from their same racial and ethnic colleagues in the face of noxious interactions with their work supervisors. One form of such negative communication interactions is that of gossiping. Alvarez (2022) observes how the organizational supervisors at RMU relied on gossiping to showcase favoritism and to solidify the organizational unity (pp. 62-63). However, interactional patterns of Latin American immigrant janitors have generated divided responses, with some workers feeling cordially welcomed and accepted while some feeling negatively viewed. Nevertheless, what this revelation indicates is that Latin American immigrant janitors' interactional patterns are interlockingly informed via their immigration status, (English) language proficiency, socioeconomic and socioeducational class, and race and ethnicity.

Alvarez's (2022) monograph nicely executes how the empirical narratives gleaned from his participants and the theoretical optics folded upon each other. Alvarez (2022) advances the connection between social identities and occupational status (pp. 97–101). He recognizes that those Latin American immigrant janitors, embedded within an oppressing workplace structure, face communication barriers rooted in not only just linguistic performance but also in the discourse of U.S. ethno-racial landscape. Alvarez's (2022) findings further shed light on possible organizational or administrative interventions through which Latin American immigrant janitors' English communication abilities and proficiency can be improved (e.g., the provision of English classes at institutions) to placate some of the communicative challenges faced by the marginalized workers (p.15). Additionally, Alvarez's (2022) work sets itself apart from other ethnolinguistic work because Alvarez himself also partook of the custodial work and experienced firsthand some of the work-related discriminating episodes—an ethnographic practice that lends itself with more credibility.

However, Alvarez's (2022) argument would have been further augmented if he had discussed more of his theoretical deployment of intersectionality. While intersectionality (Crenshaw, 1991) as a theoretical construct rooted in black feminism has traveled across multiple disciplines such that the harnessing of it is no longer confined to certain marginalized groups and disciplines, Alvarez's (2022) focus on Latin American immigrant janitors' racial and ethnic positions leaves us to wonder how this particular racialized group in the United States is also perceived by other marginalized groups—since Alvarez (2022) operationalizes identity to be discursively established and relationally constructed—and how other "identity" categories (e.g., gender or sexuality) play a role in the translinguistic communication by Latin American immigrant custodian workers (pp. 138-139). With more examinations of these questions, we could further apply Alvarez's argument by thinking through how intersectionality plays a role among interethno/racial groups and inter-identities. Another area that could be further inspired by Alvarez's (2022) analysis is that although linguistic (or communicative) usage at work, compounded by other factors, has engendered negative experiences for Latin American immigrant janitors, Alvarez's (2022) assessment galvanizes us into deliberating over what and how specific linguistic patterns might have potentially stymied the cross-cultural communication. Thinking through these questions might enable administrators to envision better what kind of racio-linguistic interventions could be introduced at an institutional level. Besides, placing the central issue of the communication schism predominantly on language (pp. 80-81) potentially risks the reification of Latin American immigrant janitors as marginalized subjects and other non-racialized interactants (e.g., university staff) as perpetrators. Such potential reinscription is concomitantly evidenced through many of the study subjects' reportage that their communicative isolation, occasioned by a lack of desirable English communication proficiency, can be resolved once they acquire a "perfect" English (p. 107). The onus to acquire English, or to change the communicative pattern, seems to fall upon Latin American immigrant janitors (p. 122). This implication might suggestively indicate that a mastery of English could be the solution to all socially discriminating attitudes and maliciously discursive performances faced by Latin American immigrant janitors while glossing over other institutional, structural, nonlinguistic, or material factors that inform racialized

subjects' experiences in relation to social injustices. Therefore, future research might benefit from a broader grasp of how other discursive and nondiscursive resources are and can be utilized by marginalized subjects to dismantle, interrogate, and challenge such reifications.

That being said, Alvarez's (2022) monograph holds a great promise for both communication design and technical communication scholars in the following ways. Alvarez's work showcases a much more needed imperative to utilize complex social theories and methodologies to account for identities of subaltern subjects. The "complex" here alludes to theoretical heuristics that can grapple with multifarious layers and scales of communicative interactions and methods that can reflect and inflect such complexity. In Alvarez's (2022) work, he deploys the framework of intersectionality to account for Latin American immigrant janitors' social identities and interactional patterns and methodologizes the inquiry with a wide array of qualitative data. With our everyday communication behaviors and patterns becoming more complexly laminated and dispersed across media, it behooves communication and technical communication scholars to apply multi-layered optics to posit communication patterns on a larger scale (e.g., how workplace communications are connected to non-institutional communications). Relatedly, for communication and technical communication practitioners, the findings of Alvarez's (2022) work could galvanize more insights into understanding how communication operates and is performed by subaltern subjects in less salient institutional (e.g., janitor workplaces or university cafeteria; see also Pigg, 2020) and non-institutional sites. Alvarez's (2022) work duly suggests that we begin to channel our attention to non-normative, liminal venues within or outside established institutional spaces.

The research undertaken by Alvarez (2022) is by no means without its limitations. Some of Alvarez's findings might appear to rehearse the already-circulating critiques against linguistic homogeneity. For instance, raciolinguistic discrimination has been recently profusely taken up by educational linguists (e.g., Flores & Rosa, 2015) who maintain that language usage cane be inherently racially marked. However, Alvarez's (2022) monograph serves as an exigent reminder that as the field of communication and its adjacent disciplines start unraveling more complex communicative phenomena that cut across intersectional identities, communication scholars and practitioners need to take a step back to heed those salient communicative sites to explore more what communication could mean *in* and *for* our research, teaching, and everyday encounters. Alvarez's (2022) audacious attempt at a less visible institutional site thus accomplishes this exigent need.

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ABOUT THE AUTHOR

Meng-Hsien Neal Liu (he/they) is a doctoral candidate in English/ Writing Studies at the University of Illinois Urbana-Champaign. His/their research focuses on how transmigrants leverage semiotic practices and activities to negotiate with transnational citizenship enactment. He/they utilizes inter-disciplinary theories and methodologies to understand how transnational citizenship is understood, taken up, and negotiated by transmigrants crossing borders of ideologies, cultures, languages, and political regimes. He/they has also published work at *Teaching/Writing: The Journal of Writing Teacher Education, Writing Spaces*, and *Community*

Literacy Journal. Contact him/them at: mhliu3@illinois.edu