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Welcome to Issue 15.2!

We'd like to begin with a special thanks to our outgoing FOCUS section editor, Joseph Jeyaraj. Joe was one of the members of the CPTSC Administrators Committee who helped to establish this section of the journal, and he has effectively guided decisions that shaped the emerging genre. We wish him well in his future endeavors!

This issue brings **research articles** from outstanding scholars in the field. In "Technically Online: Exploring Online PhDs in Technical Communications," Joseph Williams provides evidence that the past "reticence" to fully embrace online PhD programs in Technical and Professional (TPC) Communication is becoming a perspective of the past, and attitudes are changing. Williams hopes the data presented can "help guide the future of online PhD programs in TPC, showing how these early adopters of online delivery exhibit best practices for the future."

In "Community Building at the Programmatic Level: Arguing for the Implementation of the PARS Model in a Distance Learning Graduate Program" Julia Romberger uses Community of Practice theory to argue that graduate program administrators in distance learning programs should view community building among their students as a dimension of their education that is as important as their course work. Romberger's data from graduate director surveys informs the use of PARS (Personal, Accessible, Responsive, and Strategic) theory "to better create community within distance learning courses."

"In Search of a Core Curriculum: Assessment of Editing and Publishing Programs in Higher Education" by Holly T. Baker, Jacob D. Rawlins, and Aubrey Pierson provides important data that "can help program directors and curriculum developers determine core and elective courses to best meet the needs of students—keeping them competitive with graduates from other programs—and set up reasonable expectations for industry professionals hiring from these programs." The authors argue that with the growing ubiquitous nature of AI, the "need for well-trained editors and other publishing professionals is increasing."

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The **Commentaries** in this issue begin with "The Morphology of Data Governance: A Disciplinary Imperative for Professional and Technical Communication," in which Shiva Mainaly describes an interdisciplinary effort at North Dakota State University to develop a course to address topics related to "data quality, security, and usage across an organization." The curriculum moved from a single course to a program-wide emphasis that has led to significant employment opportunities for program graduates.

In "Expectations Mapping: A Cognitive Approach to Teaching Audience in Technical Communication Programs," Kirk St.Amant and Kacie Mennie present "an approach for teaching audience usability expectations in technical communication classes and across overall technical communication curricula." They explain their method, "expectations mapping,"..."focuses on teaching students to identify the cognitive factors that affect an audience's usability expectations." The authors end with helpful suggestions on how others can "integrate expectations into an overall technical communication program."

This edition of **FOCUS** turns the spotlight on our students and points out ways in which TPC instruction can build bridges in connecting students with the larger topics in TPC. Beth Kramer-Simpson's piece illustrates the innovative ways in which the curriculum can use research projects to explore students' engagement with TPC ideas and track the extent to which they have engaged with these ideas. In doing so Kramer-Simpson situates research in the context of everyday classroom practices and lets us know how such research can operate in TPC classrooms.

Laura Gaisie and colleagues' piece as well involves TPC students who work in a specialized area of editing involving the writings of those incarcerated for whom writing serves as a tool for offering help and support. Her piece demonstrates how students can be given responsibilities that take them into the heart of TPC as they go through the entire process of setting up a project, doing TPC work for creating a space for the voices of those incarcerated, and reflecting on work done. The piece, while explaining the complexities of setting up such a project, at the same time foregrounds how such projects can provide TPC students with hands on experiences that translate theory into practice.

The **Book Review** section in this issue highlights a recent publication reviewed by Lynn Russell. *Composing Health Literacies: Perspectives and Resources for Undergraduate Writing Instruction* is a compilation edited by Michael Madson that has an "excellent collection of scholars who speak to theoretical and pragmatic ways of teaching students about health literacies and writing practices." There are "three major sections that examine different aspects of health literacy in undergraduate writing education. Part one explores assignments and courses. Part two examines programmatic profiles that include significant health literacy writing instruction, and three provides theories and field studies that inform classroom instruction.

Technically Online: Exploring Online PhDs in Technical Communication

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Abstract: Despite its existence in the digital age for decades now, an online PhD program in Technical and Professional Communication (TPC) has not been fully embraced by all academics. This reticence exists alongside a push by universities to develop and offer their own online PhD programs in Tech Comm, and these developments and the data (interviews and program outcomes) suggest that attitudes in academia are changing. This study offers new views of established online and low-residency programs at two universities, Old Dominion University and Texas Tech University, who offer such programs in TPC. These programs both feature online and onsite components via a short-but-mandatory residency, which has evolved considerably since the pandemic. The author of this paper, a graduate himself in an online PhD program in TPC, interviewed 15 faculty members, administration, and graduate students who have either actively participated in or attended an online PhD program in TPC. These interviews were qualitatively coded to identify important and recurring themes that will help guide the future of online PhD programs in TPC, showing how these early adopters of online delivery exhibit best practices for the future.

Keywords: methodology, online graduate programs, pedagogical rationale, technical and professional communication

Introduction

Working toward my own PhD while simultaneously working full time on the other side of the world, I reveled in the technology and ease involved with attending synchronous classes, contributing to group-generated documents in real time, and meeting with my dissertation advisor via online conferencing. Dedicated to coursework, I worked diligently never to miss a single class despite formidable time differences or other standing work obligations. Once I attended class on top of an Indian skyscraper, Bollywood music wafting in the background (my mic carefully muted). Another time, I joined our online class in a busy Hong Kong café. Near the end of my coursework, I entered our classroom via a Sydney hotel conference facility for the best Wi-Fi connection possible. These examples indicate how traditional graduate education can align with other life experiences. They also suggest how coursework and dissertation-level research in online and low-residency programs can provide an alternative that is necessary for graduate students with full-time employment or the inability to relocate to campus. In

my graduate experience and interviews conducted for this project, I note how workloads and educational rigor are equivalent to more traditional programs, while also granting access to opportunities to pursue higher education and terminal degrees. As more working professionals and potential students consider graduate-level coursework in Tech Comm, programs like those at Old Dominion and Texas Tech provide a contemporary answer to the dilemma of class attendance for a significant portion of graduate students unable or unwilling to exit the workforce for the pursuit of their terminal degree.

This paper explores the phenomenon of the online PhD in Technical & Professional Communication (TPC) and explains and discusses best practices for this format of graduate study. When I set out to examine online PhD programs in Tech Comm I had assumed that there were multiple programs vying for the attention of would-be graduate students who did not or could not matriculate in a traditional face-to-face (F2F) postgraduate program in TPC. For many, the prospect of picking up their lives and moving to a new place solely for obtaining this terminal degree was simply not possible. Currently, there are only three universities that offer online PhDs in Technical Communication: Clemson University, Old Dominion University, and Texas Tech University. Unable to procure participants from Clemson, I researched Old Dominion University (ODU) and Texas Tech University (TTU), both of which offer the degree through their corresponding English Departments. Additionally, I noted a significant gap in TPC literature about online PhDs. Research exists that discusses the redesign of online courses in TPC to add rigor, the online structure of graduate studies in some other area such as nursing, or the existence of supposed stigma of the online PhD, but this paper serves as a clarion call to more fully engage with a smaller subset of programs that produce successful graduates for academia and industry. The interviews for this research project feature former or current program administrators in these two programs; current or former faculty who have taught in these two programs; and PhD students who have either graduated from the programs or spent a considerable amount of time studying within the programs. Due to my guaranteeing anonymity to my participants, specifics such as demographics were omitted; however, I have provided some general participant details later in this paper. Situating my research in current literature and adjacent scholarship provided a helpful framework for assessing the implications of online PhDs in TPC.

Connecting Online PhDs in Scholarly Literature

As early as 2011, Alison McCook explored the notion of online PhDs in science. At the time of her article, she posited that online PhDs are a rarity, especially in science. Noting that "science" requires a community, McCook offers the case for imagining "future tools" that "could make it easier for students to interact with others remotely, better preparing them for being collaborative researcher" (p. 282). In similar ways, McCook's comments highlight similar promises for online and low-residency graduate programs in TPC. The following interviews present the promise and inevitable peril that such developments, like Zoom and hybrid courses, offer. Within the past 15 years, tools have morphed and evolved to further engage today's online graduate student. Thirteen years ago, the notion of the

online PhD was far more novel, and academics were most likely more skeptical; however, a generation of TPC professionals, many of whom are online graduates / professionals, prove that the ability to procure a terminal degree in a rigorous environment is entirely possible.

Bill Williamson, also writing in 2011, not only explored ideas about the emerging online technical and scientific communication programs but reviewed those that were already in place. Arguing that online tools could not "replace F2F dialog," he critiques ahistorical growth of "new online programs" that "do not grow out of established undergraduate programs" (p. 193). Williamson highlights the necessity for maintaining the core of F2F education, which, more than a decade later, has become more possible with virtual meeting software and learning management systems. However, his skepticism is well-founded, as the plethora of predatory, for-profit, online programs attest. Nevertheless, with the evolvement of online tools, we needn't replace F2F dialog; the pandemic has already shown us a number of tools like Zoom and Teams where we can easily maintain F2F dialogue, if necessary, whether for synchronous delivery of an entire class or office hours for asynchronous students. This skepticism can appear post-graduation. For example, Nikolaus Linardopoulos (2012) traced biases against these degrees, revealing a much greater likelihood for a candidate with an online degree to be viewed less favorably for employment purposes compared to the candidate with a F2F degree. These attitudes undoubtedly still exist, but advances in online education surely present a much more nuanced picture currently.

In fact, just two years after Williamson, Barry Maid and Barbara D'Angelo (2013) discussed what it means to invigorate the online Tech Comm classroom under such formidable conditions that so many of us face, namely shifting departmental priorities and tighter budget lines: "The goal in curricular reform is to develop an outcomes-based curriculum that is assessable and can be modularized" (p. 19). The authors suggested that faculty inclusivity and freedom of classroom practices would assist in revitalizing the online classroom. They were right. How many of us have been restrained by a lock-step delivery of an online or onsite classroom? Different online professors gravitate to different programs and platforms, all of which could provide successful delivery under the right instructor. Additionally, Lisa Melançon and Lora Arduser (2013) suggested the formation of a Community of Practice (CoP) to facilitate sustainability in an online Tech Comm classroom. After the authors defined CoPs as "a group of people who share concern of a specific topic and how to learn to do it better through interaction," the authors mentioned that CoPs "are particularly useful for online course development because they provide ongoing support that can alleviate many of the curricular and institutional challenges online instructors face" (p. 74). Melançon and Arduser provided pedagogical examples for collaborative structure to meet these ends, such as an informal network, short-term group, semi-structured approach, and formal department (p. 78). These CoPs are methods to further facilitate the oftentimes foreboding delivery of dense course material, which can prove to be problematic onsite or online. Offering an international perspective in terms of the online Tech Comm classroom, Emily Thrush and Susan Popham (2013) discussed how to address intercultural concerns for those global online student audiences. The authors suggested online faculty to answer a series of questions to meet the

needs of the online international student, which touch on intercultural "skills and knowledge," "persuasive strategies," and "kinds of support needed to be offered to these students to support language development" (Thrush & Popham, 2013, p. 113-114).

As a former instructor in the Middle East, I view these international and intercultural considerations as paramount in the structure and planning of low-residency and online programs. While international students cannot complete fully online programs and student visas would be required for periods of in-person study in low-residency programs, the removal of boundaries and promoting of access for international students strengthens these TPC programs in the US. Beyond offering qualified international students more flexibility, swift attention to Thrush and Popham's questions captures the need for increasing acknowledgement of TPC in global and international contexts.

Heidi Harris and Michael Greer (2020) endorse purposeful pedagogy-driven design (PPDD) as well as discuss how "teaching and composing with multimedia humanizes online technical writing and communication classes" (p. 110). The inclusion of the word "humanizes" is perhaps the most important aspect to an online PhD program, as we must never forget that we are all attempting to attract prospective students rather than repel. Aside from making technology a tool for virtual communities, this attraction relies heavily on being—and acting—human. The authors suggested that technical communication instructors can employ multimedia elements synchronously and asynchronously in order "to address not only the what and why of online technical writing instruction but also the how of multimedia instructional materials" (p. 110). Although there was not much diversity in terms of specific uses of multimedia for this instruction, authors called out the use of a simple inclusion of "a photo on an LMS or Google Apps account, which reminds students that the names in the class are real people" (p. 116); the authors also suggested the use of instructor video recordings on various platforms from Zoom to Power Point. These simple tweaks could make a difference to someone who is already intimidated by the prospect of studying TPC online.

These earlier interventions, from skeptical treatments of online programs to considerations of multimedia and international identities, seem especially poignant considering the events of 2019 and after. As if forecasting our global pandemic, *Technical Communication Quarterly* devoted an entire issue to online learning in TPC, focusing on training educators for online internship courses (Bay, 2017); teaching with social media (Vie, 2017); establishing reader usability assurance (Warner & Hewett, 2017); implementing usability testing (Bartolotta, Bourelle, & Newmark, 2017); teaching graduate students to teach online (Grover et al, 2017); and even offering online education in Technical Communication in global contexts (St. Amant, 2017). After discussing highlights of such articles aforementioned in the 2017 issue, Beth Hewett and Tiffany Bourelle (2017) argued that "To succeed in online environments and online media, professionals need new instructional approaches that address distinctive qualities of teaching and learning online" (p. 220). During the two years of the pandemic, scholarly institutions learned across the globe the value of quality online instruction, as so many of us had to dive headlong into online teaching technologies and methodologies to facilitate quality

instruction as quickly as possible. After having successfully weathered this era, we already have quite an idea of what and what not to include for online audiences.

Community, connection, and access seem particularly important, especially in post-pandemic learning contexts. For example, Kirk St.Amant (2020) proposed five "C factors" in addressing evolutionary change in higher education: culture, connection, content, conveyance, and credibility, arguing that "they are all connected to, greatly affect, and are dependent upon adaptive approaches to online education." (p. 94). Although he wrote within the historical context of the pandemic, St.Amant implied that addressing these factors up front will provide educators with the necessary tools to evolve organically and overcome obstacles in online education both today and tomorrow. One way to overcome these obstacles is highlighted by Jessica Livingston, Sarah Summers, and Janie Szabo (2019), who suggest that a Universal Design for Learning (UDL) framework enables students to engage with course content in multiple ways that can both lessen student resistance and increase confidence in their professional skills. By comparing F2F assignments and student outcomes with online assignments and outcomes, the authors demonstrated how UDL principles created more engaging, accessible, and flexible practices for diverse groups of students, both in-person and online. "Incorporating UDL principles goes beyond accessibility and even online learning," (Livingston, Summers, & Szabo, 2019, p. 5) and highlighting key concepts such as diversity and multiple modes of engagement, the proper application of UDL principles in course design can further facilitate online student buy-in. These are important takeaways for those universities interested in implementing an online PhD program in TPC and for the traditional student, partly answering Williamson's earlier skepticism that centered on the gulf between traditional and online programs.

Nevertheless, concerns remain, even among some of my interviewees, and these concerns were anticipated by Spiros Protopsaltis & Sandy Baum (2019), who traced some of the concerns and pitfalls administrators, students, and faculty might consider with respect to online and low-residency programs. They highlighted lingering skepticism about their quality and rigor to the failure "to improve affordability" (p. 3). Highlighting the need for student and faculty community, Protopsaltis & Baum's work demonstrated that online programs must be about more than cost or convenience, with faculty increasing engagement and community a central concern. The authors' results showed that many of those recently surveyed in academia still consider online education inferior to F2F education. These survey responses, however, demonstrated the need for further study and the examination of experiences in online TPC education. Guided by all of this research, for the purposes of exploring online PhD programs in Tech Comm, I aimed to answer the following questions: 1) How do online graduates and faculty perceive the effectiveness of online PhD programs in TPC? 2) How are online PhD TPC degrees perceived in academia and industry? 3) What are some of the takeaways in order to create and maintain an effective online PhD program in TPC? As I coded the interviews, I defined effectiveness in terms of the axial themes, privileging the characterization of "transformative," in keeping with its implicit presence in the work of those who have studied online programs. For these online and low-residency programs to be effective, they must also be transformative.

Methods

My own online PhD program in TPC inspired me to conduct this study, and, as an associate professor, I consider my own education a success. While I acknowledge my own bias toward the subject matter, I wanted to hear the voices of others involved in online TPC PhD programs and qualitatively code them as objectively as humanly possible. This IRB-approved study, Louisiana Tech HUC# IRB 21-009, used one of the four main sources of data considered to be most common in qualitative research: interviews (Creswell, 2007, p. 129). These interviews were coded to answer my research questions. I was able to not only answer my research questions for this project but also ensure rigor by pattern reinforcement of my findings. Rich features of the data were examined and categorized using initial coding so that patterns could emerge for comparison across interviews in two distinct categories: 1) online TPC PhD students; and 2) faculty who have taught or participated in an online TPC PhD program.

Participation of interviewees from two rigorous, well-established programs was paramount to my research plan. Amy Koerber and Lonie McMichael (2008) clarify terminology in terms of participant selection and distinguish between the various types of participant selection, namely convenience sampling, purposeful sampling, and theoretical sampling. The authors denoted convenience sampling "as consisting of participants who are readily available and easy to contact" (p. 463); purposeful sampling as "participants who possess certain traits or qualities" (p. 464); and theoretical sampling as a type of purposeful sampling in which "the criteria for sampling emerge along with the study itself" (p. 465). My project employed stratified convenience sampling, which is a useful method in this qualitative study because selecting individuals capable of contributing to the answers to my research questions led me further to research conclusions. Creswell (2007) mentioned that researchers can sample "at the site level, the event or process level, and the participant level" (p. 126), all of which pertained to this study. Purposeful and convenience sampling were most beneficial for my data collection because I strived to select members who had contributed to the body of knowledge and/or participated in "successful," firmly established online PhD programs in TPC. Echoing Vicki Conn et al. (2014), I define "successful" as transforming students into independently functioning academics able to juggle teaching, research, mentoring, committee work, grant writing, and publication. My main goal was to target members who have either impacted or have been impacted by these programs; ultimately, I wanted to provide a fuller, more meaningful perspective and present their opinions about these meaningful topics such as education in the time of COVID-19, perceived validity of online PhDs in TPC, and best practices for those institutions contemplating online graduate TPC programs. Additionally, veterans of burgeoning online PhD programs for TPC were able to provide their keen insight into the behind-the-scenes aspects of running a rigorous online PhD program and all that it entails. Considering the small number of online programs, the smaller sample size nevertheless provided much useful information. Participants themselves were varied in terms of race / ethnicity. Graduate student interviewees featured 3-4 considerably "underprepared" or "disadvantaged" participants, aging in range of 30-45 years old; all faculty interviewees were already tenured.

To maintain a rigorous, accurate record of my data depicting attitudes of online PhDs in TPC, I recorded my Zoom interviews, transcribed them, and coded them qualitatively. As prescribed by Clay Spinuzzi (2013), "You have to build a story by looking across the data to see what the different data types are telling you" (p. 131). My semi-structured interview questions, attached in Appendices A and B, allowed me to make connections with interview responses and glean relevant themes.

Opinions expressed in semi-structured interviews provided an arena in which participants of diverse demographics were able to safely express themselves "behind closed doors" while I simultaneously abided by all IRB requirements. Spinuzzi (2013) defined semi-structured interview questions as a list of non-sequenced questions that also provide the interviewer flexibility to ask follow-up questions or add questions (p. 99) so that participants could elaborate on their answers; for example, I had not known a great deal of administrative challenges and specifics in implementing online PhD programs. I then asked these participants to elucidate why specific challenges had occurred and how said challenges were addressed.

Interview Procedures

I interviewed a total of 15 participants, 10 graduates and 5 administrators and / or professors, throughout 2022, each interview ranging 30-60 minutes in length. I ceased analyzing data upon reaching data saturation as discussed by Greg Guest, Arwen Bunce, and Laura Johnson (2006), who found 97% of high frequency codes after 12 interviews. Data saturation and its subtopics often found in health sciences, namely theoretical saturation, code saturation, and meaning saturation have been extensively researched over the decades (Glaser & Strauss, 1967; Guest, Bunce, & Johnson, 2006; Francis et al, 2010; Mason, 2010; Fusch & Ness, 2015; Hennink, Kaiser, & Marconi 2017). Theoretical saturation is defined as "no additional data are being found whereby the researcher can develop properties of the category (Glaser & Strauss, 1967, p. 65). Code saturation occurs when researchers have "heard it all," but meaning saturation is needed to "understand it all" (Hennink, Kaiser, & Marconi, 2017, p. 591). Authors stated a saturation point at 6-50 interviews, depending on type of study (ethnography vs. phenomenology). Although I could have conducted more interviews and surely would have accumulated further insight, I had already gathered a significant sampling of program administrators, faculty, and PhD students from these institutions, and this sampling supplied me with data sufficient to answer my research questions.

Upon interviewee procurement, I presented my participants with my Informed Consent Letter and Research Consent Form, the latter of which was signed and returned by all participants. I informed participants that I did not have an agenda; I was interested in exploring and reviewing interview themes to consider a sort of best practices / lessons learned for online PhD programs in TPC. Adhering to Spinuzzi's advice (2013), my interview questions addressed my research questions, but there was room to ask follow-up questions if need be (p. 99). Furthermore, my questions, which included vital pre- and post-interview banter, attempted to

ensure comfort and ease for all participants involved; this banter included use of reassuring gestures and vocal pitch, familiarity of academic or industry topics, and even discussion of research plans for each interviewee. Furthermore, my questions attempted to ensure comfort and ease for all participants involved, part of which was my insistence of interviewee anonymity. I also reframed questions whenever possible to assist interviewees in grasping meaning.

Upon completion of interview transcription, I applied initial coding to my data as encouraged by Spinuzzi (2013) for my first pass. Johnny Saldaña (2016) defined initial coding succinctly: "Breaks down qualitative data into discrete parts, closely examines them, and compares them for similarities and differences" (p. 295). I took time to reconcile my codes to ensure consistency as well as define my codes so that I was able to code similar instances within my data (Spinuzzi, 2013, p. 140). As I read and reread each interview transcription, I would number the topics in columns via pencil and paper that had been mentioned by interviewees, such as "COVID-19," "innovation," or "teamwork." I would list and number each instance that the interviewee spoke of a topic, and I listed corresponding page numbers within my interview transcriptions. Upon completion of my first pass, I proceeded to my second pass, which consisted of axial coding so that I could detect emerging themes across my codes and consolidate codes that were alike (p. 141). Saldaña (2016) defined axial coding as extending the analytic work of initial coding and exploring how categories and subcategories relate to each other (p. 291). As Figure 1 indicates below, once I discovered relationships amongst codes, my axial codes showed how often these connections existed among my interview transcriptions.

Helping the Technical Communicator to Get It Online

Figure 1: Ranking of Highest Themes among Student Interviews

Axial Code	Networking
Description	Methods in which colleagues collaborate
Initial Codes	Residency, bonds, networking
Transcription Example	"I think the bonds you develop in residency under a pressure cooker—the bonds you develop are really strong."

Axial Code	Support
Description	Methods or instances in which administration helps online students
Initial Codes	Support, feedback, responsiveness / lack of response
Transcription Example	"Dissertation team lack of responses were an issue."

ODU and TTU are two universities that offer rigorous online PhD programs in the field of TPC widely accepted in academia and industry. According to Old Dominion's website, with purportedly over 30 years of online courses, ODU claims to be a "national leader in distance learning." An online Technical Writing PhD degree is offered through the College of English. Also according to the website, along with obtaining required technology for online courses, online PhD students are required to come to campus for two weeks during the summer for a boot camp of sorts, liaising with faculty and keeping on-track in their coursework with full-time onsite PhD students. Additionally, the website mentions that online students must meet the same requirements as onsite students. With three main concentrations from which to choose (with an advisor's approval), the online PhD student at ODU can pursue literary and cultural studies; rhetoric, writing, and discourse studies; or technology and media studies.

Showcased in Programmatic Perspectives (Carter, 2013), Texas Tech's program remains a viable option for an online PhD in TPC. TTU's Technical and Professional Communication degree is also offered through the College of English. Like ODU, their online program for PhD students contains elements of synchronous and asynchronous components as well as a need for cutting-edge technology. TTU's website lists five major concentrations of study, namely rhetoric, composition, and technology; TPC; rhetorics of science and healthcare; technology, culture, and rhetoric; and visual rhetoric, new media, and user-centered design. There has been a 1-2 week mandatory residency every May, where students took a course, met with their dissertation committee, attended job talks and presentations by successful technical communicators, and liaised with colleagues. Before the pandemic, the 2-week residency evolved into a 1-week residency in which students stayed at a hotel near campus.

Gleaning Interview Themes: Online PhD Student Results

"Transformative" and "Networking" were the highest mentioned themes from online PhD student interviews, as Figure 2 shows below. Upon completion of axial coding, other emerging themes in the top five were: "denoting online and onsite program differences;" "the development of tacit knowledge;" and "the inability to move outside of life situations to pursue onsite graduate program." The content in this section explores the varying opinions, positive and negative, and framing of the subject matter according to Students A-J.

Transformative

Out of all topics discussed in my interviews, "transformative" was the theme that was mentioned most, whether it was associated with the online PhD students involved, the faculty, or the program itself. Student E mentioned, "I searched 'online PhD' and the program came up. The key thing was that there was no asterisk next to the title. This was a real PhD, and it wasn't an EdD online." Student D mentioned, "I have nothing bad to say about the program. It's probably the best one in its

field." Student J said, "I would call it healthy rigor. I was expected to perform at a high level, and I did." Student B addressed faculty who were actively teaching and leading in their online PhD program in TPC: "The quality of the faculty was unreal for me." Student A further elucidated about their program's quality of faculty: "There were some people who were really impactful. From one professor, I received a no-holds-barred evaluation of what I had done. The big lesson was 'don't gloss over the truth. Tell the failure story.' That still resonates with me. We can tell a story about what worked, what didn't, and why."

Networking

The second most discussed theme among the online PhD TPC graduates and students was the notion of bonds and networking, namely with other students, faculty, and colleagues within specific TPC fields. Student I particularly appreciated the international aspect of interacting with online PhD colleagues. "One of the best things I got out of the program were the connections with people. There were people literally all over the world. You don't get that with a traditional program." Student J discussed the aspect that inspired them to pursue the online program in the first place. "A huge recruiting tool: student feedback. It's what sold me." Student E focused on collegiality as an aspect that helped them finish their degree as they also mentioned the second theme of "inability to move away": "I'm super-impressed with the online program. I think that it was fantastic, it meets the needs of adult students who don't want to upend their life. The value of the friendships and support. I made some amazing friendships and learned the power of virtual communication." Inclusivity in collegiality was also a factor for E: "There was such a 'we can / I can' attitude. It felt very inclusive. The eclecticness of the people."

Figure 2: Ranking of Highest Themes among Student Interviews

Axial Theme	**Number of Times Noted**
Transformative	28
Networking	20
Online / Onsite difference	15
Tacit knowledge	12
Inability to move (for graduate school)	10

Online vs. onsite

Perceptions from these seasoned participants can guide institutions to meet the needs of their own future online graduate students. Now that these students, some of whom had studied both online and onsite, had a minimum of three years in the working world,

I deemed their perceptions to be crucial in objectively seeing what worked and did not work in their respective programs. Student C mentioned "That low-residency model – I think that's totally accepted. That being said, I know that there are a lot of questionable online programs out there. You have to know which ones are okay and which ones aren't." Student F focused on student perceptions of online programs: "Students have had the perception that online classes are easier. I wish that perception was not there. I think that some programs reinforce that stereotype, but that definitely wasn't the case for the program that I went through." Student E elucidated further: "No matter what school it is, there's still this 'is it as rigorous' factor. There is NO difference in the work." Student G weighed in: "It probably still is. It should be the ultimate online degree. It makes more sense than anything else. Why there are so few online TPC PhD programs I don't know." Student A said, "There are perceived differences, but they're now in the process of being rethought." Student J said, "Nope. I looked at the program onsite and online digitally in terms of curriculum – the curriculum was identical. I wasn't getting something less by going online. The only thing that changed was mode of delivery. I think people who are old school will look at that and I'm like, 'Tough shit. There is no difference between the two.' We had virtual class, but it was one that interacted with people."

Pressure cooker

Another common theme mentioned in my student interviews was "pressure cooker," the ability to withstand studying within a rigorous environment and still maintain mental and physical health. Student H mentioned, "It was more challenging and rigorous than I thought it was going to be. I didn't come from an academic background in that same way." Student I also alluded to the theme of bonding, a crucial aspect of any rigorous PhD program: "I think the bonds you develop in residency under a pressure cooker – the bonds you develop are really strong, and the experience – it's not just the work that you do together, it's the common experience of going through the pressure cooker." Another facet of the pressure cooker is, of course, the need to complete the program, which means to develop, write, finish, and defend a compelling dissertation. Consequently, Student A mentioned, the cohort concept has suffered. "A student yesterday said that our cohort model isn't working quite as well as it used to because some students in the cohort are really intimidated by the pressure to finish, and other pressures they have going in their lives have kept them from finishing in a timely manner. And they don't rely upon their peers in their cohort because they're embarrassed."

Motivations

A significant number of participants were motivated by the theme "promotion with PhD," which means that the student would receive a higher rank and better salary at their place of employment upon completion of their degree. Student E mentioned, "[The program] was online, I could keep my job and continue raising my family. Also, after I talked to administration I was intrigued and thought this is a liberal English program and it's online. This is a real department with real people, no plastic." Student B echoed these thoughts: "I was working at a local university and

there was the whole idea I would become permanent faculty. 90% of it was leveling up, which meant more stability and more money; 10% of it was just I always had this idea of being a doctor." Student D warmed to the idea of advancement courtesy of the online PhD later on: "I started without a goal, but it helped with supporting my current position and get better pay with my current position." Student J mentioned monetary recognition and benefits more overtly: "I was tired of working at a community college where people who had the same degree were treating me like shit. And my pay was half of theirs. It was all about the money, the benefits, the lifestyle." Student A supplied a narrative in their answer: "I couldn't teach that much anymore and didn't want to. The goal was not to teach first year writing forever. Although my goal was to stay at my past employment, careers and career trajectories are weird. I'm happy and I like my [newer] job." Student I mentioned their pursuit to earn a PhD was to obtain a better position, but "That capped out. I needed the terminal degree. I also got it because I wanted a PhD. Not everybody wants one. I wanted one. I love that shit." What surprised me about this topic was the number of interviewees who had no other motivation than to challenge themselves. Student C said, "I didn't need to get a PhD. I was wanting mental challenge. Dove into it and learned more than I imagined. I just wanted to enrich my life and improve myself. As it turned out, it gave me advancement." Student H chimed in with similar sentiments: "I didn't do this with the intention of getting a better job. It's a pretty minor impact. I wanted to get more knowledge. I thought rhetoric was really interesting, and I had something to say about it."

Thoughts on mandatory residency

Several respondents discussed their program's mandatory residency dynamics. The online student body at the time appeared to be polarized over changes instituted in the summer mandatory residency: While some students enjoyed the benefits of having a space all to themselves, other students missed the comradery and conversation that dormitory situations naturally provided. In terms of residency, some students enjoyed the one week of extraction from their life events while others missed the number of events, guest speakers, and time to get to know colleagues and faculty that a two-week residency afforded.

Gleaning Interview Themes: Online PhD Faculty + Admin Results

Amongst my five past and present faculty and administration participants K-O, "Best Practices" was the most commonly mentioned theme, followed by "differences between online and onsite programs." Also highly mentioned were "innovation," "collaboration," and "pressure / rigor." Figure 3 below shows the five most mentioned themes, positive and negative, upon completion of axial coding:

Best practices

"Best practices" was the most mentioned theme in my interviews with participants who have served administrative roles in an online TPC PhD program and faculty who have taught in an online TPC PhD program. Faculty O mentioned frequency in helpful peer meetings about the program: "We used to have little informal meetings

about best practices for teaching online. As the program got bigger we stopped doing that because we were all so busy. We forget that this is a new thing for some people." Faculty N mentioned student interaction as a catalyst for classroom innovation: "Read, reflect, look for synergies, bounce ideas off each other, and have a meeting to norm, discuss, and clarify. That's all one big pile of invention. It works really well like that." Faculty M attributed best practices to technology, which "can offer multiple avenues for collaboration. Multimodal composing is important in this, which feeds into the buffet style of learning which is this idea of offering students their own means of achieving the goals and objectives of the course." Faculty L mentioned the program's mandatory residency as a factor, particularly bringing in high quality speakers, the experience of which proved to be "salient in students' minds. There was a prominent scholar in the field who they'd be spending time with. We were pioneering." Along with discussion of best practices, a business aspect to maintaining an online PhD program in TPC was also mentioned by Faculty K: "If you create a high-quality project and let the world know about it, it will all work out. It has been really fruitful to learn from students from cohort to cohort, a nice experimental petri dish. If you're willing to be flexible and let people bring their good ideas and you can accommodate—it leads to a culture where people feel trusted and valued." Faculty K also reflected on the online program as well as reticence for other universities to follow suit: "The proof is in the pudding. We have this online program, and I think the students continue to show that the program works through the jobs they get. I still see [online TPC graduates] getting those jobs, but I think it's just a huge risk that [universities] don't know that they can take or are too fearful of."

Figure 3: Ranking of Highest Themes among Faculty and Administration Interviews

Axial Theme	**Number of Times Noted**
Best Practices	23
Online / Onsite difference	13
Innovation	11
Collaboration	9
Pressure / rigor	9

A Discussion of Best Practices for Online PhD Programs

This section includes talking points gleaned from all fifteen participant interviews, which provided a great deal of insight into improving online PhD programs in TPC; this insight, in turn, could assist universities as they develop and implement their own. Interviewee discussions echoed McCook's (2011) call for dynamic tools to facilitate online student interaction as well as Melançon & Arduser's (2013) expressed need for a collaborative nature such as networking and short-term groups to alleviate many of the formidable challenges faced by online instructors. Participants also harkened to Harris & Greer (2020), who suggest both synchronous and asynchronous elements of multimedia to facilitate a more comprehensive online technical writing instruction. Furthermore, interviewees echoed sentiments of St. Amant's (2020) five C factors in order to overcome future online education obstacles.

Better interaction with faculty

Echoing Protopsaltis & Baum's (2019) responses calling for more student and faculty engagement in online courses, interviewees cited the need for better interaction with faculty. Student I critiqued shortening their program's mandatory residency from two weeks to one week: "I think that's the worst thing they've done because that was where [students] bonded and got to know the professors. I don't think it's as much of a bonding experience and they don't get some of the experience they need." Faculty M noted how their mandatory residency had gone online during the pandemic and eschewed the notion of keeping the residency online. "I don't like online conferences, and it's hard to focus. I fear that once we go online, people will want to keep it online because of the convenience and cost factor. I don't think it has the same bonding experience." Faculty O offered a more diplomatic approach to the topic: "The students may have different needs, interests; the field has changed, it's moving in different directions as well as the university's different expectations of faculty members. They have their own responsibilities to juggle." Conversely, Student B suggested a shorter, tighter residency: "Instead of that 2-week experience they could break it off into 3 or 4 days. Meet with the committee in a dedicated timeframe. Maybe give [students] options of 3 days, 1 week, or 2 weeks." Faculty L commented on the debate between a weekly and once biweekly mandatory residency: "The two weeks to one week thing – students in the program didn't like it. Older students say don't change it." Lastly, Faculty K commented that perhaps the current model is not as effective as the older model of mandatory residency: "It used to be required for every student every year. That was not seen as a huge burden like it is today, and I recognize the burden on students. But there is a lot of benefit that comes from intensity of that experience that we don't have in the same way today."

Onsite residency housing

Different interviewees had different takes on their program's dormitory vs. hotel residency stance. Student C mentioned their staunch pro-dormitory stance: "I liked the dorm. You have this group of people, you get to know each other. It created this monastic isolation where everybody was there on campus and it was an academic life that most people don't have." Conversely, Student B stated they "didn't like [staying in the dorms]." Ultimately, there is seldom a perfect solution to placate all stakeholders involved.

Collaboration

Another topic was the need for faculty to collaborate, as interviewees inferred that it is a practice that wanes as faculty become increasingly busy. Faculty M: "We don't discuss best practices for teaching online. We need to make sure we meet together as a faculty and discuss. It would be good to interact more often." Listening to student needs at the end of mandatory summer residency also pointed to an impressive feature of online PhD programs, as another interviewee discussed. Faculty N: "We would talk at parties and meetings – teaching practices. There has been a very rich culture of talking through things. We've listened to students. We've taken copious notes during student debriefings the last day of the [residency]. It's not so much pedagogical as it has been programmatic. We have tried to have continual improvement. Lots of little changes – nothing radical."

Bonding, support

"Bonding" and "support" were major themes from the interviews, too; in order to cultivate these nurturing aspects further within an online PhD program, Student D recommended to maintain open connections with alumni. "There's a lot of learning that can come from those who have been through the experience to tell our current students how to persevere, what the ultimate value is of the degree, and I think we can improve by making those connections better." Student H concurred: "Continue to revisit the online component and making it work for students. And continue to tap into students' knowledge. Continue to survey the students and make sure the program is working for them." Additionally, Student J recommended "key contact points for the recruiting process. Faculty need to be more responsive to possible recruits. Student feedback was a huge recruiting tool. It's what sold me."

Quality

"Quality" was another theme that came up among interviewees. Faculty M mentioned maintaining a high quality product. "I want it to be high quality no matter what. To aim for the stars so that when competition came in, we'd be at the apex all the time." M later added, "I think that staying lean and mean and aggressive is the right stance. I would love to see a good longitudinal study. I would love to see ongoing assessment."

Student A commented on the quality of TPC foundations course. "I would recommend a course that would be more about histories and trajectories. The histories that we were taught were very white and academic. Very dated. The textbook was very dated and white. My own TPC class traces those histories and how document design was impacted by great thinkers of the 1980s—not white dudes. Our focus on western rhetoric was also a mistake. Comparative approaches are much better, learning indigenous rhetorics. You're thinking about how others think and one-size-fits-all doesn't work."

Mental health support, development of program archives

Online TPC grad students offered up two more valid points of constructive criticism. Student H wished that people involved in the graduate program would look out for them in terms of mental health. "It's really important to communicate to the students on a personal level to see where they are, not just their academic progression. I don't think it would hurt to add a yearly health check. It was so mentally draining. We keep it in or complain to each other but it doesn't allow it to get fixed. [Faculty] know it's a drain, they were there." Student I mentioned the need for faculty to take their graduate students more seriously, many of whom are well ensconced in their field and working professionally for a number of years. "In the beginning I felt treated like a first-year graduate student. I almost quit because I didn't want to have that experience. It's important for faculty to take the students as experts. I didn't need to learn how to be a grad student."

Lastly, Faculty M recommended administration to "archive everything" to do with their university's online PhD program. "Every lecture. Every guest speaker. Every PhD activity should be recorded."

Challenges and limitations

Research plans must be flexible, and my own research plan attempted to demonstrate this attribute, thereby accommodating various participants across the US. While it would have been insightful to witness onsite working dynamics via observations, to obtain a feel for real-world situations of those in academia and interact first-hand with members in industry, these options would not have been possible. Moreover, participants often modify their behavior in front of observers. Spinuzzi (2013) wrote that "people are often nervous when they know they're being observed. They act differently. They become self-conscious" (p. 83). I acknowledge that establishing comfort and trust with participants could have been fruitful via in-person meetings in a "safe" zone as I have done for previous research projects. Nevertheless, I have attempted to make the most out themes gleaned from my participant interviews.

Another limit is the lack of interviews from industry. While some participants maintain both academic and industry connections, not all participants shared this experience. My study's guaranty of anonymity somewhat prohibited my delving too deeply into this realm. Another study that consists of equal amounts of academia vs. industry would further elucidate popular opinion of the online PhD in TPC.

Additionally, my sample size of interviewees most likely features a bias toward benefits of online TPC PhD programs, since I only interviewed former graduate students who opted into one, as well as faculty who had some hand in building and / or teaching in their respective programs. Furthermore, a majority of student participants experienced online PhD programs and would not have been able to compare their own parallel experience with onsite programs. A larger sample size would surely glean more opinions as well as more perceptions to provide a clearer, more detailed analysis. In retrospect, it may have been a better idea to reword my first research question and omit the term "effectiveness," replacing it with one measurable on a universal scale. Finally, a quantitative or mixed-methods study could weave objective measures such as enrollment numbers, graduation rates, and job placement into the project's narrative to triangulate data and attribute more meaning to the answers of my research questions. Said triangulation would allow me to compare a variety of primary and secondary sources to ensure reliability of evidence (Johnson-Sheehan, 2015).

Finding Meaning

How do we make tacit knowledge explicit or put people in a situation where people acquire knowledge in a shorter span of time? For this project, I was particularly interested in two themes, the first of which was overtly stated in an interview question for all: Is there a perceived difference between online and onsite PhDs in TPC? As this paper has noted in the two above sections, answers were somewhat divided. To that end, I will separate student participant answers from faculty answers.

• Some respondents emphasized that online students had a tougher time than onsite students; the same resources were not there; for example, there was no bumping into people in the hallway for feedback; conversely, online students were also respected more than their onsite counterparts, as Student F pointed out: "The online students tend to get more respect than the on-campus student. More respect. More attention. On-campus students didn't have more of a connection than online students." Student E mentioned the difficulty in developing a dissertation via distance. "Because we were distance, the dissertation phase was super hard. There was no chance to text someone and say 'meet me in a café.' It took a while for some of us to get the hang of it. And not seeing people on campus."

• In the camp of "somewhat" came this statement from Faculty L: "I do perceive a little bit of difference. We developed the residency as we did so that people could get the tacit knowledge they were missing from the hallways. I don't think that quality-wise it's different, but I think that you come out of it with a different experience with your peers." Ultimately, answers from this interview question pointed to the fact that done properly and with rigor, the two degrees, online and onsite, are essentially the same. Incidentally, however, as Faculty K pointed out, online students have paid more fees for the privilege of working online, too: "It makes me mad that online people pay slightly more." Additionally, Faculty N said, "That option to get a high-caliber degree whether online or onsite is tremendous. It's difficult when there are added fees for certain things and we want to integrate onsite and online, but onsite don't pay some of those fees and sometimes online

do.” Some interviewees have noted that things have changed dramatically since the inception of the online PhD in TPC, almost 20 years ago, and that those in academia or industry who eschew the online PhD are those who simply have not experienced it…or have not experienced a rigorous program, hence the interviewee’s sage advice to be careful when shopping around for an online degree.

The pandemic was another principal theme, and it was mentioned more than once by many interviewees. Some participants mentioned that the era of COVID-19 and our necessity to move primarily to online instruction would dispel and disprove the notion of degree difference in quality; meanwhile, others mentioned the pandemic in terms of teachers worldwide having to drop everything and reframe their teaching methods to move into an online arena whenever possible for their own classes. Faculty K: “Perhaps after the pandemic and having to teach online extensively, that bias might dissipate.” Faculty O: “I think about all the techniques faculty have discovered during COVID-19. We lived in a pandemic. Students can’t make their synchronous commitments all the time.” Faculty M hinted that as an older guard of academia gives way to a newer one, the online PhD gathers strength: “Those people are dying out and they’ve had to adapt in the pandemic. I would imagine that some [perceive a difference in degrees], but I bet it’s a much smaller number than 20 years ago.” Faculty L noted that “The online system is accepted, it’s mainstream. COVID has obviously mainstreamed it even more, but even prior to that online is really what everybody is doing, and what everybody was doing pretty poorly.” Student G agreed: “I think that the pandemic has helped with [dissolving a difference between degrees]. People are forced to realize that going to college online is more difficult in some ways and easier in other ways.” Chiming in with a similar opinion was Student E: “I think that maybe things are going to change with schooling and work and everything, having everyone go virtual in the pandemic. I’m hoping these issues of difference go away because we’ve all experienced that things can continue online. I’m surprised that there aren’t more robust online programs. It was so valuable to me.” Student A: “I think that there was a [perceived difference], but I think COVID certainly undid that.” And finally, Student D: “I think that there is a perceived difference in online versus F2F education across the board. Nowhere was that more visible than when COVID hit, and we had to quickly switch to online education and the resistance from the faculty and the administration at my university was so strong. It immediately evolved into ‘how do we make sure there’s rigor? That they’re not cheating?’ I kept saying that this is an example of how it could work.”

Recommendations

After analyzing my data, several points were clear regarding perceived effectiveness of the online PhD experience in TPC. In order to develop meaningful takeaways from this project, this section provides further insight from those working in online PhD programs, and those institutions considering the implementation of an online TPC PhD program.

Recommendation 1: Facilitate a Culture of Caring

Graduate student participants mentioned that they were oftentimes placed in a volatile, highly stressful "pressure cooker." This observation echoes Protopsaltis & Baum (2019) in that online students oftentimes underperform and on average, experience poor results; therefore, regular and substantive student-instructor interactivity is crucial for improved student satisfaction, learning, and outcomes.

Although graduate studies were by their nature stressful and students were actively inviting this level of stress into their lives, institutions should remember that ultimately, these students needed support. And even though academic stress is part and parcel of obtaining a PhD with rigor, there is associated financial stress in an attempt not to live in poverty. To compound scholastic and financial matters further, we have had to endure a pandemic for two years: wearing masks, washing hands, maintaining social distance, and dealing with the illness of loved ones and ourselves. All factors emphasized the need for institutions to show support for these graduate students who are without question navigating through tremendously difficult tasks.

Recommendation 2: Establish Better Communication Practices

In tandem with the culture of caring, a lot of participants pointed to the idea that those in online PhD programs need to communicate better with their students. Jessica Livingston, Sarah Summers, and Janie Szabo (2018) look to a variety of course media and options of communication, including discussion forums, to encourage student motivation and stronger classroom bonds. Responding to emails in a timely manner, providing meaningful feedback on coursework assignments, and returning dissertation chapters with constructive comments were all essential in helping online PhD students finish their degree. Moreover, participants noted that at one point, communication was key in the success of their program, but faculty members became gradually busier and ultimately the cross-pollination of ideas ebbed. It is paramount to keep these meaningful conversations happening for the sake of online PhD rigor, which, of course, leads to the idea of cultivating best practices for an online PhD program.

Recommendation 3: Facilitate Student-Student and Student-Instructor Bonding

Establishing ties in an online program did a multitude of good, from friendship all the way to savvy networking. Alice Daer & Liza Potts (2014) mention ways in which the online instructor can help their students develop and fortify their networking skills, which could accompany students throughout their professional lives. These ties kept online students from feeling isolated alongside, and they assisted in educating students how to navigate a specific program. Student bonding also facilitated fleshing out project ideas, thinking about angles not previously explored and perhaps overlooked. In turn, faculty bonding also did a world of good, as collaboration facilitated stronger courses and ultimately a stronger program. If people cared about each other, then they were more apt to work

harder for the greater good. Student-teacher bonding was also crucial. Specially forged relationships with dissertation team members could impart knowledge, approachability, mentorship, inspiration, passion, or simply a nurturing instinct perhaps all of the above with some faculty members. The marathon of acquiring a rigorous PhD was so daunting and overwhelming that many PhD students could not fathom enduring a program without this component.

Recommendation 4: Hone a Recruitment Program

Chris Dayley (2021) provided an extraordinary amount of sound advice for recruiting would-be students from diverse backgrounds for TPC programs. Dayley argues that "Educating admission officers and academic advisors will empower them to direct students to the TPC program," rather than rely on recruitment staff with no knowledge of the program itself (p. 31). It is crucial to acknowledge the tremendous work that administrators accomplish for online PhD programs, oftentimes under duress. I am well aware of their valiant efforts in harrowing conditions. Your work is commended! Nevertheless, regular meetings with faculty and/or students involved in the program encouraged a cross-pollination of new ideas and dialogue, two crucial tools to maintain relevance and dynamism in instruction as well as classroom delivery. As these interviews show, personal experiences, both positive and negative, can provide TPC program educators and administrators the material needed to recruit the students with both the desire and motivation to succeed in online and low-residency programs and avoid negative program outcomes that Spiros Protopsaltis and Sandy Baum (2019) highlight in survey responses about online programs. Diverse, prepared, and motivated students can be recruited, leading to positive postgraduate outcomes and evidence that online and low-residency programs can be effective and rigorous.

Conclusion

Online PhD programs must constantly evolve in terms of administration, program implementation, and classroom dynamics to remain relevant and attractive to current and prospective students. With iteration upon iteration, these programs must strive for the elusive balance of rigor, inspiration, and care. Additionally, we must heed the role that COVID-19 continues to play in present education; due to this factor alone, it is my inherent belief that online education will continue to play a vital role from early childhood education through post-graduate education indefinitely. In fact, I argue that this is the defining moment in which those experts involved in online programs demonstrate their prowess and prove what marvels can be done in terms of online teaching / learning. Attention to detail and appropriate selection of methodology and pedagogical rationale can inspire and empower the workforce on both sides, the TPC faculty, and the online PhD TPC student.

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Appendices

Appendix A: Interview Questions for Online TPC PhD Graduates

1. What attracted you to your TPC online PhD program?
2. How have your perceptions been different from your initial entrance into the program?
3. How has your TPC PhD coursework affected your career?
4. Did you enter the program in order to obtain a better position, or did you enter the program in order to keep the position you held during your studies? Explain.
5. How did specific faculty members impact your TPC PhD coursework?
6. What have been your overall experiences in your TPC PhD program?
7. What changes have you perceived during and / or after your coursework in your TPC PhD program?
8. What suggestions do you have for improving your TPC PhD program?
9. Do you think there is a perceived difference between an online and an onsite PhD in TPC?

Appendix B: Interview Questions for Online TPC PhD Faculty (Past or Present)

1. What attracted you to teaching in a TPC online PhD program?
2. What has been your involvement in the program?
3. Which approaches – methodologies, classroom practices – have you taken in your TPC online PhD courses? Explain.
4. How long were you involved in the program? Why did you leave?
5. How did specific faculty members impact your involvement in your TPC online PhD courses?
6. What have been your overall experiences working in your TPC PhD program?
7. What changes have you perceived before, during, and / or after your involvement in your TPC PhD program?
8. What suggestions do you have for improving your TPC PhD program?
9. Do you think there is a perceived difference between an online and an onsite?

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Community Building at the Programmatic Level: Arguing for the Implementation of the PARS Model in a Distance Learning Graduate Program

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Abstract: Distance learning graduate programs in technical communication can work at building community at the programmatic level as well as the course level. This work might be best done by leveraging the position of the faculty member tasked with administering the program, often called the Graduate Program Director. Through the scholarship on community of practice, this article makes a case for the GPD to take on this role and recommends as a starting point the PARS – personal, accessible, responsive, and strategic – framework developed by Borgman and McArdle (2019) for community building in distance learning courses.

Keywords: Community, distance education, graduate program

Technical Communication has long had programs delivered via distance-learning at all levels. The field has talked about curriculum development and program assessment quite a bit. But as a field we've not really talked as much about the notion of community, disciplinary identity, and the challenges of distance education in creating these at the programmatic level, and where I argue it can and should look different than what happens in a classroom. Given that, of all the disciplines that fall under the rhetoric and writing studies, technical communication has had some of the longest standing distance learning graduate programs, the lessons drawn from this discussion about distance learning programs, community, and the role of the graduate program directly are highly applicable to a fair number of us. In this article, I make the case, based upon concepts drawn from Community of Practice (CoP) theory, that graduate program administrators (GPDs) have significant responsibility in developing student identity much as the course work and professional opportunities play a role. This becomes especially true in programs where the primary or only course delivery happens at a distance. The central role of the GPD in developing the CoP means that the GPD's intellectual work needs to be highly deliberative and assessed regularly to

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be sure it best fits community needs. In order to enact this in distance learning programs I will discuss how I used the PARS framework developed by Jesse Borgman and Casey McArdle (2019) to think about ways of increasing community and supporting student identity formation at the program level.

Current Scholarship on Community and Distance Learning

There is a fair bit of research in technical communication on creating presence and community in distance-learning courses both asynchronous and hybrid (Croft et al., 2015; Harris & Greer, 2021; Melonçon & Arduser, 2016; Moore, 2014). However, less discussion is happening at the programmatic level outside of focusing on mentoring relationships and their critical role for adult learners, as frequent participants in online learning, and for its facilitation of transformative learning (Columbaro, 2009; Tisdell et al., 2004). One notable exception is Yvonne Cleary's work that includes discussion of a face-to-face orientation workshop at the start of a program (2021). This is despite socialization's key role in professional identity development (Gabrys, 2012; Liddell et al., 2014). Graduate programs are the cornerstones to professionalization for both ALT-AC and university career focused students, with programs focused not only on learning content but also situating a student within and interaction with a discipline (Danby & Lee, 2012). So, it is vital to discuss building community at the graduate program level. Instead of leaning into talking about programs as if they are independent entities rather than groups of people, I argue it is important for a variety of reasons to talk about the central role of the GPD and locate the agency for building the foundations of programmatic community with that administrative position. Well thought through discussions and initiative development to support the CoP of our graduate students along with the essential faculty buy-in need to have what Etienne Wenger, Richard McDermott, and William Snyder call a community coordinator (2002, p. 80). In what follows, I show that some of the aspects of the community coordinator's functions as Wenger et al describe them have significant overlap with what GPDs already are responsible for. I end with a discussion of how the PARS model of Borgman and McArdle (2019) can be applicable in helping to conceptualize what a GPD might do at the programmatic level for building community. PARS, as articulated by editors Jessie Borgman and Casey McArdle (see both the 2019 *Personal, Accessible, Responsive, Strategic: Resources for Online Writing Instructors* and chapter 1 of *PARS in Charge: Resources and Strategies for Online Writing Program Leaders* (2023) has three levels of implementation for each of the four tenets, with the last being administrative. I will discuss how the PARS framework and their prompts for Writing Program Administrator consideration from the latter text have value for GPDs administrating graduate programs.

Graduate Program Directors

The administrative role of the GPD is seldom discussed across in the rhetoric and writing studies scholarship, and it is notably missing from the work of the Council of Graduate Schools. They focus on deans for much of their data gathering and

discussion. However, given the involvement of GPDs in recruitment, advising, communication, development of initiatives, event planning, and ultimately the success of graduate students, this administrative role should be seen as equal in value to student professional identity development to that which happens in classroom spaces and between mentors/chairs and students. Suzanne Ortega (2003) argues that despite this critical role, GPD roles are seen as service roles, get little or no training, and often rotate out on a 2-3 year cycle making continuity a bit difficult (Wiener & Peterson, 2019). Research on GPD roles is still sparse. Within this wide range of roles required for running a program, GPDs have a responsibility to assist students in forming the community that will help support them through their graduate careers. Finding clear descriptions of the role of administrators in charge of departmental graduate programs is not a particularly easy task, especially as there is an array of terms used such as Graduate Program Director, Directors of Graduate Studies, Program Director and Advisor. This difficulty might be in part because faculty handbooks are only available in portals limited to university and staff access. For the purposes of this article, I chose descriptions accessed on the internet at universities with graduate degrees in rhetoric and writing studies writ large to include some form of technical and professional communication that also included descriptions of the administrative position of GPD, however they may have named it. These include James Madison University (JMU) (Graduate School, 2024), North Carolina State University (NC State) (*University Catalog, Directors of Graduate Studies*, 2024), Old Dominion University (ODU) (Office of Academic Affairs, 2024), and University of South Florida (USF) (Office of Graduate Studies, 2024).

Across each of these positions, the following responsibilities were listed:

- Program Marketing and Recruitment (JMU, ODU, USF)
- Admissions to Program (JMU, NC State, ODU)
- Advising and Problem Resolution (JMU, NC State, ODU, USF[1])
- Thesis and Dissertation Coordination (JMU, ODU, USF)
- Continuance (JMU, NC State, ODU, USF)
- Certifying Students for Graduation (JMU, ODU, USF)
- Program Policies and Manual (JMU, ODU)
- Scheduling and Curriculum Review (JMU, NC State, ODU)
- Program Assessment (JMU, NC State, ODU)
- Participation in Regular Training to stay current with University/Graduate School Practices (JMU, NC State, ODU)

1 USF is very brief in their description, but they include general academic support, which I am assuming includes all of the categories that would be included in support of progress to degree. It is unclear to what extent they shape policy, scheduling, and assessment; although, it is a reasonable assumption they participate in those activities.

- Assigns Students to Assistantships (NC State, ODU - Does not appear in official description but is in fact how things are handled in the college of Arts and Letters)
- Fellowship Support (NC State)
- Provides Communication between Graduate School, Program, and Students (NC State; Note: this is not explicit but is implicit in JMU and ODU's descriptions.)

The significance of the role of the GPD is clear from these descriptions and aligns with Ortega's findings (2003). As I will demonstrate in the next section, the role connects to the important work of moving students from legitimate peripheral participation in CoP to full participation through the management of several of the key mechanisms for engagement. This can be complicated in the case of an online graduate program and the role of the GPD in addressing this set of issues may require different tasks.

Community of Practice Concepts

All degree programs, especially at the graduate level, operate as communities of practice as defined by Etienne Wenger (1999). They are social learning systems that are social, cultural, and historical (Wenger, 2000). Some community of practice attributes need to be both explicitly articulated and engaged with. This is work that the program, in large part through the efforts of the GPD, must do as community coordinator. Degree programs have the following community of practice attributes that include explicit and tacit ways of structuring and providing meaning to what we do (p. 47):

- There is learning through social participation.
- Work within them is action-driven and collaborative.
- People within them are multimembers across communities.
- The community has associated genres.
- The community builds learning mechanisms for itself.
- Knowledge counts as participation toward completing an enterprise of some sort.
- The community creates a form of meaning to experience and engage with the world (Wenger, 1999).

A community of practice needs interaction and reification to succeed (Wenger, 1999). The community coordinator has an important role in identifying issues important to the community, event-planning, linking members, and assessing how well goals are met, among other duties (Wenger, 2002, pp. 80-81). All of these are demonstrably true of degree programs in general. The GPD's role can often be the work of making the tacit explicit in cases where there is a lack of clarity especially as we become more and more aware of how the tacit nature of these practices are impediments to graduate student success. Also critical within the

progress of the completion of a degree program is the movement from legitimate peripheral participation to full members of a community. Engagement with communities of practice is important because stakeholders are invested in them as part of their identity, but within the definition is the notion that these are not stagnant mechanized reproductions of practice, but are negotiations by community members (Wenger, 1999, p. 97). As suggested above, the GPD is often the center for information collection and distribution about graduate program needs from students, faculty, and university administration. Additionally, they often act as the point person for planning various professionalization opportunities and are often tasked with collecting and distributing data for programmatic assessment, which is directly tied to determining how well a community is doing and the negotiations between the stakeholders necessary to make changes. In another article on this subject currently under review, I outline the intellectual work of several major tasks GPDs take on that fit into the larger scope of the community coordinator role (Wenger, 1999, p. 80; Wenger et al., 2002). Some of the most pertinent items on a longer list include identification of programmatic issues, planning and facilitating events focused on student development and professionalization, fostering development of legitimate peripheral members (students), designing for program evolution which includes planning for transition out of the position, and working with a smaller subset of faculty from the department who work as project leads and operate as disciplinary experts, critical for a degree program that houses multiple disciplines and subdisciplines.

The work of the GPD as community coordinator requires negotiation and collaboration with all, including faculty and students. Community of Practice as a heuristic has been used to consider the professional development for instructors of online courses in Aaron Bond and Barbara Lockee's *Building Virtual Communities of Practice for Distance Educators*. One of the most important concepts from that work that applies to the community building work of the GPD when encouraging faculty buy-in to the graduate program community of practice is determination of intent and identifying needs. This includes problem solving, best practice determination and innovation when the focus is specifically upon professional development for teaching (Bond & Lockee, 2014). However, when looking at program community development writ large these foci hold true as well. GPDs often have a big picture view of how well the program is running within both the department and college within which it is situated and what its needs are. As mentioned earlier, monitoring the state of the program through information gathering is key to the community coordinator functions of the GPD role.

GPDs also often work with committees who can speak for graduate faculty more broadly. Additionally, it is important to reach out to those not directly involved in these committees to ensure that buy-in to whatever community building efforts are being put in place — whether it be discussion about revisions of comprehensive exams or mentoring styles or online faculty/student discussions about thesis and dissertation committees and expectations — are met with, if not enthusiasm, at least engagement. Part of buy-in is providing faculty the ability to have a voice in the process.

Individual faculty relationships with individual students who are a part of the community of practice can have knock-on effects on the community. Encouraging investment from all parties is critical and is something a GPD must actively foster with support from other administrators.

Boundaries and Multimembership

Students often come to our graduate programs as multimembers of various CoPs. The productive nature of these spaces and tensions, the dissonance and consonance of them, is important. And while students might be working toward legitimate peripheral participation within the academic CoP of the graduate program, they are often full members of others in educational, governmental, nonprofit, and corporate spaces. Legitimate peripheral participation is "the process by which newcomers become included in a community of practice" (Wenger, 1999, p. 100). Importantly there is no such thing as "illegitimate participation" just varying degrees of moving toward integration (Wenger et al., 2002, p. 35). Part of the GPDs work is to facilitate the integration of students into the CoP through providing opportunities outside of the classroom but within the department for this integration to occur that try to consider and even draw upon student multi-membership where appropriate. The conclusion of this article will look at potential ways of doing this within the PARS model, but this integration work can be generally categorized as providing opportunities to network with students and faculty in settings that are professional/casual and providing workshop and community writing spaces where students can support each other through their development of various class projects and their capstone projects, theses, or dissertations. Students can also be encouraged to propose workshops within their specializations such as working with multilingual writers, writing in government sectors, or working with modeling and simulation teams.

The scholarship on CoP and situated learning isn't without critique, such as its failure to account for groups consisting primarily of a long standing set of members, none of whom are likely to engage in legitimate peripheral participation or its minimal address of how the introduction of those already possessing expertise may impact the understanding of who is legitimately peripheral (Fuller et al., 2005, pp. 60, 52). While the first critique is less important for a graduate program, which by its very nature will always have members working toward legitimate peripheral participation as new students, the second is more salient. For example, the fact that many graduate students come in with membership in areas of expertise outside of our technical and professional communication program's disciplinary conceptualizations of themselves is a complicating factor that we have likely encountered in course work and advising, but the GPD along with faculty mentors can assist students in seeing how to leverage this as an advantage in their research interests and contributions. Additionally, CoP, as a response to the focus on individual cognition and learning prevalent at the time of its first iterations, has left out the individualistic nature of the person and the impact that can have as the individual negotiates in and between communities. This is always a negotiation "shaped by person histories" and experiences" (Billett, 2007, pp. 55-56). Individual agency gets lost theoretically in this move away from cognitive theories of learning (Billett, 2007, pp. 55-56). GPDs are in part responsible for making sure students

within their programs are integrated into the community but also able to pursue individual interests and provide a variety of professionalization opportunities to help support this variety, whether it be master's students looking to create documentation for workplace promotion or apply for PhD programs or PhD students looking for jobs in ALT-AC spaces rather than the academy.

Faculty can also learn much from students especially those coming from or currently pursuing various career pathways in industry or other academic workplaces. despite faculty members' role as longer term members of the technical and professional academic community. Alison Fuller, Heather Hodkinson, Phil Hodkinson, and Lorna Unwin note that the prevailing model of CoP doesn't account for this neatly and tends to "treat newcomers as tabula rasa" (2005, pp. 64-66). These structures are also imbricated in relationships of power (Lave & Wenger, 1991, p. 36) that critics like Joanne Roberts feel are not adequately addressed along with the issue of trust, which is critical for transfer of knowledge and building mutual understanding (2006, pp. 627-628). Despite these concerns about some of the theoretical limitations, CoP is useful, and despite Jean Lave and Etienne Wenger's apparent dislike for formal education as noted by Fuller et al, as a theoretical construct for analysis, community of practice works well for conceptualizing graduate programs. GPDs play a critical role in the negotiation and in maintaining and negotiating the mechanisms of this participation at the programmatic level as well as fostering trust and monitoring power situations, especially when the students don't fit an abstract set of norms that inform policy. (This happened all too often during the recent COVID pandemic.)

GPDs have important roles in setting community intent which include problem solving for everyday disciplinary issues, best practice setting — including collecting information on, sharing, and discussing best practices from a variety of sources including scholarship and in-house practices, tools and job aid creation, and innovation (Bond & Lockee, 2014, pp. 9-10). For much of these intents to succeed, though, the students within the program need to be able to see themselves as a community with the faculty joined in common cause. This is where I think that the PARS model used primarily for the development of undergraduate online writing course community provides a useful framework for programmatic thinking that GPDs can take up. In the next sections I'll talk about the exigence that led me to this conclusion and some of the ways that PARS helped me think about what to implement or to plan to address this situation in our own context, with the hope that the same framework can be useful for others looking for a way to scale things up to the programmatic level.

Lessons from a Post-Pandemic Program Survey

The basis for this argument that GPDs must take responsibility for crafting initiatives to promote community at the programmatic level is both anecdotal and statistical. When I took over as the GPD of our PhD in English Studies in mid-summer of 2022 after spending over a decade both as faculty of that program and as the coordinator of our technical (professional[2]) writing programs at the BA and MA levels, it was clear that the student sense of community was different within the program

2 I put this in parentheses, as the program changed names a few years back.

from what it had been. It was also quite clear the needs were different from the distance learning MA program, with its focus primarily on career professionals and students looking to create a clear pathway into the corporate world that I had been overseeing. This was abundantly true even though the programs shared a significant number of courses, with student work being differently scoped at each level, along with their fundamental infrastructure. This move on my part occurred just as we were coming out of a pandemic. The noticeable negative changes the pandemic wrought on PhD program's communicative abilities that I was seeing were likely exacerbated by the temporary shuttering of our low residency requirement of two summertime weeks on campus during students' coursework phase. Where we had once had a robust community that was primarily driven by students, this had mostly fallen away. I cannot be specific about all this reasons this latter fall off may have happened as no data had been collected, but the pandemic and the myriad negative effects it had seems a likely significant contributing factor. As there were many spaces for such community work that faculty aren't privy to such as private cohort and course Facebook Groups and Google Hangouts, it is difficult to be certain.

To address the need, the program had to demonstrate what was possible. The institutional knowledge graduated along with previous students, so I developed a survey[3] (see appendix A) and distributed it to the newly revived PhD Listserv. This survey is preliminary, and lacked focus groups for providing validity, which I recognize. I opted for speed over slower deliberation as the program communications seemed to be in crisis with incorrect information in a variety of forms circulating within the informal student groups not associated with the program, and there was a need for rapid implementation of relief measures. The questions in the survey were based upon current and previous practices for communication and community building used within the program, including some course-specific communication options various faculty had been using. Literature about attrition and community was also consulted for question development (Ampaw & Jaeger, 2012; Caruth, 2015; Devos et al., 2017; Golde, 2005; Lovitts, 2001). A follow up survey with focus groups is being planned after the students have had time to engage with some of the adjustments put in place based upon this data set, which will take about two years to fully implement. Two of the major initiatives coming out of the initial data, the video-streaming, student-led dissertation workgroups facilitated jointly by the PhD program and Writing Center begun in Fall of 2023 and associated four-day in-person/video streaming dissertation bootcamp facilitated by the GPD and Writing Center Director held in Summer 2024, have in-depth, three-year studies currently in progress, that will assist in providing understanding of how well they worked both short term over the 23-24 AY and longer term. Studies in the field have shown that post-course work initiatives of these types do have better outcomes for PhD completion (Aitchison, 2009; Aitchison & Guerin, 2014b; Cui et al., 2022; Fladd et al., 2019). A survey on the two-week residency requirement, its timing during the course of the year, and its value is being prepared by myself and the PhD advisory committee, but it was deemed unwise to do it the first year back as there was no institutional knowledge among nearly all of the parties planning and participating as to how it would function, outside of the coursework which had continued online during

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pandemic, and any results regarding experience and value would likely be atypical. This type of data collection, assessment, and adjustment of the community based upon formal information gathering is precisely the type of work discussed as a critical function of the community coordinator in *Cultivating Communities of Practice* (Wenger et al., 2002).

The survey discussed here focused on what I as the GPD had a certain degree control over and could improve to better meet the students' needs. At the time of the survey, January 2023, the PhD program identified 72 active students from our records. The number is as exact as I could get it, as a few students may have unofficially paused their programs without any formal indication they were doing so. Of those 72 students, 26 participated in the survey for a completion rate of 36%. Because the program knows, through multiple anecdotes and time-to-degree data that suggests a slowing of their progress, that students become a bit disconnected post-coursework because they don't have the structure that coursework and comprehensive exam preparation provides, it was important to collect information regarding where they were at in their progress through the program. For the 36 respondents, 11 were in course work, 14 were working on their prospectus or dissertation, and 1 was focusing on comprehensive exam preparation. Therefore, the split was close to being even between the major stages of the program, coursework and dissertation stages. About two-thirds of our students learn from a distance. The breakdown between those answering who were on campus (8) versus at a distance (18) was close to reflecting the overall student population in the program.

In a question designed to gauge the feelings of students on how well they believed that they were able to create community with peers, responses broke down in a more positive way than had been anticipated. A total of 58% of students felt communication was very strong with their peers on topics like course work, dissertation writing, and programmatic concerns. Another 23% felt communication was somewhat strong with their peers. Only 15% felt communication was somewhat weak with their peers. 4% (1 student) felt communication was very weak with their peers. This speaks to the resilience of students during the pandemic and how they built and maintained networks. Students reported using video streaming communication (20%), email (36%), and social media-based groups (36%), which was indicated to be Facebook in 12 answers out of the 18 who listed a preference for communication outside of class time while in coursework. One noted that texting was also heavily used, but interestingly, only that student saw group texts as a social media option. Only 8% reported using writing groups, which research shows plays a significant role in student success at the graduate level (Aitchison, 2009; Aitchison & Guerin, 2014a, 2014b; Cui et al., 2022).

However, when it comes to a sense of community with the program itself and the faculty within it, the responses were less positive. The students felt that the program could do more in communicating and promoting community. Of the options provided including SharePoint and X, students felt that emails (both the listserv and those sent directly to individuals) and Facebook were the most effective in helping them maintain a sense of community among their peers and with the program despite the fact that the program doesn't maintain a Facebook page separate

from the department's, nor do we use Facebook for significant communication for programmatic issues as a department. When asked what topics they needed more communication on, dissertations and choosing committees and advisors were listed most frequently (8 of the 18 who provided a list of topics mentioned these). There also seem to be disconnects between programmatic realities, including how far in advance we know which faculty will leave, what courses will be offered in upcoming years, and what exactly the relationship between a student and their advisor/chair should be, which speaks to a need for more transparency as this particular relationship is among the most critical for student degree completion (Caruth, 2015; Lovitts, 2001). Realistically, we cannot announce any faculty hires or departures until contracts are signed, courses change sometimes just a few weeks prior to registration because of a wide range of circumstances, and a student's relationship with their advisor/chair is very individual. Frank and transparent conversations about each of these topics is worth having, with a foregrounding of the notion that fundamentally they are learning to be independent scholars, so that some independence in delving into scholarly topics and less reliance upon faculty and specific coursework becomes important at this stage. We house literature, cultural studies, digital humanities, rhetoric and composition along with technical communication in our program with our 20 core faculty members dispersed across these disciplines. Thus, we have to actively promote the development of independence in pursuit of projects and the seeking out of professional development opportunities. That isn't to say that mentoring and professional development isn't critical. It is. But that is fundamentally different than a reliance upon faculty to guide student inquiry in a topic in which they are specialists, as no graduate program can possibly house specialists in every area that students might find themselves invested in. There are ways to support this, which I will discuss in the section about moving forward with developing programmatic-based support for students and crafting clear communication and messaging from the GPD.

The greatest interest was in formalized writing groups with accountability, faculty–or student–led, at 37%. In the section on the PARS framework, I will talk about what the initiatives this last, and in many ways key, interest expressed by the students led to. Part of the reason this last number was significant was because students mentioned in the qualitative portion of the survey how happy they were that the Summer Doctoral Institute (SDI) was returning, in part because being able to be with peers during the summer, especially face to face for the majority distance students, was seen as valuable. This in connection with the previous 37% suggested that students found time with peers working toward scholarly goals was deeply important to their sense of community, and so as GPD I needed to find ways to better facilitate that connection post-course work. Other important takeaways from the qualitative portion include a desire for more mentoring sessions combined with meet and greet events by faculty or ABD students/recent graduates. Especially desired was more faculty interaction outside of class, an important part of the events associated with the on-campus, two-week SDI, which students at the time were unaware of because of its multi-year suspension.

The website was regarded as a site for both information and community identity building, knowing what faculty and students outside of their cohort were doing was important. There was also a desire for an increased number of professionalization sessions focused on various things from CV building, ALT-AC careers, specifics on

the dissertation process, mock conference presentations. The major takeaway from the survey was that communication is not as in as much dire need of overhaul to keep students connected to each other as much as there is a need for the program to re-build some of its events infrastructure. Additionally, communication about what is in fact available must be improved and there is need for innovation in some of the areas mentioned. Re-instituting and expanding upon what had gone before is needed regarding professionalization. More work needs to be done on keeping dissertating students connected in the form of student-led gatherings, discussion/reading groups, and formalized writing groups to address professionalization, genres, and ways of knowing. An underlying theme was that the support students are getting from dissertation chairs seems to be quite variable, which means that these larger programmatic mechanisms are crucial.

PARS and the GPD

So, what can GPDs, as the administrator of their programs do to better enhance community at the programmatic level? Looking at the PARS framework, developed by Borgman and McArdle (2019) for courses, instructors, and administrators, can serve us at the graduate programmatic level, too with some careful rethinking. Their administrators are more WPAs than GPDs (specific references to WPAs along with the focus on language regarding undergraduate writing course administration and faculty professional development suggests this), but many of the principles they espouse can be useful to any administrative faculty. As it is a framework developed for distance education coursework, I think it works particularly well for distance education programs, because considering the difficulties of delivery is already inherently part of the thinking behind this framework.

PARS in this work stands for Personal, Accessible, Responsive, and Strategic and is a practical framework to better create community within distance learning courses. Personal is importantly deeply connected to personality and the concept of presence - the social nature of online interaction (Borgman & McArdle, 2019, pp. 19, 24). Programs, too, have biographies but the nature of them is a bit different. Programs, instead have mission statements but also profiles that are deeply connected to the types of students they draw and the types of professionals or teacher-scholars they produce. These can be made clear through faculty and student bios and information regarding publications, presentations, awards, and job placement. As Borgman and McArdle note, the online nature of the communication, so heavily writing dependent, means writing is first and foremost a social act (2019, p. 25). In *PARS in Charge*, they provide a list of prompts that focus on professional development for faculty and staff (2023, p. 12). GPD's do parallel work, but our professional development work is more often targeted at our graduate students who are in the process of becoming members. We also often tasked with recruitment initiatives, which require us to think about the personality of the program profile. A GPD concerned with programmatic marketing should familiarize themselves with and ideally contribute to studies done within the rhetoric and writing studies fields (such as the MA Consortium of Writing Studies Specialists' report on programs conducted in 2012 and the Doctoral Consortium of Rhetoric and Composition's current survey updates) as well as research in scholarly outlets such as the *Journal of*

Marketing for Higher Ed, *Journal of Marketing Education,* and *Journal of Education Advancement and Marketing* when initiating changes. The GPD, then must look carefully at the messaging on the university website areas they have control over especially as regards program and people (Lim et al., 2020). This messaging is often the first contact that prospective students have with the program who need to see the range of projects a program can support but also importantly is the source of information for current students, who when at a distance rely heavily upon it for information especially about faculty whom they've not had classes with, at least as my program survey results suggest. Alongside anyone directing web content development, the GPD is responsible for making certain that the messaging is consistent, appropriate student information is shared and may often need to nudge faculty into making certain their profiles are updated given that these profiles serve as an important source of information for students looking for exam and project committee members. Unless the university enforces templates, profiles may operate like the bios that Borgman and McArdle recommend. As the authors note, "[I]nstructors (or in this case the program through the efforts of faculty and the GPD) should take the lead in making … a safe space… by inviting conversation… and facilitating connections" (2019, p. 25). This means crafting spaces other than coursework where communication between online graduate students and faculty can occur, whether it be the pull medium of the website, zoom invites, workshops, or other sites like residency requirements.

Accessible is the next tenet of PARS, and it is critical not only because of Federal Mandates (along with the Americans with Disabilities Act, https://www.ada.gov/ see https://www2.ed.gov/about/offices/list/ocr/frontpage/pro-students/issues/dis-issue06.html, https://www2.ed.gov/about/offices/list/ocr/504faq.html) but is also a diversity and equity issue. Distance education programs often serve students who cannot relocate for a variety of issues include cost, work and personal obligations — students who might not be able to engage with advanced education in a traditional setting. Students are often non-traditional in many respects. This means that accessibility is not just a technological issue (although that is important) but also DEI issue that GPDs must address. In addition to technology concerns, Borgman and McArdle provide prompts for administrators considering accessibility that focus on conveying expectations, access to documentation, and aiding faculty in working with students (2023, p. 14). If thinking programmatically for a graduate program, consider providing clear access to policies, forms, and expectations regarding processes, timing of courses (especially those that are hybrid as well as synchronously video streamed, which while having clear value for helping students' disciplinary knowledge through discussion, is also a trade off in terms of access), policies requiring residency, and how certain milestones are handled such as comprehensive or candidacy examinations and defenses. This can quickly become complicated when also negotiating with the registrar's office or office of distance learning which likely controls a fair bit of scheduling, and sometimes there are no perfect, only reasonably good answers.

Responsiveness is the third tenet of PARS, and Borgman and McArdle define it as "responsive to students and the work they complete" (2019, p. 51). In *PARS in Charge,* they recommend administrators consider conveying availability to faculty and staff and creating pathways for communication over various mediated platforms

along with creating workflow systems (2023, p. 16). When considering graduate programmatic issues, responsiveness means multiple, clearly defined lines of communication between the GPD, who is the clearinghouse for programmatic issues as per the common definition, and the stakeholders. This requires creating the mechanisms for faculty/student causal professional interactions, as mentioned in the presence section previous. The survey results suggest that this is a significant factor in creating community in an online program. Borgman and McArdle also mean accessibility in terms of being reachable, through email, video meetings, or telephone calls (2019, p. 41). This necessitates flexibility on the part of faculty, but that also doesn't mean 24/7 access. As GPD, fielding questions about why a certain faculty member just doesn't answer their emails is a difficult one, and not one that is easily addressed. But it is part of the advising and problem resolution duties, and there can be a source of tense negotiation when there is a lack of buy in or understanding on the part of faculty as to what an online degree program will mean for them. However, retention of students can depend upon it. If faculty that students most wish to work with are not regularly available to them, it can be a cause for students to separate from the program, despite best efforts from administration and other faculty to fill gaps (Lovitts, 2001). Other than good faith efforts to assist students and improving faculty buy-in, I have no clear pathways forward on that issue, and it was a concern that the survey demonstrated.

The work of the graduate student when viewed from the programmatic level should be considered at the level of programmatic outcomes, and the GPD has a responsibility in maintaining the processes and the assessment of the milestones that constitute the measurement of how well the students are meeting those outcomes. There is a significant role for the GPD in developing assessments for comprehensive exams and routing feedback for certain milestones. There is also a need for providing mechanisms to laud student accomplishments to be certain student work is valued and is seen as a model by other students. And advising is critical even as students find specific academic advisors and mentors moving forward, they need assistance in figuring out which faulty members might be a good fit, especially if hallway conversations are not a reality in their program experience.

The last tenet of PARS is strategic, a "pillar to success" for administering distance education that is "focused on the user experience of the student" (Borgman & McArdle, 2019, p. 71). The advice for administrators in *PARS in Charge* focuses on planning alongside instructors (2023, p. 17). Mapping out a process for crafting community building and the communication and programmatic events that support it based upon data from students and faculty is critical to developing a strategic approach. Borgman and McArdle's suggestion to work backward from major projects and course outcomes is just as relevant when applied to programmatic thinking, where getting students through major milestones like comprehensive examinations, prospectus defenses, the dissertation, and ultimately the various job markets are the points from which a GPD might think backward to seeing how all the pieces along the process of working on a degree for students can build to this. This means thinking about the program as more than just the coursework. Borgman and McArdle turn to experience architecture as articulated by Potts and Salvo with its focus on ecosystems of activity. I believe that GPDs, too, can benefit from gaining a "stronger understanding of strategy and [willingness] to lead

initiatives in the name of participants [our graduate students] who will use these systems and the organizations that want to engage users as contributors" (2017, p. 5). A graduate program is nothing if not an ecosystem of students, without whom it would not exist, and faculty who want to engage in crafting and promulgate disciplinary knowledge. In the PARS discussion on creating strategy, there is a focus on systematically gathering and using student feedback and finding ways to know your students while preparing faculty to work with them, which I argue is critical in absences of hallways conversation in a distance learning program. Added to this is crafting clear expectations — the function of the policies that the GPD is often in charge of both negotiating with faculty and the graduate school and distributing (pp. 73-74). The initial survey of our students indicated that, when the final tenet of PARs was applied to programmatic level thinking, communication strategies must be handled first. Other forms of critical support such as assisting dissertating students remain connected to the program is additionally highly prioritized.

Strategies must also change over time as the wide variety of needs of students, their future workplaces, and the current faculty specializations shift. Other prioritization should come from discussion with students and faculty about what the perceived needs are, and, as this is likely to change over the course of time, regular surveys and focus groups are necessary — again spearheaded and administered by the GPD.

The GPD also needs to negotiate concerns of faculty for things like program integrity and disciplinary community and identity building — we are after all certifying the next generation of practitioners, teachers, and scholars — and students' concerns with their ability to participate and their various financial situations. Regular surveys and solicitation from feedback from all parties concerned can keep the GPD clear on the concerns so that changes can be strategically planned and, in what I think is a necessary act of transparency, the GPD needs to let faculty and students know why the policies that are in place exist as they do. There should be mechanisms in place for faculty to advise upon and help craft policy such as advisory committees, and feedback from graduate faculty at large should be considered in significant policy change instances. Faculty buy-in is critical for all parts of a PARS approach, because the outcomes of much of GPD's work is very much reliant upon other graduate faculty and thus creation of good will through transparency and mechanisms for input is important. A program is its people, and without faculty both understanding and, mostly, agreeing with the policies and processes in place, administering a program can become problematic.

Moving Forward

Using the concepts from PARS, as a GPD I have worked at the programmatic level to create the following communications facilitating and community building initiatives with the assistance of the PhD advisory committee which has helped me prioritize – as there is always too much that can be done. Some initiatives have been revived after falling away because of the pivots required during the pandemic, and these have been taken up first as our history shows they work. Others are new. All of the initiatives are Responsive to data about student's needs, both from

the survey and from anecdotal evidence gathered in discussions with students and faculty, and in that sense are Strategic as they are based on data gathered fulfilling those aspects of the PARS framework; however, other initiatives fall more specifically in one or another category of PARS.

Under Personal, I am working with the PhD advisory committee on updating and expanding faculty profiles to help underscore the multidisciplinary nature of our degree program. The university just overhauled the website universally, and the new templates provide us with opportunity to highlight this strength by promoting the wide range of student projects we can support in this type of program on these pages through a News feature. The News feature will allow us to highlight alumni who work in a diverse array of spaces including outside traditional academic spheres and their profiles are critical to word-of-mouth recruitment. Others within the department are working on developing a robust department wide social media integration which the graduate programs can work within. For the basis of some of these decisions, I rely upon the excellent workshop on program profiles held at CPTSC (Almjeld et al.).

As we need to accommodate technical communication focused students alongside rhetoric and composition, literature, and digital humanities students, I've also had to find ways to integrate their specific needs. To that end, ODU also has recently received a significant grant for funding internships at all levels within the Humanities, and I am working with Monarch Humanities Internship Academy office to see what internship availability we can create for our online technical communication graduate students at the MA and PhD levels. I also have worked with alumni who have gone into industry as UX experts, designers, and health care communication specialists to hold ALT-AC workshops.

Falling under Accessible are initiatives to help students post-coursework continue to thrive and move forward, as accountability and access to peers while writing was deemed essential. The survey directly led to the implementation of the dissertation workgroups the following fall of 2023. The Dissertation Workshop Groups are student led groups that meet bi-weekly. Students are asked to choose a leader, with the expectation that this duty will rotate between them, and one of 3 meeting foci for each meeting — feedback focused, writing problem focused, or just write focused. Students are also asked to keep writing logs and reflective journals that they may then choose to share with their dissertation chairs. Additionally, a Thesis/Dissertation Boot Camp now takes place on campus and at a distance during the summer residency requirement. The one-week bootcamp for dissertating students was initially hosted by the English Graduate Student Organization, but it had fallen by the wayside in recent years and was effectively ended during the pandemic. As GPD along with my writing center director colleague, we have implemented a program-run bootcamp led by the GPD with faculty providing workshops that happen concurrent with our summer residency course requirement so that students in multiple stages of the program will be on campus or meeting over zoom for the workshops at the same time. Students on Zoom are fully integrated into the writing prompts, breakout groups, and workshops as both faculty and students in the on-campus space have normalized having student peers at a distance and have little difficulty incorporating the chat and video stream into the ongoing work.

While the workgroups are designed to help with writing prospecti and dissertations, I did end up opening them up to first year PhD students who felt additional accountability was important for writing papers for coursework especially valuable for those coming in from industry or government spaces where they might not have written academic genres for some time.

Squarely in the Responsive category was the desire to have better messaging and discussion about the program and career questions. Students in the survey indicated they wanted student-lead discussion groups about the program organized and implemented by the students (30%). This, however, relies upon student-driven initiatives, which have become problematic post-pandemic, and the primary student-driven conversation seems to be occurring over Facebook, based open anecdotal reports. Therefore, the options of a program led Slack channel or Teams group were investigated and ultimately the choice to have Canvas-based space built was agreed upon for summer/fall 2024, although, email at the time of writing remains the current primary means of programmatic communication. The Canvas space is being conceptualized by a team of 5 – the GPD and one other PhD program faculty member and 3 graduate students working in an advisory capacity to make certain the space meets their needs. The plan is to build a documentation repository, a resources list that gathers disparate materials across the university infrastructure into one space, and a student question driven discussion board within Canvas that all the student and faculty have access to.

Another initiative that falls within the Personal and Accessible categories, was the expressed a desire (at 17%) to continue with the faculty-led summer reading groups that were started on individual faculty initiative. The program is trying to formalize into something that occurs with regularity to keep students engaged in their communities over the summer while not in coursework, as this is when attrition most becomes an issue.

As the director, I also architected a communal log of presentations, publications, and awards so that any student may update their own information and increase the Personal nature of the program's profile via Google Spreadsheet entry. With student permission, I have shared information from the spreadsheet in various programmatic spaces, including our department's Facebook account. Anecdotally, its value has been mentioned in two personal emails.

Other initiative that fit into the Personal and Accessible categories of PARS include various meet and greets including a New Student/Faculty Online Meet Up, which consists of 60-minute video streamed meeting, with breakout rooms based upon stated research and teaching interests. Additionally, when it is time to plan for comprehensive exams, I hold a comprehensive exam committee meet and greet. For this meeting, students are asked to create a research profile. These profiles are made available to faculty prior to the meeting. Students also review the faculty profiles on the websites for those whom they've not had opportunity to take classes with and list faculty with whom they'd like to discuss research foci. Additionally, faculty can provide names of students they share research interests with. Breakout rooms are then created during the 90-minute meeting are created based upon these lists.

The final pillar, Strategic, will be implemented in the form of the ongoing surveys and discussions to continue to support students in the program and to innovate and shift where needed. IRB review applications have been filed for surveys and focus groups connected to the upcoming dissertation bootcamp as well as a survey of all students enrolled in the program in the spring of 2025 on communication as a follow up to the initial data. A process for making sure that all faculty provide feedback on suggested policy revisions has also been implemented to increase the buy-in critical for faculty engagement with the program and encourage a more cohesive program direction.

Conclusion and Future Directions

But despite all these ideas that fit within the PARS framework designed to promote community that are being put in place to assist our graduate students, I believe an additional and critical change both in our department, but also for the role of GPDs everywhere, is to create better transitions through mentoring and robust documentation and better professionalization at the national level. Ortega (2003) noted this as an issue nearly two decades ago. We need to create spaces within our professional organizations for the faculty holding these types of positions to talk. More research needs to be done upon this role, as well, much like had been done with the WPA to make it clear how it is distinguished from other forms of "service" like committee work especially when arguments for resources need to be made. There are a lot of threads to be woven together in this role, from advising both for curriculum and career purposes, to crafting communication channels that work for students to liaising with alums. Documentation needs to be developed and circulated. Resources—especially release time if it is not already in place along with advertising and program specific budgets—need to be argued for and acquired, and working groups at our major conferences (especially CPTSC, CCCC, and ATTW) that are directly concerned with both pedagogical and curricular issues need to be developed.

The Consortium on Doctoral Programs in Rhetoric and Composition and the Masters Degree Consortium of Writing Studies Specialists provide a good place to start this discussion. Within our universities, we can argue for a model (Ortega 2003) that lays out features including leadership summits, a listserv, and monthly focus groups. While mentoring is certainly a part of the role of the administrator of a graduate program, a great deal more goes into the role. Graduate Program Directors and administrators are instrumental in recruitment, applicant selection, advising, monitoring students' success, policy development, communication and outreach. They conduct public relations and program advertising as well as internal communication about current program events, deadlines. More effort should be put into these individuals' professional development to better support broader development of the community, particularly among students in degree programs reliant upon the communication and policies coming from the GPD.

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Appendix A

Questions for Graduate Student Survey

Please answer each of the following questions.

1. Are you:

- In coursework
- Writing the prospectus or dissertation
- Other

2. Are you:

- On campus full-time
- On campus part-time
- Distance full-time
- Distance part-time

3. What are your career goals upon finishing your degree?

- Advancement in your current job
- A new position at your current institution
- A tenure-track job at a research university
- A tenure-track job at a four-year institution
- An alt-AC job outside academia
- Other

4. How would you rank your connection to fellow students in the PhD program?

1. Very strong (we communicate regularly about course work, dissertation writing, programmatic concerns)
2. Somewhat strong (we communicate occasionally – 3 – 4 times a semester - about course work, dissertation writing, programmatic concerns)
3. Somewhat weak (we communicate occasionally – 1–2 times a semester - about course work, dissertation writing, programmatic concerns)
4. Very weak (we seldom communicate regularly about course work, dissertation writing, programmatic concerns)

5. What kind of communication media did you use while in coursework to communicate with your peers outside of the class time?

- Video Streaming
- Email
- Social media-based group – please list
- Writing groups

6. What topics do you need to see more communication regarding? List any topics that apply?

7. What types of media are LEAST likely to grab your attention?

Push communication (media)

- Email
- Individual
- Program Listserv
- Programmatic SharePoint announcements
- Other – please list

Pull communication (media)

- SharePoint
- Facebook
- Instagram
- Twitter/X
- Mastodon
- Other – please list

8. What would enhance your sense of community that the program could help provide?
    - Infrastructure for formalized writing groups
    - Book groups that integrate faculty and students
    - Discussion group infrastructure lead by students regarding the program
    - Other
        - If you are interested in a formal writing group do you prefer student-led or faculty-led?

9. What kind of communication media would you be interested in participating in as alumni? Email lists, Social media-based group – please list, Other

10. Do you have other suggestions for community building that the program might be able to facilitate?

Thank you for your participation and for helping us make the program stronger.

Author Information

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In Search of a Core Curriculum: Assessment of Editing and Publishing Programs in Higher Education

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Abstract: With the rise of artificial intelligence (AI), the need for well-trained editors and other publishing professionals is increasing. However, the training of editors differs widely. In this paper, we explore whether a core curriculum exists in higher education editing and publishing (E&P) programs throughout the English-speaking world. We assess E&P programs in undergraduate and graduate education by collecting a list of 1602 course titles, coding each course based on 37 descriptive codes that reflect course aims, and then examining the data for patterns to identify shared objectives and outcomes.

Initial findings indicate that no core curriculum is shared among E&P programs at either the graduate or undergraduate level, and coding reveals uneven distribution of course types. Moreover, the data suggests a lack of core identity among E&P programs, as well as widely varying skillsets in students entering the workforce. Nevertheless, the diversity of course offerings does lend itself to categorization from which a core curriculum could be derived. This data can help program directors and curriculum developers determine core and elective courses to best meet the needs of students—keeping them competitive with graduates from other programs—and set up reasonable expectations for industry professionals hiring from these programs.

Keywords: curriculum, course content, editing, programs, publishing

Artificial intelligence (AI) has exploded in popularity and usefulness over the past few years, and its rise has been met with excitement and discomfort in many industries. The publishing industry is one industry that is facing a particularly great disruption. As more people experiment with AI to write texts and create publications, there is an accompanying mounting need for skilled editors to fact-check information, craft and shape texts, and oversee the publication and distribution process.

Many universities have courses designed to teach students how to edit, both within technical and professional communication (TPC) programs and without. These editing and publishing (E&P) courses are often contained within English or writing departments as elective credits that provide students with practical skills for when they enter the workforce. Some universities have gone beyond single courses to design entire programs at the undergraduate and graduate levels that teach the skills, practices, theories, and business of publishing. These more robust programs are well established in the United Kingdom and Canada, but there are a growing number of programs being established or expanded in the United States.

Our own program's growth is typical of many of the E&P programs in the United States. Located at a large private university in the western United States, our E&P program began with a single copyediting course several decades ago. Over time, the course offerings expanded to include different aspects of editing and publishing, along with a robust professionalization program that includes dozens of internship partners and an editing service within the University. While it was initially housed in an English department, our program moved to a linguistics department during a departmental realignment. The program has grown to include a minor and a major that serves more than 200 undergraduate students who go on after graduation to work in the publishing industry or many other industries as writers and editors. A growing number of students pursue graduate studies in E&P, English, linguistics, law, and business. Yet we are still seeing an increasing demand for our students in internships and full-time careers as the companies around our university grapple with their needs for effective communication.

With the need for editors and other publishing professionals on the rise, as well as an increasing number of courses and programs in universities, we assumed broad similarities in the training that students are receiving; however, anecdotal evidence tells a different story, suggesting instead wide variances among different programs and courses in the definitions, practices, and approaches to the discipline of editing and publishing.

With these observations in mind, we conducted a rigorous qualitative exploration of E&P courses and curricula across programs in the English-speaking world. What we found confirmed our earlier anecdotal evidence: editing courses are taught at many universities, and are staples in TPC programs, but there is no core curriculum for E&P courses or programs. In fact, there are widely differing approaches to teaching editing and publishing across the disciplines. These disparities could stem from the status of editing within academia in that it does not have an established discipline supported by scholars, journals, and conferences. The disparities could also be a result of the variety of departments where E&P courses are housed, from English to technical communication to business to linguistics. The differences are likely also connected to editing and publishing's history as a trade (and, by extension, E&P courses as professional skills development) rather than a subject for serious academic inquiry.

Whatever the reasons behind the lack of a core curriculum, the increasing need for well-trained editors and publishing professionals shows that the discipline would benefit from a degree of standardization to help students, faculty, and employers know what to expect out of an E&P program. In this study, which is the beginning of a larger effort to assess E&P courses, we ask the following research questions (RQs):

1. *How do E&P programs fit into standard definitions of academic disciplines?*

2. *What is the current profile of E&P programs across the English-speaking world?*

3. *What curricular commonalities or patterns exist among disparate E&P programs?*

Ultimately, our goal in addressing these three questions is to collect solid data about the current state of E&P programs so that we can address a larger and more important fourth question:

4. *What might a core curriculum for E&P include?*

This study is the first step toward that goal. By documenting and categorizing current course and program offerings, we can begin to see the patterns and practices shaping the education of editors today.

Literature Review

Background of Editing Practice and Research

The practice of editing—shaping manuscripts, improving texts, and correcting errors—has been part of communicating since the emergence of written language and part of the publishing process for centuries, even well before the invention of the printing press (Bell, 2008, p. 185). The *academic study* of editing, not simply as a function of writing but as its own process with distinctive features, is much more recent. Over the past several decades, scholars throughout the English-speaking world have begun to recognize the rich opportunities for research offered by studying the "unsung, faceless, nameless technicians assisting the author in the creation of the completed manuscript" (Gross, 1993, p. xvi).

Studies in the 21st century have examined the specific functions of editing, such as determining which errors matter to readers (Beason, 2001; Gubala et al., 2020) or connecting editing to questions of linguistic prescriptivism (Chapman & Rawlins, 2020) and corpus research (Smith, 2023). In just the past two years, studies of editing (along with much of academia) have turned their focus to the rise of AI and the editorial role in working with computer-generated text (Węcel et al., 2023; Noy & Zhang, 2023). In many cases, studies of editing do not exist in their own right but rather are folded into writing studies, technical communication, or business communication, which claim editing as a small though significant piece of a larger discipline.

The continuing idea of editing as a small part of various larger disciplines is key to the questions in this paper and to the status of editing research and pedagogy. In our E&P program, editing started as a single course focused on a professional practice that could be paired with students' work in their own majors in different departments. Over time, the number of editing courses grew and became the focus of several faculty members instead of side courses. In an undergraduate teaching institution, where faculty research is ideally connected with their courses, there began to be an increasing focus on connecting editing practices with academic research that drew on the background and expertise of the editing faculty. This story is mirrored in many of the programs we discuss in this paper. As the demand for practical editing courses grows, the interest in academic treatments of the theories and concepts of editing similarly grows.

Unfortunately, however, the body of academic literature on editing and publishing is small, with few academic journals dedicated to publishing on the subject and few scholars engaged in relevant research. For instance, in her summary of the scholarship centered on technical editing, a specialized field of editing often found in technical communication programs, Suzan Flanagan (2019) concludes that scholars have no shared definition of *technical editing*, that empirical studies on technical editing published in peer-review journals are sparse, and that instructors do not share an established pedagogy for teaching technical writing in the classroom. The website editingresearch.org also demonstrates the paucity of research in E&P. Since 2020, the website—run by students in an editing and publishing program—has tracked and summarized empirical research in editing and publishing. As of this writing, they have featured only 92 articles related to editing and 46 related to publishing from a variety of disciplines and journals across the last four years. While not an exhaustive list, the site offers a representative sampling from a broad range of disciplines, from creative writing to business writing to philosophy to linguistics, demonstrating that editing research is generally regarded as a subfield of other disciplines, and not a discipline in its own right.

What Makes a Discipline

One key question is whether E&P could (or should) qualify as a standalone discipline. A discipline, as defined by Eli B. Cohen and Scott J. Lloyd (2014), entails "academic studies that focus on a self-imposed field of knowledge" (p. 189). Although disciplines vary widely in character and activity, Armin Krishnan (2009) proposed six qualifying factors that may serve as criteria for determining whether a class taught at a university does indeed fit the definition of a discipline, including (1) "an object of research" (e.g., writing, music, law); (2) specific and exclusive body of knowledge acquired through an extended period of research; (3) underlying theory; (4) specific language or jargon understood by the associated community of scholars; (5) specific and defined research methods; and (6) "institutional manifestation in the form of subjects taught at universities . . . and professional associations" (p. 9).

Although some argue that a study that is primarily vocational, such as accounting, does not qualify as an academic discipline (Joel S. Demski, 2007), others argue

for the acceptance of practical disciplines as legitimate forms of study. In his 2018 article "For a Practical Discipline," Robert T. Craig positions the field of communications as a discipline that cultivates both wisdom (phronesis) and skill (techne) in a "culture's communicative praxis" (p. 289). Within the various branches of communications, the balance between the practical and the theoretical is an ongoing academic discussion (see, for example, Kristen M. Getchell and Paula J. Lentz, 2019, which addresses theoretical approaches to business communication; or Lisa Melonçon and Joanna Schieber, 2022, which focuses on building a disciplinary identity for TPC). In some ways, E&P fits within this discussion as a practical discipline, given its grounding in research and direct application to professions that impact written language and, by extension, thought and culture. Nevertheless, while the practical application is undeniable, the question remains as to whether E&P has its own unique disciplinary home or whether, like other TPC and business communication disciplines, it overlaps with others (see Carabelli, 2013; Carradini, 2020). Important to the subject of this paper, is a unique disciplinary identity requisite to give rise to a core curriculum? In the next two sections, we consider the importance of common scholarship and common pedagogy to the existence of a core curriculum within a discipline.

Common Scholarship in E&P

As described above, scholarship on editing can be found under the umbrella of a variety of different disciplines. For instance, scholars of technical editing may find a home for their scholarship in TPC journals like *Technical Communication*, *Technical Communication Quarterly*, or the *Journal of Business and Technical Communication*. But E&P as its own discipline—one that can capture scholarship on everything from technical editing to fiction editing to magazine editing—struggles because journals dedicated exclusively to E&P scholarship are virtually nonexistent. Journals with "editing" in the title, like *Scholarly Editing, Science Editing*, and *European Science Editing*, focus on esoteric applications of editing practice in larger disciplines. Publishing-specific journals like *Publishing Research Quarterly*, *Journal of Scholarly Publishing*, and *Publishing History* address a broader focus of research and analysis related to the publishing industry. Because the number of potential venues for publication in academic contexts is so few, many scholars wanting to write about editing and publishing turn to industry journals instead, such as *Publishers Weekly*, *Learned Publishing*, or *Electronic Publishing*.

In a similar vein, E&P scholars wanting to share their work with each other have no established conferences. Scholars who teach and study editing have looked to academic conferences in a variety of fields at which to present their work. They have attended TPC conferences such as Special Interest Group on Design of Communication (SIGDOC) and Council for Programs in Technical and Scientific Communication (CPTSC), linguistics conferences such as the Prescriptivism Conference and corpus conferences, business communication conferences such as Association for Business Communication (ABC), and even industry conferences such as ACES: The Society for Editing. A common scholarship does not exist among E&P scholars because of the fractured and scattered nature of its discipline and lack of cohesive academic institutional forces, like journals and conferences.

Additionally, because editing courses are housed in a variety of departments (English, creative writing, business writing, linguistics, professional communication, technical communication, mass communication, and so on), instructors are drawn from other disciplines and bring with them their own academic training and research agendas. This leads to a wide variety of academic approaches to E&P, with fundamental differences in theoretical foundations, methodologies, and broader academic communities. Not only does this influences approaches to research, but it also shapes the identity of the program and its courses. As several scholars have noted in their studies of technical communication programs, "where a . . . program is located within a university has profound impact on the nature of the program" (Davis, 2001, p. 19). For E&P programs, this is no different. A program based in an English or creative writing department may tend to focus on fiction editing while one based in a TPC or business department may focus on professional or technical editing and publishing, and the two departments may overlap little in terms of academic expertise, course content, and pedagogical approaches.

Our program is in a linguistics department, but the four full-time faculty who teach and study editing have academic backgrounds in rhetoric and professional communication, creative writing, and linguistics. Some of the faculty have master's degrees in other areas, like business or public administration. All four have professional experience in editing and publishing, but in vastly different areas: textbook publishing, academic publishing, religious publishing, fiction publishing, and government publishing. Adjunct instructors in our program come from a wider variety of backgrounds, bringing even more professional E&P experience to the classroom. Even in this small program, with a focused editing and publishing curriculum, the faculty are conducting, presenting, and publishing research in different forums.

Common Pedagogy in E&P

The variety of backgrounds, research interests, and departmental homes results in faculty drawing their course content from textbooks and teaching practices in different disciplines. Editing programs housed in creative writing departments take on distinctly creative flavors, while those housed elsewhere build on the established pedagogies of their fields. The result is that there is no common thread across institutions as to best practices for teaching editing or publishing to students.

Few studies address editing in pedagogical terms, and the few that do couch their studies in the broader context of writing studies, TPC, or similar disciplines. For example, Karen Nairn (2019) studied the effectiveness of collaborative editing pedagogy with students in a writing for publication course, and Whitney B. Taylor (2019) wrote about the "pedagogical possibilities" of teaching Shakespeare students to edit digital texts for modern audiences. One of the more useful resources, Suzan Flanagan and Michael Albers' 2019 book, *Editing in the Modern Classroom*, provides in-classroom guidance on how to structure courses and design lessons in technical editing.

Of the various genres of editing, technical editing has the broadest selection of well-known and well-used textbooks, including Carolyn Rude and Angela Eaton's *Technical Editing* (2010) and Donald H. Cunningham et al.'s *Technical Editing: An Introduction to Editing in the Workplace* (2019). Outside of TPC, there are fewer options. Many instructors rely on references, such as *The Copyeditor's Handbook* and accompanying workbook, to teach copyediting skills; style guides such as *The Chicago Manual of Style* and *The APA Style Manual* to teach students how to apply a publication style; and handbooks, like Scott Norton's *Developmental Editing* (2023) to teach book editing or Suzy Bills' *The Freelance Editor's Handbook* (2021) to teach freelance editing. Additionally, instructors may find themselves flipping books on how to write for the purposes of instructing in editing. For example, one of the authors of this paper has used *Write for Children* (2001) by Andrew Melrose to teach students how to edit children's books. Although excellent resources, handbooks and reference manuals are not based in established pedagogy, nor are they explicitly intended for the classroom but for professionals in the workplace. Consequently, instructors lack common, tried-and-true pedagogy across editing programs, especially outside of technical editing.

This lack of common pedagogy is evident primarily between institutions. Within institutions, E&P programs tend to have a strong identity closely tied to their functions and relationships inside their departments. In our program, for example, the faculty use their different backgrounds and research interests to build an E&P program with different options for students. The faculty work together to define curriculum for shared courses (like usage, grammar, and copyediting) and to create common learning outcomes for advanced genre-specific courses that draw on individual faculty expertise (such as fiction, magazine, technical, or business editing). What is lacking is a range of resources designed for a curriculum consistent with programs outside of our university.

Benefits of a Core Curriculum

Within a single university's E&P program, a common or core curriculum creates consistency for the student experience in that program. It also provides measurable results for institutional assessment efforts. However, a consistent curriculum that crosses university boundaries produces much larger benefits. For evidence, we turn to similarly practical communication disciplines: technical communication and business communication. These fields have some overlap in both faculty and research, but each has an established identity based on a combination of dedicated academic journals and conferences and a core curriculum connected to shared understanding of what should be taught in these courses. While both technical communication and business communication have several well-established textbooks, the concepts, approaches, and often assignments in those textbooks share an identity unique to those disciplines. These identities have been confirmed by studies such as Carradini, et al. (2020) and Hyejung Chang, et al. (2018) in business communication, and Lisa Melonçon and Sally Henschel (2013) in technical communication.

Fairly regular evaluation of a discipline's curriculum is essential to understanding where programs are located and what content is taught in those programs, particularly in fields where there has been rapid growth or change (see Lisa Melonçon and Sally Henschel, 2013, p. 46). Even more important, however, is that evaluation of programs and curriculum plays a huge part in creating a disciplinary identity, especially when combined with recognizable published scholarship in the field. The core curriculum is not simply a unified approach to teaching a subject; rather, as Karen Card and Crystal Renée Chambers (2016) argue, "A core curriculum representing the core knowledge and values of a field is necessary to solidify the status as an academic discipline" (p. 127).

At the same time, a core curriculum is necessary in practical disciplines to create consistency in the expectations of what students are learning. Potential employers need to be able to identify the skills and practical value created by a degree in those disciplines. We argued at the beginning of this paper that the need for trained editors in the professional world is increasing. AI-generated text has not replaced editors; rather, computer-generated text has been shown to "introduce fatal linguistic errors, ultimately reducing comprehension by the reader" (Jaime A. Texeira da Silva, 2022, p. 2). Employers are increasingly seeking skilled writers and editors who can work with AI to create accurate, readable texts. This is in addition to other technical skills—including word-processing, design, programming, web communication, and social media—that are necessary for editors to succeed in the modern workplace. There have been several studies of the skills that employers are seeking (Clinton R. Lanier, 2018). Susan Lang and Laura Palmer (2017) took that approach a step further by examining technical editing textbooks and editing-related job requirements to propose a redesign of technical editing courses. But no studies have looked at the field as a whole to determine what is being taught in editing and publishing courses and what skills editing graduates should have.

In this study, we seek to take the first steps toward a core curriculum for editing and publishing by documenting what is currently being taught in editing and publishing at universities throughout the English-speaking world. This documentation provides the groundwork for future studies that can connect pedagogy, academic research, and disciplinary identity with the practical expectations of employers.

Methods

In this section, we detail our methods for defining E&P programs and for collecting and analyzing data to give us a clear understanding of the shared and distinct features among such programs.

Identifying Relevant Programs

To answer our second research question (*What is the current profile of E&P programs across the English-speaking world?*), we first needed to define E&P programs and then compile a list of programs that fit within our definition.

We limited our study to E&P programs in higher education to understand what is happening in academia and to manage our data more effectively. For this study, we defined E&P programs as being (1) associated with institutions of higher learning (e.g., universities, colleges); (2) explicitly designed to train future editors and publishers; and (3) terminating in a degree or certification (see Lisa Melonçon, 2019; Sandi Harner & Anne Rich, 2005) related to editing and/or publishing, including graduate degrees (e.g., MS in Publishing from New York University), undergraduate majors (e.g., BA in Editing, Writing, and Media from Florida State University), undergraduate minors (e.g., Publishing and Editing minor from Susquehanna University), emphases or tracks (e.g., BA/BS in Publishing, editing track), and certifications (e.g., Certificate of Editing from the University of Chicago). Because our study was concerned with official and established E&P programs, we excluded single courses of study not related to a program. This limiting factor had the added benefit of making data gathering and analysis manageable within the scope of our research questions.

We intended to create a comprehensive list of E&P programs. First, we referred to previously compiled lists of E&P programs, such as the one compiled by Peter Ginna (2017) in his book *What Editors Do*, which lists 29 institutions' programs. We verified that each program met with our definition of E&P programs and that each was still running; if not, we removed it from our list. We next conducted an independent exploration of E&P programs via the use of search engines using key terms such as *editing program, editing major, editing minor, editing certificate*, and *editing master's*, as well as similar terms with *publishing* in place of *editing*. Ultimately, we compiled a list of 77 institutions from around the English-speaking world (namely, the US, UK, Canada, Ireland, Australia, New Zealand, India, Malaysia, Kenya, and Ghana). Because many of these institutions host multiple programs (for example, both a major and a minor), we counted 94 individually specified editing and/or publishing programs meeting our criteria.

From this list, we collected information about each E&P program's (a) location (city, state, country); (b) host institution/university; (c) host department; (d) official program name; (e) degree/certification name; (f) level (i.e., graduate, undergraduate, or non-degree-seeking); (g) number of required credits; (h) associated course titles (required and elective, excluding general education requirements); (i) admission requirements; and (j) internship expectations. A spreadsheet with the collected data can be found in Appendix A (https://tinyurl.com/EditingAndPublishingData). It is possible that some programs that would otherwise fit our criteria were overlooked, and so we welcome program officials to contact the authors to correct or contribute to the entries in our growing database of E&P programs.

Collecting Course Titles

To answer our third research question (*What curricular commonalities or patterns exist among disparate editing and publishing programs*?), we needed to know what is being taught in each of the E&P programs on our list. As the most critical part of our data collection, we created a list of all course titles required to complete

each program—excluding any general education requirements—as a method of ascertaining what is commonly being taught across curricula. This practice has precedent in the literature. Irina Borisova (2018) conducted a large-scale study in which she and other researchers "classif[ied] college courses into course categories using only a college course name as input" (p. 419) and discovered a "very high accuracy" (p. 422) in the correlation of names to categories, which is to say, to the primary learning objective of the course. In a more TPC-focused study of undergraduate and graduate editing courses, Lisa Melonçon (2019) described collecting course titles in order to discern trends in the objectives of editing programs in TPC. She describes the function of course titles and their use to both students and administrators, particularly in relationship to editing courses:

> As the outward-facing information that students and other stakeholders see, course titles (and course descriptions) are important institutional and programmatic information. Unlike other courses . . . the editing course is a bit more straightforward in being able to succinctly describe what the course contains based on its title (p. 174).

Additionally, Luke Thominet and Kristina Acosta (2023) tied course title analysis to patterns in programmatic naming practices when describing course objectives and argue that course titles are used to "communicate . . . values and goals more clearly to students" (p. 221). They identified the frequency of lemmas such as *editing* and *design* as common descriptors that signal to students the central topic of a course. Furthermore, using course titles enables researchers to code and categorize courses to determine how many disparate programs require similar courses with like objectives, as demonstrated by Lisa Melonçon and Sally Henschel (2013) in their assessment of undergraduate degree programs in technical and professional communication across universities and colleges.

To collect course titles for each E&P program as the basis of our analysis, we relied on lists provided by program websites and course catalogs. In total, we identified 1602 courses across 94 programs. Where we could not find course names related to a specific program, we solicited that information directly from program officials via email. In rare cases when our emails went unanswered, we do not include course offerings from that program in our official count and so are unable to code them.

Coding Course Titles

We aimed to discover what is currently being taught in E&P programs across the English-speaking world. Therefore, after compiling a list of course titles from our list of E&P programs, we began to code them for their perceived course objectives, as suggested by course titles, which we had established as being accurately indicative of course content (see above). We followed Johnny Saldaña's (2016) method for descriptive coding because it "identifies and links comparable contents" (p. 102), which would enable us to observe comparable objectives among E&P courses. For example, two courses titled Basic Manuscript Editing, and Basic Editing Skills were both coded as "editing," which we perceived as the primary learning objective of the course; two other courses titled Traditional Publishing I, and Publishing Overview

were both coded as "publishing" for the same reason. In this way, codes suggested common content or objectives shared among courses thus coded. It should be noted that many courses required two or more codes to accurately describe them. For example, the course Design and Future of Publishing was tagged with two codes, "design" and "publishing"; and "Children's and YA Publishing" was tagged with "genre" and "publishing." We reviewed one another's work and resolved disagreements about which codes had been applied and where (David B. Allsop et al., 2022) to come to a unified vision of common course content being taught. Ultimately, this process yielded 29 distinct content codes representing the range of subject matter taught to editing and publishing students (see Table 1).

Table 1
List of Initial Codes Applied to E&P Courses

CODE	COUNT	%CODE	%CASES
Publishing	420	13.30%	26.20%
Writing	305	9.70%	19.00%
Business	251	8.00%	15.70%
Editing	206	6.50%	12.90%
Genre	201	6.40%	12.50%
Book	197	6.30%	12.30%
Digital	186	5.90%	11.60%
History	127	4.00%	7.90%
Introduction	120	3.80%	7.50%
Design	114	3.60%	7.10%
Technology	108	3.40%	6.70%
Tools	100	3.20%	6.20%
Research	89	2.80%	5.60%
Literature	83	2.60%	5.20%
Internship	76	2.40%	4.70%
Rhetoric/Com	64	2.00%	4.00%
Miscellaneous	64	2.00%	4.00%
Web/Online	52	1.70%	3.20%
Thesis/Senior Course	48	1.50%	3.00%
Legal	46	1.50%	2.90%
Ethics	45	1.40%	2.80%
Print	41	1.30%	2.60%
Style	36	1.10%	2.30%
Copyediting	36	1.10%	2.20%
Magazine	33	1.00%	2.10%
Grammar	31	1.00%	1.90%
DEI	28	0.90%	1.70%
Printmaking	25	0.80%	1.60%
Foreign Language	19	0.60%	1.20%

Note. COUNT refers to the frequency with which the code was applied to all course titles. %CODE refers to the percentage of total applied codes (n=3151). *%CASES* refers to the percentage of total course titles (n=1602).

After completing the first cycle of initial coding, we wanted to explore how codes related to one another and whether they could be reasonably grouped into categories based on shared characteristics, in this case, shared learning objectives. We initiated a second cycle of coding, as recommended by Saldaña (2016), and applied axial coding: "Grouping similarly coded data reduces the number of Initial Codes . . . developed while sorting and relabeling them into conceptual categories" (p. 245). We called these newly identified categories "Content Sets" to emphasize the similar course content and common learning objectives implied by each set: Editing Skills, Publishing, Writing and Literature, Design and Technology, and Industry (a sixth set, Other, contains outliers in the dataset). Descriptions of each Content Set are found in Table 2. Each of these Content Sets and their related codes are described further in Results and Discussion.

Table 2

List and Description of Content Sets and Their Related Codes

CONTENT SET	SET DESCRIPTION	INITIAL CODE
Editing Skills	Skills involving editing practices defined as textual manipulation at both global (whole document) and local (sentence and word) levels	Editing (general), Style, Copy-editing, Grammar
Publishing	Skills and knowledge of commercial production and issuance of a text in various media	Publishing, Digital, Book Magazine, Web/Onlin, Print
Writing and Literature	Skills involving text creation, research, and analysis of created/published texts	Foreign language, Research, Writing, Genre, Rhetoric/communication, Literature, Thesis/senior course
Design and Technology	Skills engaging specific tools, technology, and theory in the design, creation, and production of a text	Design, Tools, Technology, Printmaking
Industry	Skills and knowledge related to the profession/business of editing and/or publishing	History, Business, Legal Internship, DEI, Ethics
Other	Outliers in the dataset that have no discernible relevance to E&P curricula	Introduction, Miscellaneous

Note. COUNT refers to the frequency with which the code was applied to all course titles. %CODE refers to the percentage of total applied codes (n=3284). %CASES refers to the percentage of total course titles (n=1602).

Finally, we included institution-related codes to distinguish core versus elective courses (e.g., Required, Elective, Unspecified, and Outcomes-based) and the degree level (Graduate, Undergraduate, Non-degree, and Concentration; see Table 3). These additional institution-related codes, when combined with the 29 content codes, give us a total of 37 codes.

Table 3
List of Institution-Related Codes Applied to E&P Courses

INSTITUTION SET	CODES	COUNT	%CODE	%CASES
Requirements	Required	579	17.6%	36.1%
	Elective	997	30.4%	62.2%
	Unspecified	16	0.5%	1.0%
	Outcomes-based	10	0.3%	0.6%
Degree Level	Graduate	546	16.6%	34.1%
	Undergraduate	749	22.8%	46.8%
	Non-degree	297	9.0%	18.5%
	Concentration	90	2.7%	5.6%

All 1602 courses offered across 94 programs were imported into Provalis Research's QDA MINER LITE software for qualitative analysis and were coded as described.

Results and Discussion

In this section, we report our findings on the assessment of editing and publishing programs around the English-speaking world. Particularly, we indicate (a) which departments or schools host E&P programs, the number of credits required to complete the programs, and the types of qualification achieved (RQ2); and (b) the most common course types being taught in E&P programs, indicating the kind of training future editors are receiving in higher education (RQ3). We discuss whether a core curriculum exists among editing programs. Finally, we address the implications of our findings and provide a holistic overview of the current state of E&P programs in higher education.

The Current Profile of E&P Across the English-Speaking World

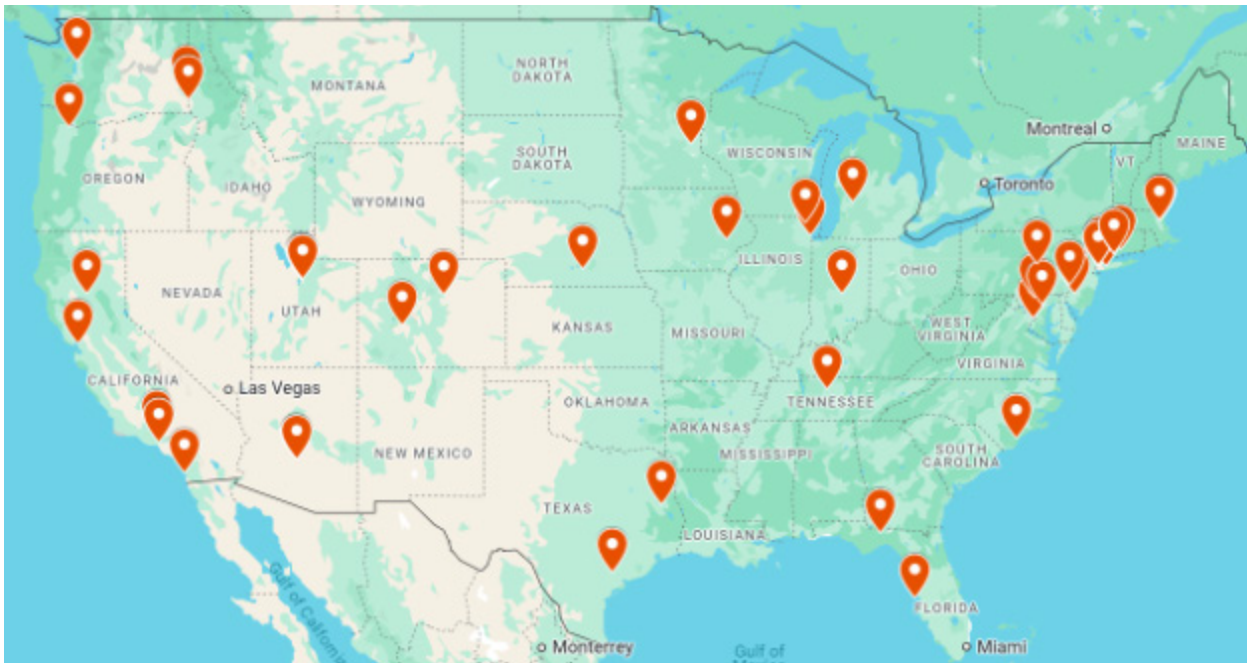
Where Are E&P Programs Found? A total of 94 E&P programs were found in the US (53), UK (14), Canada (8), Ireland (1), Australia (12), New Zealand (1), Malaysia (2), India (1), Kenya (1), and Ghana (1). Considering that the combined number of universities in each of these countries is just shy of 8,000, E&P programs are found in less than 0.048% of schools, making such programs uniquely

specialized and statistically rare (Australian Government, 2024; Council of Ministers of Education Canada, n.d.; Ministry of Business, n.d.; Ministry of Education, 2021; MyGovernment, 2024; Natalie Cowling, 2023; National Center for Education Statistics, n.d.; Rachel Swain, 2022; UniRank, 2024; Universities UK, 2024).

In the United States, more than half (29/53, or 55%) of E&P programs are found in Eastern states (Massachusetts, New York, New Jersey, Pennsylvania, Maryland, North Carolina, and Florida), 13 (25%) in Western states (Washington, Oregon, California, Arizona, Utah, Idaho, and Colorado), and 10 (19%) in central states (Minnesota, Iowa, Illinois, Indiana, Nebraska, Texas, Michigan, Tennessee) (see Figure 1). Given that most major, traditional publishing houses are concentrated on the East Coast, particularly in New York City, it is unsurprising that universities in Northeastern region of the United States host the majority of E&P programs. Not only are many faculty members current or former industry professionals in traditional publishing, but the programs are designed to support the local publishing industry with the intention of placing recent graduates in internships and entry-level editing and publishing jobs.

Figure 1

Locations of Editing and/or Publishing Programs in the United States

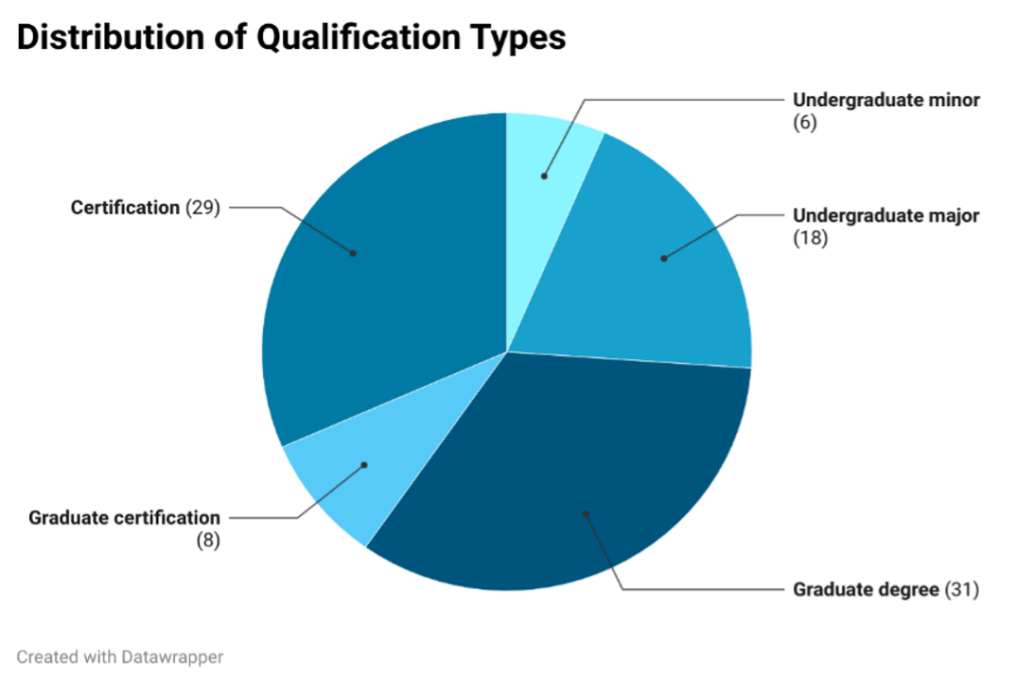


Publishing houses are not the only employers seeking new hires with training in editing and publishing, however. In 2023, the number of editing jobs was listed at 122,100, according to the Bureau of Labor Statistics (2024a), with an anticipated 11,600 new editors to be hired every year for the foreseeable decade in the United States alone, an increase of 5% through 2030. At the same time, the publishing industry at large boasts over 900,000 employees, including editors, graphic designers, reporters, copywriters, and marketing agents (Bureau of Labor Statistics, 2024b). Media and communications sectors are not restricted to the East Coast but are found throughout the United States, and the rise of the remote worker

and decentralized publishing office means that an employable editor or publishing professional may come from anywhere, including middle America (Michael Seidlinger, 2021), where E&P programs are also found.

Which Departments, Colleges, or Institutions Host E&P Programs? The role of "editor" or "author" is often named as a career option for which English departments prepare students entering the job market , and indeed, E&P programs are often, though not exclusively, hosted in English departments (to include such departments as English and Philosophy, English and Creative Writing, English and Writing, and Writing and Literature). E&P programs are also hosted by business, communications, journalism, media and creative arts, publishing, typographic and graphic communications, and linguistics departments, which are found in colleges and schools like liberal arts and sciences, arts, social research, professional studies, multidisciplinary studies, and graduate studies (see Appendix A). The range of schools and departments hosting E&P programs reflects differing aims and objectives for the courses themselves, from business to production to language to social concerns to practices in editing and publishing. While this demonstrates E&P programs' degree of flexibility and adaptability to the objectives of various disciplines, it also suggests that E&P programs lack a core identity as a self-contained discipline. While some schools may regard editing and publishing as a trade lacking academic merit, others may deem E&P-focused research as merely tangential to more established literature.

Figure 2
Distribution of Qualification Types in E&P Programs



[1] See, for example, the English Department at the University of Utah, where, under Career Opportunities, "editor" is listed among the many job options for English majors; or the English Department at Purdue University, where "editor" is the number one career listed under "Careers in English." Neither department currently hosts an E&P-specific program.

What E&P Qualification Types Are Offered? Training in editing and publishing yields different degrees or certifications. Among the 94 E&P programs, 40 (42.6%) offer graduate-level qualifications (including MA, MFA, MRes, Mlitt, and PGDip). Undergraduate degrees (24 or 25.5%) include majors, minors, and tracks/ emphases. Certifications or programs for non-degree-seeking students (30, or 31.9%) are offered at both the graduate (9) and undergraduate (21) levels. Figure 2 shows the distribution of these program types. It should be noted that the vast majority of all of these qualifications are specific to publishing (67, or 73.4%). Only 24 (26.4%) include the word editing in the degree name, suggesting an emphasis on publishing as a discipline and practice over editing

How Intensive Are E&P Programs as Training Grounds for Future Editors and Publishers? On the low end, to earn a minor in an editing or publishing program, students need to complete 6 credits (or the equivalent of two courses), although most minors range from 15 to 21 credits (or five to seven 3-credit courses). Completing a BA or BS in an E&P program requires 36 to 70 credits, and graduate-level work requires 12 to 54 credits. Certificate programs vary widely. Whereas some certifications can be earned in an intensive four-week course or require earning only 4 credits, others may take up to two years or require earning 45 credits. Given this range of education in editing and publishing fields, graduates entering the workforce in the publishing industry come with a highly variable set of skills and knowledge base, impacting both employers who are unable to predict the educational background and preparedness of potential job candidates, and the candidates themselves who may not have an accurate assessment of the competition or the industry itself.

Is There a Core Curriculum for E&P Programs?A primary objective of this research is to determine whether E&P programs around the English-speaking world share a core curriculum. Core curricula among academic programs—whether in the humanities, arts, or STEM fields—serve the dual purpose of firmly establishing a program as a recognized discipline and offering students predictability in outcomes when signing up for a field of study. An added benefit is that a core curriculum sets up expectations for employers hiring from these programs. For example, a student majoring in English at most any North American university can expect to take courses in literature, writing, and theory. A student studying computer science can expect courses on programming, computer systems, and software development. But what courses can a student studying editing and publishing expect to take? Is there any consensus among E&P programs from various institutions with respect to course content, learning objectives, or student outcomes

For an affirmative answer to this question, we determined that our analysis would need to reveal a core curriculum that shared disciplinary understanding and yielded comparative student competence (Lena M. Levander & Minna Mikkola, 2009), although we do not specify what course types are needed to satisfy the dual requirement. Rather, after applying discipline- and competency-related codes to course titles as a way of categorizing outcomes (see Methods), we looked for patterns that would suggest a core curriculum among E&P programs around the world.

A survey of 1602 course titles in relation to their respective programs reveals that no core curriculum exists. To illustrate the disparity between individual programs, we consider the courses from three institutions offering a bachelor's degree in editing and publishing (see Table 4), where (possibly) equivalent course types share a row and × indicates gaps in the curriculum. *See Table 4.*

Certainly, similarities exist between or among these majors from different institutions. For example, all three majors require an internship in the editing or publishing industry, all three offer a course focusing on the current publishing industry, and all three instruct students in editing practices, although it is unclear whether copyediting, per se, is taught at FSU. Differences among similar majors may be attributable to the fact that each program is paired with a different focus, from English as the primary major to writing and media studies to publishing with an editing track, and so associated courses reflect those differences. Nevertheless, gaps among these programs are stark. Based on this sampling, an E&P student could not expect to receive instruction on copyright and publishing law, textual rhetoric, and Adobe skills all in one program, nor practice in technical editing, marketing, and visual rhetoric in another.

If we restrict our analysis only to patterns in the coding, we discern no core curriculum among E&P courses at either the graduate or undergraduate level; rather, we see an uneven distribution of course types. However, when we group codes into Content Sets (see Methods) based on shared qualities, a potential core curriculum begins to emerge. In the next section, we present these sets, the frequency of codes within each set, and their prevalence in E&P programs generally.

Editing Skills

The first set of codes is described as "Editing Skills": skills involving editing practices defined as textual manipulation at both global (whole document) and local (sentence and word) levels. This Content Set is composed of four codes: Editing, Style, Copyediting, and Grammar (see Figure 3), which we consider the "core skills" of editing. The most common of these codes is Editing, with 196 instances across 1602 courses, or 12.4% of all courses, a surprisingly low count for programs that purport to train graduates for careers in editing and publishing fields. Even more startling is that so few courses were coded for Copyediting (2.2%) or Grammar (1.9%) (see Table 5), which we consider key skills- or knowledge-based courses for aspiring editors. Our own E&P program places emphasis on core editing skills, with semester-long courses dedicated to grammar, usage, copyediting, and substantive editing. This intensive focus on editing skills puts us in a minority position with respect to most E&P programs, suggesting that where we are strong in one content set, we are likely weaker in another.

Writing and Literature

The third set of codes described as "Writing and Literature": *skills involving text creation, research, and analysis of created/published texts.* This Content Set is composed of seven codes: Writing, Genre, Research, Literature, Rhetoric/

Table 4
A Comparison of E&P Curricula from Three Institutions

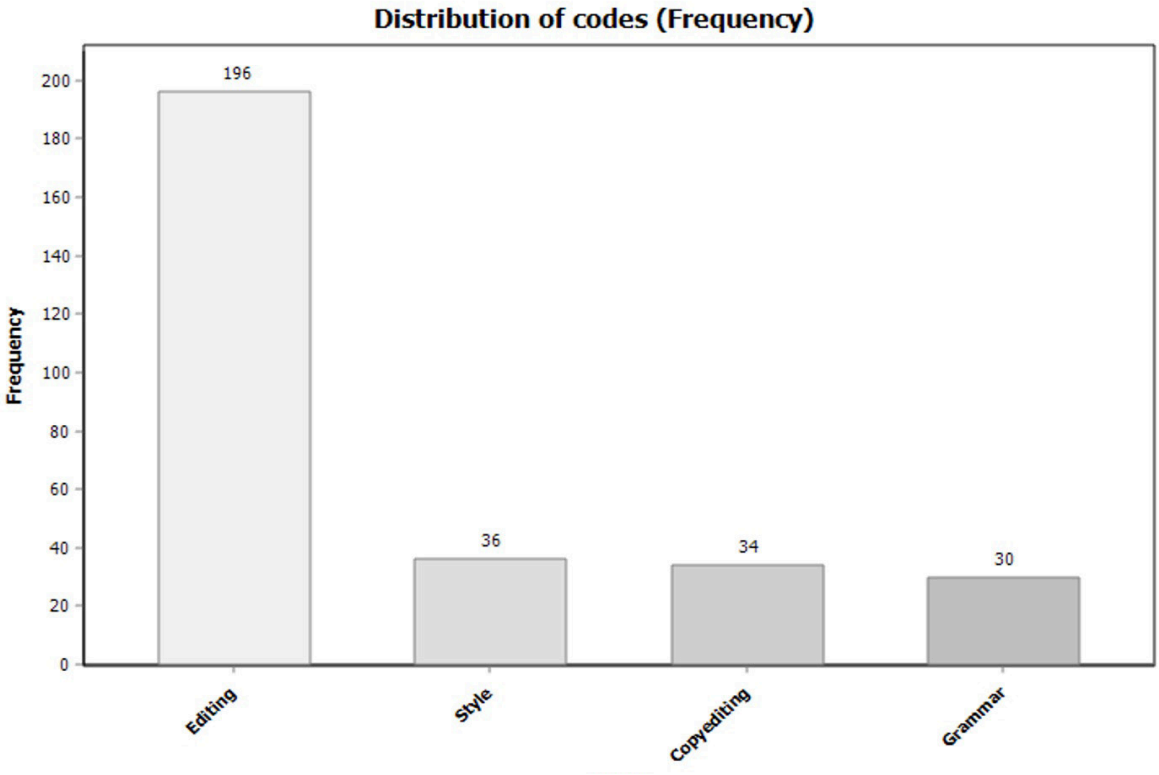
Course type	Susquehanna University	Florida State University	Belmont University
	BA in English – Publishing and Editing Major	BA in Editing, Writing, and Media	BA/BS in Publishing (Editing track)
Internship	Internship	Editing Internship	Publishing Internship
Publishing as practical application	Small Press Publishing and Editing	Issues in Publishing	The Publishing Process
Introductory course	Intro to Modern Publishing	Intro to English Studies	×
Copyediting/editing	Copyediting and English Grammar	Editing Manuscripts/Documents/ Reports	Copyediting
History of text	History of the Book	History of Text Technologies	×
History of illustration	×	History of Illustrated Texts	×
Public relations	Intro to Advertising and Public Relations	×	Public Relations Design & Production
Entrepreneurial media	×	×	Entrepreneurial Media
Visual rhetoric	×	Visual Rhetoric in the Digital Age	×
Adobe Creative Suite	Methods of Adobe Creative Suite	×	×
Podcasts	Writing and Editing Podcasts	×	Podcasting
Copyright and law	×	×	Copyright and Publishing Law
Ethics	Publishing: Ethics Entertainment	×	Media Ethics
Book editing	×	×	Book Editing in Context
Advanced writing/editing	×	Advanced Writing and Editing	×
Marketing	Marketing	×	×
Rhetorical theory	×	Rhetoric	×
Rhetorical practice	×	Rhetorical Theory and Practice	×
Online editing	×	Writing & Editing in Print & Online	Media Writing I/II
Digital publishing	Digital Publishing	×	Survey of Digital Production
Book review	Book Reviewing	×	×
Aesthetics	Aesthetics and Interpretation	×	×
Text theory	×	What Is a Text?	×
Nonfiction	×	×	Non-Fiction and Technical Editing
Fiction	Intro to Creative Writing	×	Fiction Editing
Professional writing	Professional Writing	×	Business and Professional Communication

Note. Where institutions share common course types (e.g., internship requirement, history of publishing, these courses appear on the same row. × indicates a lack of equivalent course or course type.

Publishing

The second set of codes is described as "Publishing": *skills and knowledge of commercial production and issuance of a text in various media*. This Content Set is composed of six codes specifying the practice and genre of publication in the industry: Publishing, Book, Digital, Web/Online, Print, and Magazine (see Figure 4 and Table 6). The most common of these codes is Publishing, with 414 instances across 1602

Figure 3
The Frequency of Codes Categorized in the Editing Skills Set



courses, or 26.2% of all courses. Because far more programs, especially at the graduate level, offer qualifications in publishing than in editing, the disparity between this set and that of Editing Skills is not surprising. However, it is notable that more courses are dedicated to digital and web publications than to print publications (e.g., magazines), given the state of the industry.

Courses dedicated to book publication are likewise common (197 instances), and such courses are popular among students, as we see in our own program. Given the level of interest in book publishing when compared to the diminished number of publishers and presses, particularly with respect to works of fiction, the book-publishing industry is highly competitive. Contrarily, technical editors are in higher demand , and yet courses in technical editing are vanishingly few (only 6 courses are specifically titled with both the words *technical and editing*), suggesting one of two things: student demand, not industry need, is the primary driver of course offerings; or technical editing courses are offered primarily in other programs (e.g., technical communication, business) and not in E&P programs generally. In our own program, technical editing is taught infrequently and as a special topic, which may be another reason that technical editing courses show up infrequently in the data. Writing and Literature

Table 5
The Editing Skills Set and Associated Codes

SET	CODES	COUNT	%CODE	%CASES
Editing Skills	Editing	196	6.2%	12.4%
Editing Skills	Style	36	1.5%	2.3%
Editing Skills	Copyediting	34	1.1%	2.2%
Editing Skills	Grammar	20	0.6%	1.9%

Writing and Literature

The third set of codes described as "Writing and Literature": skills involving text creation, research, and analysis of created/published texts. This Content Set is composed of seven codes: Writing, Genre, Research, Literature, Rhetoric/ Communication, Thesis/Senior Course, and Foreign Language (see Figure 5). The codes reflect the course types and outcomes commonly found in English curricula, a discipline adjacent to—if not encompassing—E&P. The most common of these codes is Writing, with 302 instances across 1602 courses, or 19.1% of all courses (see Table 7). Skills in writing and research (such as those found in a senior course), as well as the study of literature, could be considered adjacent to editing and

Figure 4
The Frequency of Codes Categorized in the Publishing Set

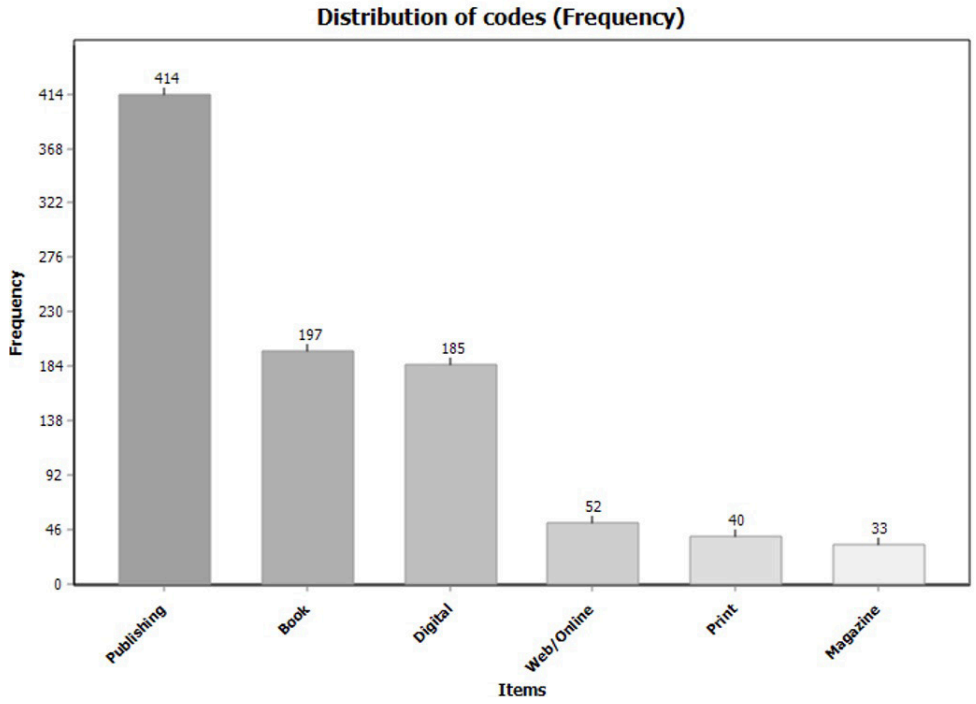


Table 6
The Publishing Set and Associated Codes

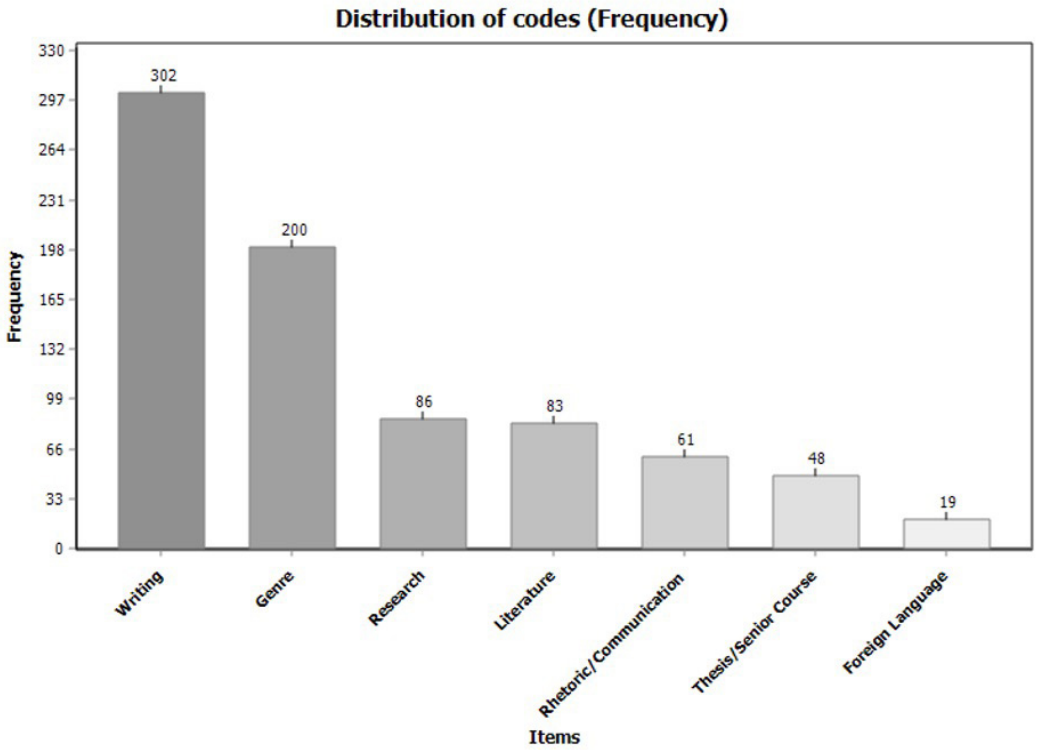
SET	CODE	COUNT	% CODE	% CASES
Pub and Genre	Publishing	414	13.1%	26.2%
Pub and Genre	Digital	185	5.9%	11.7%
Pub and Genre	Book	197	6.3%	12.5%
Pub and Genre	Magazine	33	1.1%	2.1%
Pub and Genre	Web/Online	52	1.7%	3.3%
Pub and Genre	Print	40	1.3%	2.5%

publishing practices, and skilled professionals in the publishing industry are likely to have interests, responsibilities, and training in all three. Because our program is not found in an English department, we see a gap in our own curriculum with respect to writing and rhetoric, a gap we would want to address in curricular review.

Design and Technology

The fourth set of codes is described as "Design and Technology": skills engaging specific tools, technology, and theory in the design, creation, and production of a text. This Content Set is composed of four codes: Design, Technology, Tools, and

Figure 5
The Frequency of Codes Categorized in the Publishing Set



Printmaking (see Fig. 6), intended to reflect the principles and tools related to the design of published materials. The least common of these codes is Printmaking, with only 25 instances across 1602 courses, or 1.6% of all courses, indicating that physical printmaking is a niche interest in editing and publishing fields and is perhaps more common in a fine arts program (see Table 8). Nevertheless, tools and technology are essential to the work of practicing editing and publishing professionals, including the use of word processing software, design software, editing software, and other computer skills. Students who take classes not overtly focused on acquiring skills in, say, INDESIGN, or on learning principles of print and digital design must rely on on-the-job training or, in the case of freelancers, self-teaching. Otherwise, this gap in their curriculum may put them at a disadvantage on the job market. In our program, the required print and digital design course for both majors and minors is housed, not in our own department, but in digital humanities, demonstrating how gaps in an in-house curriculum are often filled through interdisciplinary teaching.

Table 7

The Writing and Literature Set and Associated Codes

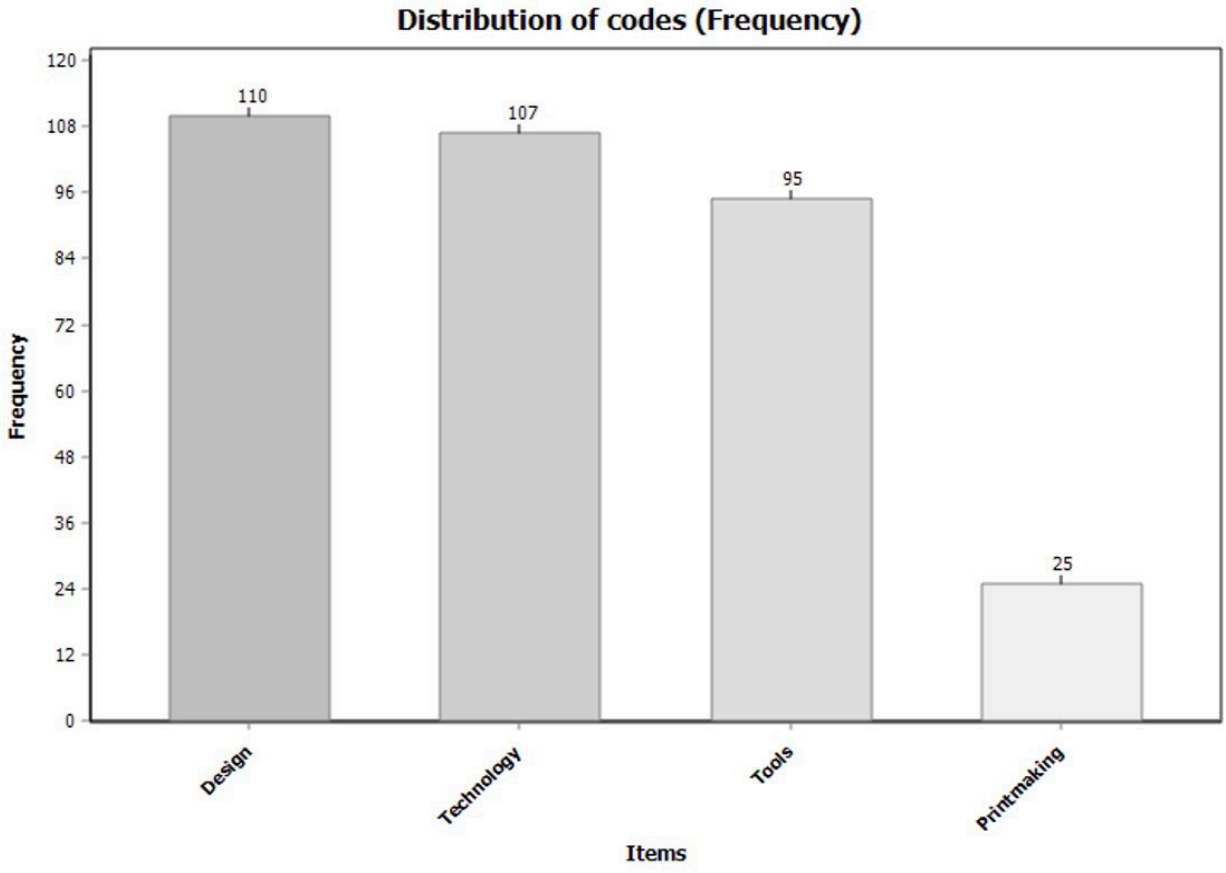
SET	CODE	COUNT	% CODE	% CASES
Writing & Literature	Foreign Lang	19	0.6%	1.2%
Writing & Literature	Research	86	2.7%	5.4%
Writing & Literature	Writing	302	9.6%	19.1%
Writing & Literature	Genre	200	6.3%	12.7%
Writing & Literature	Rhetoric/Com	61	1.9%	3.9%
Writing & Literature	Literature	83	2.6%	5.3%
Writing & Literature	Thesis/Senior	48	1.5%	3.0%

Table 8

The Design and Technology Set and Associated Codes

Set	CODE	COUNT	% CODE	% CASES
Design and Technology	Tools	110	3.5%	7.0%
Design and Technology	Design	95	3.0%	6.0%
Design and Technology	Technology	107	3.4%	6.8%
Design and Technology	Printmaking	25	0.8%	1.6%

Figure 6
The Frequency of Codes Categorized in the Design and Technology Set



The fifth set of codes is described as "Industry": *skills and knowledge related to the profession/business of editing and/or publishing*. This Content Set is composed of six codes: Business, History, Internship, Ethics, Legal, and DEI (diversity, equity, and inclusion) (see Figure 7). This set reflects programs' interest in explicitly preparing students for jobs in editing or publishing, with learning objectives focused less on the practice of editing and publishing and more on the business aspects of the industry, including understanding the origins of the profession, studying the ethical and legal issues of the industry, and engaging directly with the industry itself through internships. The most common code in this set is Business, with 240 instances across 1602 courses, or 15.2% of all courses (see Table 9). Our own program has one elective devoted to the business of editing, an elective focusing on the history of publishing, and an internship requirement for all majors, reflecting a programmatic aim to prepare students to enter the workforce as editors and publishers.

Figure 6

The Frequency of Codes Categorized in the Design and Technology Set

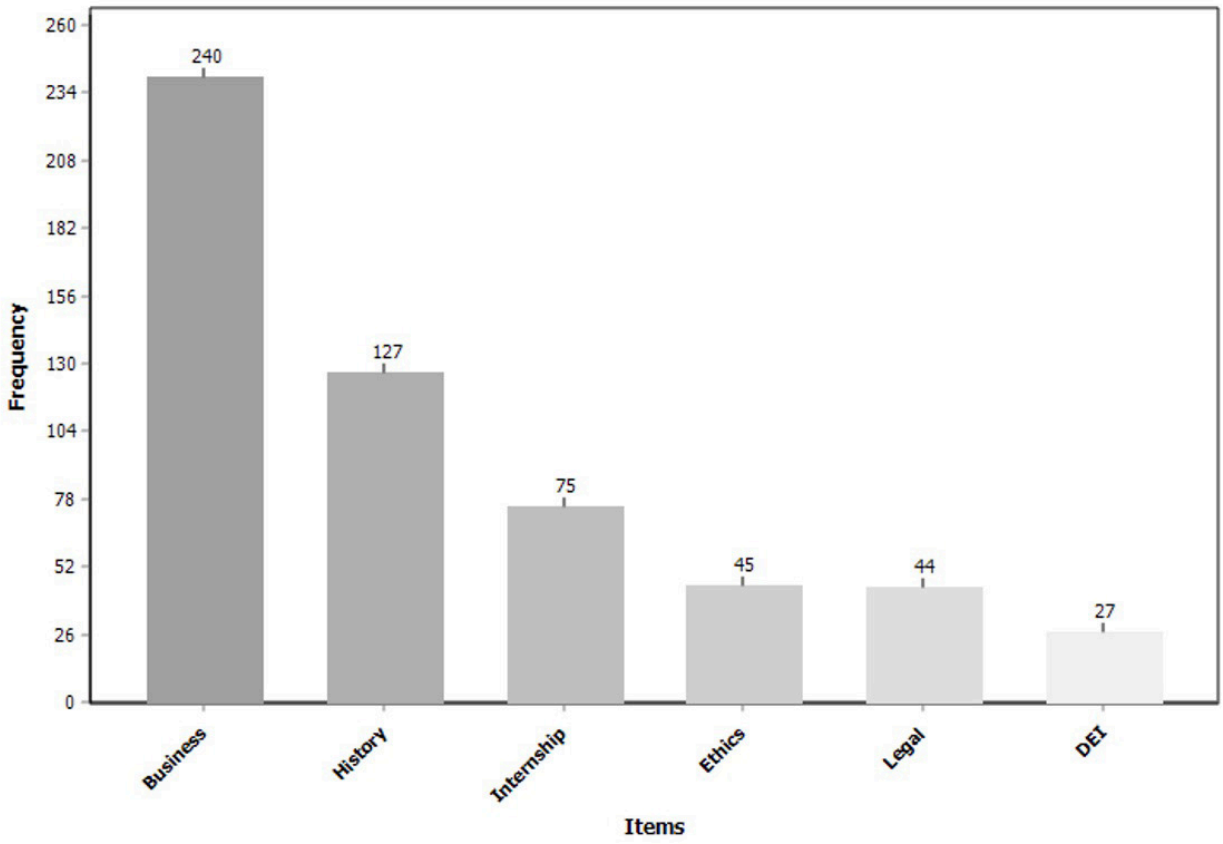


Table 9

The Industry Set and Associated Codes

SET	CODES	COUNT	%CODE	%CASES
Industry	History	127	4.0%	8.0%
Industry	Business	240	7.6%	15.2%
Industry	Legal	44	1.4%	2.8%
Industry	Internship	75	2.4%	4.7%
Industry	DEI	27	8.6%	1.7%
Industry	Ethics	45	1.4%	2.8%

A Preliminary Core Curriculum

Although these findings indicate that no core curriculum is shared among E&P programs at either the graduate or undergraduate level at this stage in its academic story, the diversity of course offerings does lend itself to categorization—which we have demonstrated in our Content Sets—from which a core curriculum *could* be derived. However, the data suggests a current imbalance among these categories.

Based on our coding, we see that course offerings associated with the Content Sets Publishing, and Writing and Literature are more commonly offered than courses emphasizing Editing Skills, Design, or Industry, accounting for nearly two-thirds of

all codes (see Figure 8 and Table 10). Surprisingly, Editing Skills account for only 10% of courses—a shortcoming considering our characterization of such programs as Editing and Publishing, where, we believe, Editing should be equally valued with Publishing. A closer look at the data reveals the scarcity of core-skills editing courses, such as copyediting, usage, and grammar, what professionals might think are bread-and-butter skillsets for those entering the profession.

Figure 8
Distribution of Codes for E&P Programs

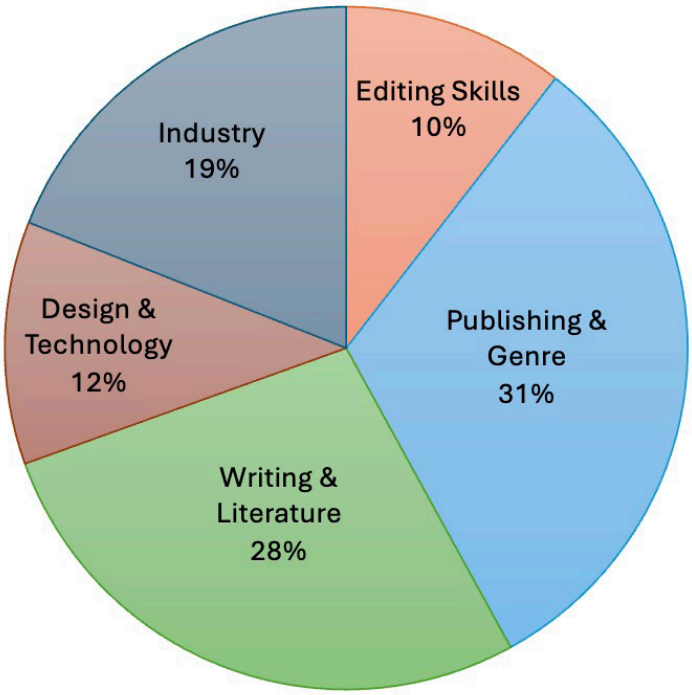


Table 10
Current Distribution of Codes for E&P Programs by Set

Editing Skills	296	10.5%
Publishing	921	31.5%
Writing and Literature	799	27.5%
Design	377	11.5%
Industry	558	19%
Total	**2911**	**100%**

This study lays the groundwork for future, more robust recommendations for what a core curriculum might look like, although preliminary recommendations may be offered based on current observations of what is being taught. For one, a more favorable distribution of categories would give greater credence to Editing Skills alongside Publishing courses as the heart of any E&P curriculum, accounting, perhaps, for approximately 50 to 60 percent of the focus of E&P programs, supplemented by Writing and Literature, Design and Technology, and Industry. Together

they make up the other 40 to 50 percent of the curriculum. We suggest, too, that no Content Set be neglected in the design of an E&P program (from minors to master's programs), bearing in mind that a single course may have multiple outcomes. These core and elective courses, when applied across E&P programs may very well keep students competitive with graduates from other programs, as well as set up reasonable expectations for industry professionals hiring from these programs.

Conclusion

Limitations

The scope of this study was limited. For one, we did not investigate the successfulness of E&P programs with respect to their job placement rates, nor did we investigate how many editing and publishing professionals were educated in E&P programs. These questions were beyond the scope of the current research and warrant further investigation. The data gathered reflects only the current course offerings from each identified program in higher education. Future researchers may be interested in the effectiveness of E&P programs in preparing students to enter the workforce, as well as the rates at which students successfully make careers in the industry.

Recommendations

As the need for skilled editors and publishing professionals increases and more students demand training in these fields, more editing and publishing programs will likely be developed. However, our research shows that no core curriculum is shared among current E&P programs at either the graduate or undergraduate level, leaving future program directors and curriculum developers without a framework for creating new programs or even restructuring current programs. An additional barrier to developing a core curriculum arises from a lack of core identity among E&P programs. For one, E&P programs are hosted by a variety of departments with diverse standards and objectives, frustrating efforts to identify objectives shared by all. For another, E&P is hardly seen as a scholarly discipline in its own right: doctorate degrees in editing or publishing are rare to nonexistent, few journals publish exclusively on the subject, and research into pedagogical practices in the E&P classroom is lacking. With so little commonality among programs, instructors, and classrooms, it is no wonder that E&P as an academic discipline has not gained a foothold, nor that a core curriculum has failed to form.

For Future Researchers

Nevertheless, a core curriculum in E&P programs would not only be beneficial to students and industry professionals, as argued above; it would also be a key ingredient in developing editing and publishing as an academic discipline. An established disciplinary identity takes time, of course, and though E&P as a discipline may be in a fledgling state, there are things current scholars can to do promote its development:

- Form professional relationships with scholars in E&P-related disciplines.
- Pursue further scholarship in E&P, particularly through interdisciplinary col laborations; look for commonalities in practice, theory, and teaching.
- Publish empirical research and pedagogical research related to E&P.

- Publish in editing- and publishing-specific journals.
- Look to models of other emerging disciplines, such as technical communica tions, for how to grow a discipline (see, for example, Melonçon & Schieber, 2022).

In light of our findings, we see the need for future researchers to join us in assessing the need for a core curriculum by (a) asking whether programs see themselves as a trade (i.e., a training ground for future editing and publishing professionals) or an academic discipline from which marketable skills are derived; and (b) developing a proposal for what such a curriculum might look like and how it might be implemented. For our part, we see the emergence of a core E&P curriculum as a positive addition to higher education and encourage the emergence of more scholarship in the field. The emergence of an E&P discipline will help facilitate common pedagogies and recognizable curriculum development across programs.

For E&P Program Administrators and Instructors

Recognizing the emerging state of E&P as a discipline is key for program administrators and instructors. We recommend beginning to take further steps to meet the needs of students, to prepare students for industry, and to build E&P as an academic community. These steps could include the following:

- Form professional relationships with instructors at other E&P programs by attending conferences, joining research groups, visiting campuses, or in viting speakers to give lectures.
- Get to know other programs' course offerings, aims, and objectives.
- Be strategic in naming courses. Course titles are succinct, public-facing de scriptions of program offerings and may be used to attract students looking to acquire specific skillsets. Course titles also appear on official transcripts and resumes, enabling external stakeholders (e.g., employers) to ascertain course content and objectives at a glance.
- Consider the five Content Sets proposed in this paper (Editing Skills, Pub lishing, Writing and Literature, Design and Technology, and Industry) when growing or revamping a program. Identifying gaps or unevenness in the curriculum may help program administrators decide what courses to offer, develop, or redesign to best serve their students. Consider the five Con tent Sets proposed in this paper (Editing Skills, Publishing, Writing and Literature, Design and Technology, and Industry) when growing or re vamping a program. Identifying gaps or unevenness in the curriculum may help program administrators decide what courses to offer, develop, or re design to best serve their students.

Like many of the E&P programs we have studied in this paper, we are actively assessing the courses, structure, and place of editing and publishing within our department. Our research on other E&P programs not only strengthens our program, but also begins to connect us with other like-minded scholars and teachers in this emerging discipline.

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The Morphology of Data Governance: A Disciplinary Imperative for Professional and Technical Communication

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Abstract: This commentary discusses my experience transforming the technical and professional communication program at North Dakota State University (NDSU) by integrating data governance principles. I collaborated with faculty from various departments, including business, computer science, and Northern Plains Ethics Institute, to create a comprehensive, interdisciplinary curriculum. My efforts also grafted data governance principles across NDSU's communication programs. Over time, new courses focusing on AI content strategy and data storytelling were also introduced. The integration of data governance skills into the curriculum made NDSU graduates highly sought-after by employers. I fostered a data governance culture through extracurricular initiatives, such as student clubs, an annual "Data Thon," and partnerships with industry professionals.

Keywords: data-driven innovation, data governance, data silos, technical communication, UX/UI

I joined North Dakota State University (NDSU) in the capacity of an expert on technical and professional communication with a mission—to transform how the university's technical and professional communication program approached data. I spent years in the corporate world before getting into academia. I had seen firsthand how poor data governance practices could lead to inefficiencies, compliance issues, and a lack of trust in an organization's data assets. At NDSU, the technical communication and professional writing program was highly regarded, with graduates going on to successful careers at major tech companies, consulting firms, and other businesses needing skilled communications. However, I recognized that the curricula did not adequately address the data governance domain.

In the 21st-century data economy, understanding how to manage data properly as an asset throughout its lifecycle has become essential for dedicated data professionals, technical communicators, and anyone who works with data in any capacity. Technical writers, content strategists, documentation specialists, and

user experience designers rely on data, a lack of data governance principles and best practices may mean that communicators could unknowingly give rise to data quality issues, compromise data privacy and security, or create inconsistent data flows that impair efficiency. (Cheong et al., 2007; Benfeld et al.,2020). I knew that giving NDSU's students a solid grounding in data governance would make them even more valuable to employers and better prepared to make the university a pioneer in integrating data governance into communication curricula, because—as argued by Olivia B. Nielsen (2017) concerning literature review on data governance practices between 2007 and 2017— "32% of published papers came from computer science disciplines, another 32% from information systems, and only 5% were from education, mainly higher-education institutions and learning" (p. 199). This provided us a sense of how data governance has been associated with certain disciplines such as computer science and information technology from a technical and system perspective.

Let's start with what data governance is in the literal sense of the word. Tibor Koltay (2016) argues that it is the backbone of any organization's data strategy, encompassing the policies, processes, and technologies that ensure data is managed effectively throughout its lifecycle (p. 303). To proceed along similar lines, data governance establishes accountability, transparency, and consistency in collecting, storing, processing, and utilizing data. Moreover, it involves defining clear roles and responsibilities. Establishing standards and procedures and implementing controls to mitigate data misuse and unauthorized access risks fall under the rubric of data governance.

One of the primary objectives of data governance is to foster what Samir Passi and Steven J. Jackson (2018) call "trust in data" (p. 4). In today's data-driven world, organizations rely heavily on data to make critical decisions, drive innovation, and gain a competitive edge. Nonetheless, without a proper spectrum of measures such as governance measures, data quality issues, and inconsistencies can undermine the integrity of insights derived from that data. By implementing robust data governance practices, organizations can ensure that data is accurate and trustworthy, thereby enhancing confidence in decision-making processes and enabling stakeholders to derive maximum value from data assets (Wilkinson, 2016). With this realization, I proposed to pitch a new course in the program at NDSU.

Pitching a New Course

In my first year on the job, I worked on developing a new course dedicated to data governance to diversify and aggrandize the scope and profile of technical and professional communication. With all this in mind, I drew upon my industry experience, poring over data governance frameworks used by major corporations and government bodies. More importantly, the course would cover key data governance concepts like data governance's roles and responsibilities (McMahon et al., 2019), data quality management (Wang, 1998), metadata management (Mark & Roussopouslos, 1987), data security and privacy (Salomon, 2012), data lifecycle

management (Rahul & Banyal, 2020), and the impact of emerging technologies like AI, Blockchain, and IoT (Soldani, 2021). In one sense, the idea was to give students a comprehensive understanding of data governance, why it mattered, and how communication professionals could apply governance principles and processes in their work.

More pointedly, I also wanted to bring real-world applications, having students examine data governance use cases, policies, and artifacts from actual organizations. In the simplest terms, my vision was to create a new breed of technical communicators who were "data-aware" (Baehni et al., 2004) and could serve as stakeholders and champions for optimal data management practices. However, implementing and maintaining effective data governance can be complex and challenging. It requires strong leadership commitment, cross-functional collaboration, and ongoing investment in people, processes, and technology. Organizations must balance enforcing stringent data governance policies to ensure compliance and foster "a data-driven innovation and agility culture" (Sultana et al, 2022). They must also navigate the evolving landscape of data privacy regulations, technical advancements, and changing business requirements to adapt their data governance practices accordingly. I did my best to align my course with fundamental data management principles.

After months of research and course planning, I pitched the idea to the university curriculum committee. Some faculty members were skeptical of adding a new course focused on data governance, wondering if it strayed too far from the core communication disciplines. However, I showed how the data-driven nature of business, technology, and communications itself had evolved to make data governance mission-critical knowledge for the program's success. Additionally, data governance can accelerate decision-making processes and drive operational efficiency by empowering employees with access to trusted data and self-service analytics tools. Since my strategy was pragmatic enough to drive the whole process methodically, I presented examples of job postings showing employers actively seeking communicators with an understanding of data governance. I also emphasized that the course would make NDSU's programs distinctive and cutting-edge. Ultimately, the curriculum committee approved launching the "Data Governance for Communication Professionals" course starting the following academic year. I had achieved my primary goal—now came the real work of implementing my vision.

An Interdisciplinary Approach

One of the remarkable aspects of how I approached data governance education was my emphasis on interdisciplinary collaboration. A multidisciplinary approach to data governance utilizes expertise from information technology, legal, risk management, data science, and business units to develop comprehensive policies and accountability models for managing and using data assets across the organization (Palmer et al., 2023). I knew the concept of data governance touched on various domains: Business, technology, law, ethics, and more. To provide a

truly comprehensive learning experience, I had to incorporate perspectives from across the university. To that end, I quickly formed partnerships with other faculty across different departments and colleges. A professor from the business school helped shape lessons on data governance frameworks, operating models, and their connection to organizational strategy. A computer science professor consulted on the more technical aspects like data modeling, metadata management systems, and data integration. Since the course's prototype was what I had envisioned, I did not prefer getting bogged down in the rigmarole of jargon-rife delineation.

To give a robust interdisciplinary cast to my curricular endeavor, I turned to the university's law school. There, a lecturer on information privacy and cybersecurity law, provided valuable insights into the legal and regulatory considerations around data governance, especially in industries with stringent data protection requirements like healthcare and finance. Professors in applied ethics and philosophy helped explore the ethical implications of data practices on issues like algorithmic bias, surveillance capitalism, and individual rights over personal data.

Over time, the fledgling shape of the course on data governance course took on a holistic perspective as I managed to bridge these disparate disciplines through guest lectures, joint projects, and interdepartmental knowledge sharing. Students would not learn about governance in a vacuum. They would see all the intersecting dimensions and stakeholders in implementing effective, responsible data management. This course also benefited from collaborations with industry partners I fostered through the university's co-op, internship, and corporate training programs.

Opting for cross-pollinating ideas and insights, I approached experienced data governance professionals from significant companies like tech giants, banks, insurers, and manufacturers with a request to visit the class as guest speakers. They shared illuminating case studies and examples from enterprises grappling with ever-growing data footprints. Additionally, I tapped members of professional associations like DAMA International, the Data Governance Institute (Prasetyo et al., 2019), and others for expertise in current data governance standards, best practices, and certification programs. In creating my innovative curriculum, I absorbed knowledge and resources from a vast network of contributors and pioneers in the data governance space.

Embedding Governance Across the Curriculum

Launching the flagship data governance course was a significant achievement, but it was just the start of my ambitions. My bigger goal was to fundamentally ingrain data governance principles across NDSU's entire suite of communication programs. "Data is the lifeblood of modern organizations," I emphasized repeatedly in the gatherings and interactive meetings. Leveraging my persuasive knack and nuance, I affirmed: As a communication professional, stakeholders must treat data as a precious asset to be properly acquired, described, maintained, and leveraged. Data governance should not be a separate silo—it must be integrated into all communication disciplines and workflows.

Under my guidance, data governance concepts soon started permeating classes beyond the core data governance course. In technical writing courses, students learned metadata tagging standards, content auditing for data quality, and creating data dictionaries and governance artifacts. Toward this goal, I made room for UI/UX design classes incorporating data protection and privacy by design. Students pursuing careers as documentation managers studied governing controlled unclassified information and adhering to data retention policies.

Meanwhile, I developed new classes focusing on emerging communication and data intersections. A course on AI content strategy showed students the intricacies of managing data used in machine learning development. A data storytelling class explored communicating data-driven insights through compelling narratives and visualizations. Data storytelling involves taking complex data sets and communicating insights from them in compelling narratives accessible to broad audiences (Shin et al., 2020). Using data visualization, explicit language, and narrative frameworks, data storytelling makes data meaningful and impactful for influencing strategy and decisions. With some insight into this dimension of data governance, I tended to facilitate this curricular transformation. To that end, I guided faculty from across the programs in training themselves on data governance competencies. I organized workshops, facilitated reading groups, and brought in external trainers to ramp up instructors' knowledge of data governance frameworks and their real-world applications.

Within a few years, my data governance integration efforts had entirely reshaped the technical and professional communication offerings at NDSU. Students were graduating with skill sets few other programs could match—a powerful blend of communication expertise and a robust, future-proof grasp of organizational data governance practices. Companies quickly took notice of the unique capabilities NDSU's graduates now possessed. During on-campus recruiting events, employers were impressed by students' ability to articulate critical data governance concepts like data quality dimensions, data lineage, and metadata management. They could deftly discuss approaches to operationalizing data governance through data governance offices, councils, and centers of excellence.

My students were in high demand, landing enriching roles as data governance analysts, digital governance associates, content governance specialists, information management consultants, and more. Some were hired into dedicated data governance roles, helping companies establish and optimize governance programs. Others became champions for data governance best practices embedded within enterprise communication teams. The success stories poured in, with alumni relating how their data governance knowledge gave them a serious advantage. They could bring tremendous value by bridging gaps between an organization's communication functions and data management capabilities. They understood how to align communication strategy and deliverables with foundational governance processes around data quality, security, retention, and integration. In a few short years, NDSU was transformed into a pioneer and leading educator in data governance for communication professionals.

By embedding these critical 21st-century skills into the curriculum more traditionally focused on writing, UX, and content strategy, NDSU produced a new generation of graduates fully prepared to thrive in the data-driven future of the workplace.

More Than Just Coursework

Beyond just shaping the formal curriculum, though, I helped foster a broader data governance culture across the communication programs at NDSU through extracurricular initiatives and hands-on application opportunities. I worked with student organizations to establish data governance societies and clubs that furthered learning and exploration beyond the classroom. Members of the "Data Steward" club volunteered for consulting projects, helping local nonprofits and small businesses implement basic data governance practices (Peng, 2028). An annual "Data Thon" (Li, 2017) challenged interdisciplinary student teams to analyze datasets and databases from real organizations and enterprises and then present recommendations for improving data quality and developing governance processes. Students could earn micro-credentials and badges for data governance skills through these activities.

I also partnered with the university's technology transfer office to connect students to data governance co-op, internships, and job opportunities. By establishing an advisory council of data governance professionals, I helped create a robust pipeline for students to gain hands-on experience and get mentorship in the field while still in school. For students demonstrating exceptional data governance aptitude, honors projects, and fellowships became available to work directly with me on research initiatives. They examined emerging trends like incorporating AI techniques for operationalizing data governance and studying the social impacts of governance mechanisms around personal data and algorithmic decision-making systems. In large part, within NDSU's technology communication programs, students who had gone through NDSU's refurbished curriculum became go-to resources for their peers struggling with data quality or governance issues. It created a virtuous cycle of knowledge sharing, strengthening the university's collective data governance capabilities for future generations of students.

Looking back years later, everyone beamed with pride at what NDSU had achieved. When I first arrived, data governance was a mere curriculum footnote. It was deeply embedded in how NDSU produced world-class communicators ready to thrive in the data-driven era.

Though it had initially faced skepticism and hurdles in infusing this "non-traditional" domain into the programs, NDSU's vision and collaborative approaches helped make NDSU a promising school for data governance education. My former students were leaders and innovators, spreading data governance brilliance throughout businesses and organizations globally.

Data governance was no longer a niche need but a core skill for the modern technical communication professional. Thanks to the pioneering efforts of educators and expert faculty members, the future was brighter for businesses seeking to unlock the total value of their data assets.

New generations would have the tools to bring order and discipline to the flow of information, powering the industry while upholding vital ethics around privacy, security, and data rights. As data's societal and economic importance only grew over time, there would always be a demand for those who could bridge the gaps between an organization's communication needs and data management capabilities. NDSU's programs, forever transformed by my passions and efforts, would continue supplying the world with skilled data governance communicators for decades.

In conclusion, data governance is critical to modern data management strategies, enabling organizations to effectively manage, protect, and derive value from their data assets. Organizations can ensure data integrity, foster trust, achieve regulatory compliance, and drive innovation by establishing clear policies, processes, and controls. However, successful data governance requires a holistic approach, encompassing people, processes, and technology, solid leadership commitment, and ongoing investment. Ultimately, organizations prioritizing data governance will be better positioned to navigate the complexities of the digital age and capitalize on the opportunities presented by data-driven decision-making.

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Expectations Mapping: A Cognitive Approach to Teaching Audience in Technical Communication Programs

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Abstract: Usability is central to creating effective technical content. Audience expectations for usable content, however, are neither fixed nor universal. For this reason, technical communication students can benefit from approaches that help them effectively identify the usability expectations an audience has for technical content. This entry presents an approach for teaching audience usability expectations in technical communication classes and across overall technical communication curricula. Known as expectations mapping, the approach focuses on teaching students to identify the cognitive factors that affect an audience's usability expectations. The entry then concludes by providing suggestions on how to integrate expectations into an overall technical communication program.

Keywords: Audience usability, cognition, design, expectations, usability

Effective technical communication is often a matter of usability. Specifically, the individuals reviewing technical content, be it text, visuals, multimedia, etc., must use that content to successfully complete a desired objective (Redish, 2010; Redish & Barnum, 2011; Schreiber & Melonçon, 2021). Technical communication students therefore need to understand audiences in terms of who individuals are and how those individuals expect to use certain content to achieve an objective. For this reason, members of the field have increasingly advocated integrating the teaching of usability into technical communication courses and curricula (Kastman Breuch & Spinuzzi, 2001, LaRoche & Traynor, 2010; Cleary & Flammia, 2012; Lauer & Brumberger, 2016; Jacobsen & DeVasto, 2023). Achieving this objective often means acquainting students with psychological factors that guide how individuals identify, understand, and use different content (Albers & Mazur, 2003; Siau & Tan, 2005; Cooke, 2010; Acharya, 2022; St.Amant, 2022).

The psychological factors affecting usability are not random. Rather, many involve cognition – or how individuals' brains have learned to process different kinds of information over time (Tse et al., 2007; Yamada & Itsukushima, 2013). Specifically, the usability of an item, content or otherwise, reflects how an audience has learned to interact with or use that item (Pass, Renkl, & Sweller, 2003; Cook, 2006; van Merrienboer & Sweller, 2010). Accordingly, integrating usability into technical communication classes and curricula involves helping students identify and address cognitive factors affecting an audience's expectations.

Achieving this objective is no simple task. The related concepts are complex, and the teaching of these concepts needs to be somewhat standardized for students to grasp core ideas across classes. Expectations mapping is an approach to identifying the usability expectations of an audience, and it can help address this situation. Based on the cognitive concept of conditioning, the expectations mapping process helps identify the foundational elements individuals associate with using an item. This process also provides technical communication instructors and program administrators with a relatively easy-to-implement and consistent way to teach audience expectations in classes and across a curriculum.

This commentary provides an overview of the expectations mapping process and explains how it can benefit technical communication classes and programs. The article begins by reviewing how individuals' experiences condition them to engage in behaviors that influence t how items are used. The authors then explain how the process of expectations mapping can provide technical communicators with a method for identifying conditioned behaviors affecting how audiences respond to and use different content. The entry then presents an approach for integrating the teaching of expectations mapping into different technical communication classes and across related programs. In so doing, the authors note how combining such mapping with user testing can help students understand conditioning factors that shape an audience's perceptions of usability.

Foundational Cognitive Dynamics

Cognition, or how the mind processes information, impacts the way humans use items (Eyal, 2014; Acharya, 2019; Verhulsdonck & Shalamova, 2020; Vukasovich & Kostic, 2022). While many cognitive mechanisms are innate (nature), the inputs that shape user behavior reflect an individual's experiences (nurture) (Cooper, 1999; Norman, 2002; St.Amant, 2022). By addressing such nature-nurture factors, courses and curricula can help students understand the usability factors audiences associate with different content. Educators and program administrators can achieve this objective by focusing on how the process of conditioning shapes an audience's usability expectations.

Conditioning

Humans often learn what an item is and what it does through a process called conditioning. Conditioning influences an individual's criteria for determining:

- What items are (e.g., which features identify an item as a can opener)●
- What items do or are used to do (e.g., what individuals use a can opener to do)
- How to use items to perform a process (e.g., how individuals use a can opener to open a can)
- What results indicate the individual used the item correctly (e.g., what resulting situation indicates individuals correctly used a can opener to access the contents of a can) (Kirsch et al., 2004; Staddon & Cerutti, 2003; De Houwer, 2011).

As such, conditioning often plays an important role in shaping an individual's assumptions of what constitutes a usable design in terms of one's ability to recognize and use different things (Michalco, Simonsen, & Hornbaek, 2015; Hassan & Galal-Edeen, 2017). Per the prior example, an individual's ability to recognize a can opener and use it to open a can reflects that person's prior exposure to and experience with can openers.

The more frequently individuals encounter an object, use it a certain way, and observe a particular result, the stronger these associations become in the minds of those persons (Taylor & Todd, 1995; Barnard et al., 2013). The brain then relies on these repeated experiences to develop patterns (i.e., create expectations) for how to use the related item (Hurtienne & Blessing, 2007; Setchi & Asikhia, 2019). So, the more often individuals observe a can opener used a certain way to open a can, the greater the chances they will use a can opener that same way. These common patterns then become the foundation for how individuals identify and use various items.

Over time, these repeated experiences become seemingly automatic behaviors for using items (Norman, 2002; St.Amant, 2022). Essentially, if individuals encounter the right stimulus (e.g., correct visual, sound, tactile sensation, etc.), they will instantly perform the associated action until the expected results occur. Most if not all of this activity occurs without any conscious thought. Rather, such automatic behavior results from conditioning. Essentially, the presence of the correct stimulus (e.g., design) readily prompts the reflexive performance of a related behavior (Duhigg, 2014; Eyal, 2014). Per the prior example, the moment I encounter a design I recognize as a "can opener," I automatically use that item a particular way to open a can. This is because my prior experiences become the guide I instinctively follow to perform this process.

The experiences that create conditioned behaviors, however, are not universal. Rather, they can vary from person-to-person depending on an individual's experiences and what someone has been exposed to over time. As a result, different usability expectations can arise among individuals based on the stimulus (e.g., visuals, sounds, etc.) each person learns to associate with a process (Duhigg, 2014; Eyal, 2014; St.Amant, 2022). Individuals who have only been exposed to an automatic can opener, for example, might be unable to identify or use manual can openers to open a can.

Such differences in experience-based conditioning dynamics have important implications when designing content to address what an audience considers usable. For example, individuals who have only experienced printed manuals might have no idea of how to use online help systems to access instructional content. (They might not even be able to recognize what such systems are.) Technical writing professionals and students alike can benefit from an understanding of how conditioning factors can shape an audience's perception and use of different technical content. The first step in developing such an understanding involves examining how the connections between conditioning and content affect usability. Little has been said, however, regarding design literacy in TPC.

Content

In technical communication, the term "content" often refers to the information one shares via different formats including textual, visual, and multimedia (see, for example, Albers & Mazur, 2003; Dubinsky, 2015). Effective content presents concepts in a way that audiences can easily apply to accomplish the objective for which they are using an item/consulting a text (Carliner, 2001; Albers & Mazur, 2003; Dubinsky, 2014). Accordingly, textual/verbal/sonic content needs to address what audiences expect to achieve (and how) for those individuals to consider the related information usable. Similarly, visual content (e.g., images, features, and interfaces) needs to mirror the design factors conditioning has trained individuals to expect when using this kind of content to perform a process.

These content expectations can encompass everything from the design of individual features or parts of an item (e.g., the design of an "On" button on a remote control) to the overall design of objects and products themselves (e.g., the design of the remote control on which the "On" button appears) (Norman, 2002; Acharya, 2019; St.Amant, 2022).They can also determine if individuals can recognize a tool or technology so they can use it in a setting. In these ways, conditioning teaches individuals to associate the usability of certain content with the presence and design of certain elements (e.g., use of headings in a document, configuration of text and visuals on a page, presence of features on a website, etc.) The better students understand the connections between conditioning and content, the more effectively they can create materials an audience can use effectively. Achieving this goal is a matter of teaching students about how condition shapes a groups' usability expectations for content.

Expectations

Conditioning often accounts for different usability preferences audiences have for content. This is because the conditioning factors affecting an audience's expectations are not universal. Rather, they can vary from person based on each individual's experiences (Mendoza & Novick, 2005; Sonderegger et al., 2012; Kujala & Miron-Shatz, 2015). For example, individuals who have no prior experience using a smart phone similarly lack the conditioning associated with using that phone easily or automatically. As a result, content creators cannot assume individuals will know the dynamics of interacting with such technologies. Rather, they must provide content that provides new users with information on how to use this previously unencountered technology.

Additionally, conditioned behavior is not fixed. Rather, it can change over time as individuals engage in new experiences that reshape prior, conditioned behaviors (i.e., prompt new kinds of conditioning) (Mendoza & Novick, 2005; Sonderegger et al., 2012; Kujala & Miron-Shatz, 2015). Developments, such as moving to a new location, can expose individuals to new stimuli and approaches for using an item or performing a task. The design of kiosks for purchasing train tickets, for example, can vary from country to country. Such variations can impact how usable an item is for long-term residents of an area (e.g., individuals conditioned to use such technology) vs. visitors conditioned to use a different design or kind of device. In such cases, instructions on how to use new designs (e.g., features or products) can help individuals with different experiences modify their conditioned behaviors to include the use of such "new" items. Accordingly, providing visitors with instructions on how to purchase tickets at a kiosk can help them revise their conditioned behavior to use technologies.

Essentially, new experiences can bring new content expectations that affect how items should be designed, or how content should be worded, so individuals can use products or information effectively in new situations. The better technical communicators—and technical communication students—understand these conditioning dynamics, the more effectively they can address them to create usable content for different audiences. Expectations mapping is a process that can facilitate such content creation by helping practitioners and students alike identify the conditioning dynamics that shape an audience's assumptions for usability.

Implications for Education

Technical communicators can determine how much conditioning influences usability based on how often individuals rely on automatic behavior (i.e., doing without thinking) when using an item. For example, how many times do most individuals stop and actively think about how to use their smart phone to call someone? This is because humans rarely notice how conditioning affects the use of items in everyday life. Technical communicators, however, need to understand such cognitive dynamics in order to identify the usability expectations of different groups (St. Amant, 2017; 2022). Such an understanding is central to creating communication materials (i.e., content)—documents, visuals, multimedia, etc.—an audience considers "usable." Accordingly, teaching technical communication students to identify and address these conditioning factors represents a core skill instructors should focus on in courses and across programs. The challenge for educators and program administrators involves finding an approach that can 1) effectively identify the conditioning factors affecting usability expectations, and 2) successfully be implemented across a curriculum.

Such an approach should also be easy for students to apply repeatedly and consistently across courses r to reinforce core ideas within a program. Achieving these goals involves identifying the elements central to conditioned behavior—or the stimuli that start and stop the particular actions in an overall process.

The solution comes in the form of *expectations mapping*, an approach that focuses on identifying the stimuli and associated actions behind a conditioned behavior. Such mapping is also adaptive so it can help identify if usability expectations change over time based on experiences (e.g., moving to a new location). As a result, expectations mapping can both account for an audience's current usability behaviors and help identify potential shifts in such behaviors based on changes in an individual's experiences and exposure.

Teaching the Fundamentals of Expectations Mapping

Familiarizing students with expectations mapping involves teaching them how to identify the conditioning dynamic foundational to what constitutes usability. The metaphor of "on switch" and "off switch" helps students conceptualize the fundamentals of conditioned behavior. Essentially, educators can begin by examining conditioning (i.e., learned, automatic behavior) in terms of three interrelated parts:

- **On switch** = The specific sensory stimulus that prompts a particular action from users when they encounter it

- **Action** = The particular action the specific sensory stimulus (i.e., "on switch") prompts users to perform when they encounter it

- **Off switch** = The specific sensory stimulus (i.e., result) that indicates the action was performed correctly and the user should stop performing that particular action

When introducing students to these concepts, instructors can use the process of making a call with a smart phone as an example that illustrates how this process works in everyday life. The resulting approach might look something like:

- **On switch** = The icon (e.g., telephone receiver) that initiates the "make phone call process" by prompting users to perform a specific action associated with that process

- **Action** = Tapping the "phone call" icon (on switch) in order to begin the process (i.e., use the item) of making a call

- **Off switch** = The new stimulus (e.g., number pad for typing phone number) that appears in response to this action (i.e., tap icon) and indicates the individual correctly performed the process and can stop the related action (i.e., stop tapping "phone call" icon)

By using this familiar process, instructors help students conceptualize conditioning in terms of how certain stimuli can prompt individuals to start or to stop particular actions. This example also helps students understand how quickly the conditioning process can develop a particular, automatic behavior for using an item.

To help students more fully understand how experiences affect conditioning, instructors could ask the class if any of them have ever helped a friend, family

member, etc. use a technology—like a smart phone—to perform a process the students considered self-obvious. Instructors could also ask students to discuss how that person's limited experiences using the related item resulted in this need for information (i.e., content) on how to use that item.

Next, instructors could have students perform an in-class activity where they identify or map the "on switch," "action," and "off switch" dynamics for the next step in the process of making a phone call with a smart phone (i.e., typing in a phone number). For this activity, students could work individually or in pairs to identify the conditioning factors at work in this second activity associated with making a call with a smart phone. Each student-pair would then share the results of this mapping with the class, and all members of the class could compare and discuss their findings in terms of similarities and differences.

In the case of this example, the resulting mapping might resemble the following:

- **On switch** = Number pad that appears after tapping the "call phone" app
- **Action** = Type in phone number and click "call" icon/button on the number pad interface
- **Off switch** = Interface changes to a "Calling" screen to indicate the process of typing in the number was successful

As students discuss their findings, instructors could ask them to consider how their own experiences with this process might have resulted in certain similarities and differences noted in the mapping results. Instructors could also have students discuss how the automatic nature of this process can make it difficult for individuals familiar with the process to map it effectively. Instructors could then conclude with a discussion of why students need to research the expectations of their audience, vs. rely on their own experiences, when creating usable content for different groups.

Extending Expectations Mapping to Overall Processes

Conditioned behavior often involves more than the performance of a single action in response to one set of "on" and "off" stimuli. Rather, such behavior generally encompasses a series of conditioned actions strung together almost seamlessly through a process of overlapping different stimuli. This is called chaining. Per the example of using a mobile phone, the number pad interface that stops the action "tap app" also serves as the "on switch" that prompts the next action in the overall process, typing in a number. Overlap involves almost automatic responses to different stimuli, and individuals remain unaware of how various sensory input initiates different behaviors in a process.

Instructors, in turn, should have students expand upon their initial "on-switch, action, off-switch" analysis of behavior in a way that helps them understand how different conditioning dynamics shape a greater sequence of behaviors. The expansion of these ideas involves students performing more granular expectations

mapping of activities to identify the different conditioned behaviors (i.e., on switch, action, off switch) at work in an overall process. These granular mapping activities also help students realize how humans might overlook the nuances of conditioned activities by reducing them to a few inclusive steps. In the call phone situation, for example, individuals often view the "type number and make call" process as one task vs. as multiple tasks with their own on and off switches.

To achieve a deeper understanding of conditioning, instructors should ask students to reflect on how different automatic actions seem to overlap in a greater process associated with using an item (e.g., all stimuli and actual steps involved in making a call with an app). For example, after students discuss their mapping results for tapping a "call phone" app, instructors could note how the "off switch" (i.e., appearance of number pad) that ended one process (i.e., starting to make a call) suddenly became the on switch that automatically started a new process (i.e., typing in phone number). Instructors could then explain this overlapping of "off switch" for one part of process that is also the "on switch" for the next part of the process creates the illusion the overall action (making a call with a cell phone) is one simple task.

In reality, the process of using something often encompasses a series of "on switch," "action," and "off switch" relationships. This situation means that different experiences can lead to different conditioned behaviors for each part of a greater activity. To understand such factors, students need to map the overall process for using something to identify the various conditioning dynamics (on switch, action, off switch) associated with performing that process.

Teaching Extended Expectations Mapping

Teaching students to extend expectations mapping to overall processes involves having them scrutinize activities to identify the conditioning factors at work across all parts of a process. To do so, instructors can have students build upon their prior expectations mapping activities. For example, instructors can use the "making a call with a cell phone" example to help students conceptualize how to map an overall process according to overlapping conditioning factors. To guide students as they perform this extended mapping, instructors should first ask them to identify the greater process they wish to examine, map.

- *Example:* Making a phone call with a cell phone

Next, instructors need to have students identify the different tasks – or actions – involved in this process. Students could undertake this assignment individually or in pairs, but they should first attempt to map the greater process and then compare and discuss their results with the class. After the *example*, **Process** shows how the related map could look:

- *Example*: Tap "call phone" icon to access keypad, type in number on keypad and press "call" button, respond to resulting input (e.g., person says "Hello," voicemail message provides instruction, etc.)

Process: *Make a phone call with a cell phone*

Task 1: Tap icon to access "make phone call" app

Task 2: Type in phone number and press "call" button

Task 3: Respond to input received after call connects

At this point, instructors should ask the student to identify the stimulus that starts each task ("on switch") and the related stimulus that stops each task ("off switch"). The resulting map might look something like the following:

Process: *Make a phone call with a cell phone*

Task 1: Tap icon to access "make phone call"

- On switch = "Call" icon (and perhaps corresponding sound/sensory stimulus associated with it)
- Action = Tap "Call" icon to access number pad
- Off switch = Number pad (and related sound/sensory input associated with its appearance)

Task 2: Type in phone number and press "call" button

- On switch = "Keypad" screen
- Action(s) = Type in number and tap "call" button
- Off switch = "Calling" screen appears

Task 3: Respond to input received after call connects

- On switch = Response from other party ("hello?" voicemail message, etc.)
- Action = Respond (state who you are, leave message, etc.)
- Off switch = Confirmation responses from other party (e.g., speaker replies, voicemail message confirms receipt etc.)

During this in-depth mapping process, instructors would have students identify overlap areas – or points where the stimulus that stops one action starts another (e.g., number pad = stop tapping "call phone" app and start typing in phone number). Instructors can also ask students to identify points where multiple actions

seem embedded in the same task (e.g., keypad = type in number AND tap "call" button). At this point, instructors can request students try mapping this particular task in a more granular on switch-action-off switch fashion such as:

Task 2: Type in phone number

- On switch = Number pad
- Action(s) = Type in number
- Off switch = Each number button changes slightly and/or makes a sound when tapped to indicate it was correctly used (i.e., stop tapping specific number button)

Task 3: Tap "call" button on number pad

- On switch = Full phone number appears on screen
- Action = Tap "call" button
- Off switch = Interface changes to "Calling" screen

In this way, students learn how one apparent task (e.g., type in number) can actually contain multiple, connected activities (e.g., type in number and press "call" button) with each task having its own on and off switches, each of which impacts the usability of the item.

From this point, instructors can ask students to further identify the different smaller stimulus-based actions/tasks that occur within a larger process. Per the phone call example: This activity could include noting how the "off switch" for type in number/ on switch for "press "call" button is often the full, typed number appearing on the number pad screen. This realization should then prompt students to do a new level of mapping to account for each of these actions.

Next, instructors could ask students to create a similar expectations map for different, common activities associated with using other items (e.g., logging in to an institutional email account). Again, students would have to identify the task-related factors (i.e., on switch, action, and off switch) involved in using that item to perform a particular process. Students could then discuss their resulting expectations maps with the class to understand how conditioning shapes behaviors.

During these discussions, instructors could help identify areas where students overlooked a task entry (i.e., blended two tasks together and overlooked sensory on/off switches and the related action for these switches). Such a guided discussion can help students realize how easily one can overlook, forget, or blend certain elements when communicating about familiar processes. During these guided discussions, instructors should emphasize the need to work with—and collect mapping information from—the audience for which students will design content. Instructors should also emphasize why students should not rely on their own understanding of a process to create content for others.

Building on the Basics of Expectations Mapping

The smart phone example mentioned here is one example of how instructors can use a common technology or product to teach the basics of expectations mapping. The key is for students to learn about conditioning by mapping a process very familiar to them. This mapping of familiar processes helps students realize how they have conditioned themselves to respond to different stimuli when using a particular item or performing a given activity. Accordingly, instructors could customize this activity by having students create expectations maps of technologies associated with a specific class or topic (e.g., mapping the use of icons in a visual design program as part of a visual design class). The objective is for students to learn:

- How much stimulus-response conditioning influences the uses of an item
- How different experiences can result in different conditioning that affects usability expectations
- How to map/identify such conditioning factors related to using an item

An understanding of these factors can help students learn they should not assume there is a universal way for doing or using something. Such understanding can also help students realize audiences new to an item need certain instruction (i.e., content) to identify the on switch, action, and off switch factors central to a performing an activity or process. In this way, mapping helps students comprehend how the creation of technical content, such as instructions, should focus on identifying the stimuli and actions associated with using an item.

Once students have analyzed a process, they could use the resulting expectations map to create instructions on how to use the related item to perform the associated process. Students could then test those instructions by having individuals unfamiliar with the item or process use these instructions to perform the related activity. As test subjects use those instructions, students could note if or where usability problems occur and note how some aspect of the "on switch-action-off switch" process affected the usability of those instructions. Students could then share their testing results with the class and discuss how expectations mapping can help identify where different experiences can cause usability issues. Instructors could also have students discuss how usability issues can arise from the assumption an audience's behaviors are similar to those of the student/content creator. Such a discussion could emphasize the importance of working with and collecting information on usability dynamics directly from the members of an audience.

The objectives of these testing activities and related discussions are threefold. First, they help students understand the degree to which experiences shape expectations. Second, they help students understand what these factors mean for how audiences use an item to achieve an objective.

Third, these activities help students understand the role that stimuli—particularly, recognized stimuli in terms of the design of essential features—impacts the actions individuals perform when completing a task. By combining user testing with expectations mapping, students learn to identify user behaviors as well as address potential usability problems.

Expectations mapping and associated user testing can also permit a degree of collaboration as students learn to apply this process to different topics or projects in a class. Instructors, for example, could include an in-class expectations mapping activity every time the class examines a different genre for or approach to sharing information with others. Students could then use expectations mapping to collaboratively determine how to draft a given item/assignment based on the related audience's usability-related behavior. Students could also use the results of this mapping process to develop sample materials they could test with members of the intended audience. By combining expectations mapping with user testing, students learn to identify and address core factors affecting how audiences use different content.

When teaching this topic, instructors could ask students to create an expectations map for how the intended audience might use the related item or access associated content. Instructors could also have students research the intended audience in a relatively standardized way in order to identify associated factors per the on switch-action-off switch factors associated with a process. To collect such information, instructors could have students conduct interviews where they ask members of the intended audience to discuss the process for how they use an item (e.g., "Where and how do you review an instruction manual?"). As audience members describe the process, students could ask them to identify the factors that prompt certain actions (e.g., "When do you start reading the text? What prompts you to start reading it?") Such activities can help students learn how to systematically apply expectations mapping to collect information on an audience's conditioned usability behaviors. Students can also use expectations mapping to identify how an audience uses a certain content (e.g., "How do you know to stop skimming the pages and start reading a particular section of a report?").

Integrating Expectations Mapping into a Curriculum

While seemingly simplistic, expectations mapping can help teach students about usability factors related to an audience's experiences. Specifically, students can use expectations mapping to analyze different communication situations and determine what information/content an audience needs (identify on switch, identify action, identify off switch) to use texts or technologies based on that audience's experiences. Students can also quickly and easily apply expectations mapping to different communication situation including:

- Writing papers (e.g., what conditioning factors influence how individuals read a report)
- Developing websites (e.g., what conditioning factors affect how users log in to a website)
- Designing infographics (e.g., what conditioning factors affect how audiences review visual content).

Expectations mapping can also help students identify where users might need information or content (e.g., need text to identify the on switch for new users) based on a breakdown of the tasks (stimulus, action, stimulus) associated with a process.

This flexibility means individuals can integrate expectations mapping into classes and across a curriculum relatively easily. Students, moreover, do not need any specialized background or technical skills to map expectations when researching audiences or drafting materials. This factor can be important in situations where students from different disciplines assemble in the same class context, like a service course or a technical communication class required for students from different majors (e.g., a usability class required for computer science majors). In such cases, creating a common foundation for examining audience behavior can allow students with various levels of knowledge and experience to participate relatively easily in class projects. The relative ease of applying expectations mapping also allows individuals from different disciplines to participate effectively in more advanced classes in a program (e.g., bioengineering students interested in a health communication class).

This flexibility allows instructors and program administrators to implement expectations mapping in a class regardless of its relative level (e.g., beginner, intermediate, or advanced) within a curriculum. As a result, expectations mapping can create a common approach for identifying audience/usability behavior across different assignments irrespective of the focus of a class. Instructors of technical communication service courses, for example, could have students use expectations mapping when drafting technical reports for a non-specialist audience (see, for example, Chong, 2018). Likewise, instructors of more advanced classes in media and communication could have students use expectations mapping to identify user expectations when developing apps, infographics, or other kinds of content. This adaptability also allows for the use of a relatively standardized approach for considering audience behavior across a curriculum. Such standardization can help the students in a program better understand and apply a consistent approach to addressing audience across the classes they take in a program.

Additionally, instructors do not need any specialized expertise to teach this expectations mapping process. In fact, the overall process is relatively easy to learn—as well as relatively easy to impart to others. These factors make the teaching and application of expectations mapping something individuals can effectively integrate into different courses and across an overall curriculum regardless of the instructor's background in an area. This factor can help create consistency in situations where programs regularly hire instructors just before the

start of given term (see, for example, Bartolotta, Bourelle, & Newmark, 2017; Melonçon, 2018; Schreiber, Carrion, & Lauer, 2018). This ease of application, moreover, can help students understand and apply basic aspects of cognition and usability to different topics and processes based on the related class (e.g., visual communication, web design, technical writing, technical editing etc.).

This ease of application helps create greater consistency across a program in terms of how students approach a topic/project (i.e., through a mapping process). Expectations mapping also provides a consistent framework students can use to assess their work (i.e., how well do assignments map onto the expectations of intended users). Additionally, the ability to apply expectations mapping to different contexts provides students with a methodology they can use to address other kinds of writing projects throughout their careers.

From an assessment perspective, expectations mapping creates a common foundation for evaluating student work in terms of meeting common criteria regardless of the project. This factor could also permit more flexibility in the kinds of projects students need to submit for a class by providing a common approach to grading different products created to achieve a common objective. Such flexibility within classes could allow students from different majors to create projects that best suit their learning styles and backgrounds while also meeting common standards for evaluating work. Situations like these could make individual classes, and the related program, more appealing to a wider range of students (including students from different majors) and increase enrollments in classes and overall programs. Such a perspective also connects to prior discussions of usability-related approaches to assessment (e.g., Salvo & Ren, 2007; Grice et al, 2013; Kowalewski & Williamson, 2016).

Conclusion

Technical communication materials—including manuals, infographics, and websites—enable users to achieve objectives. An understanding of an audience's usability expectations is thus essential to creating technical content the audience can use effectively. The better students understand such dynamics, the more successful they will be at technical communication activities in and beyond the classroom. The expectations mapping approach helps students comprehend and address such factors. Moreover, instructors and program administrators can easily integrate this mapping approach into individual classes and across an overall curriculum. Additionally, the ease of teaching experience mapping allows for a standardized approach to examining topics within a program. It also provides the flexibility needed for students from different majors to examine ideas while permitting instructors from different backgrounds to teach audience in a more uniform way. For these reasons, the administrators of technical communication programs can benefit from integrating expectations mapping into their curriculum and across their programs.

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Defining Social Justice According to Undergraduate Students

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Abstract: "Social justice" has been well-defined in TPC literature, but this definition may be in competition with other popular media influences. This study examines six definitions of social justice and shows that students perceived small, feasible actions and the importance of context in social justice after a semester of class readings and activities.

Keywords: definitions, electives, pedagogy, social justice, undergraduates

Introduction

When teaching a social justice TPC elective course, I was curious about how students perceived the term "social justice" and their own "positionality" in society (Walton, Moore & Jones 2019). I first wanted to know what they thought of the term "social justice" in the first two class periods. I then wanted to see how these definitions might change over the course of 15 weeks of TPC coursework aiming to teach both about social justice and how to enact social justice. Findings indicate that for most students, changes in their definitions were not radical, but incremental and nuanced. A second key finding is that students from all disciplines, not just TPC, could benefit from social justice-themed classes.

Social Justice in TPC Literature

Social justice has risen as a central theme in Technical Communication literature. Recently, the Association of Teachers of Technical Writing (ATTW) (2022) used this theme, and IEEE Transactions on Professional Communication (IEEE) published a special issue on social justice (March 2022), and Programmatic Perspectives (Spring 2021) addressed crises of 2020 including Covid-19 and systemic racism. Natasha N. Jones and Rebecca Walton (2018) provide a definition of social justice research as looking at how communication can "amplify the agency of oppressed people—those who are materially, socially, politically and/or economically under-resourced" (242). Communication can be a tool of agency.

TPC definitions of social justice may compete for attention with other media coverage of social justice. Sometimes, the media can amplify and support these definitions. For example, movements like #BlackLivesMatter (referenced by

Kimberly Harper, 2021) or #MeToo are visible, and students may find these helpful for identifying systematic oppression.

Media also challenges TPC definitions of social justice. On June 12, 2022, in an interview with CBS Sunday Morning News, Ibram X. Kendi comments on how his book *How to Be an Antiracist* has been used as negative fuel by some politicians. Some claim social justice or antiracism is over-dramatized. Others may feel threatened. In the last few years, some vocal members of majority groups have been claiming that they, too, are oppressed and under-resourced and that a specific social justice focus impinges on their civil rights.

Positionality as a Theory and Definition

Exploring positionality can draw students' attention to themselves, and then they can look to patterns in the larger society that can help them in turn understand the complexities of social justice. Walton, Moore, and Jones (2019) explain how aspects of social identity like gender, race, education, and culture can influence the opportunities available. Their discussion reads in part that "a person's position within the multidimensional social structure governs the opportunities, resources and capital available to them" (Walton, Moore & Jones, 2019, p. 66). Some resources and capital are more accessible to particular groups. Students' positionality highlights larger social issues of injustice and oppression.

Teaching Social Justice

TPC instructors have used games to teach students about inequity, like the gerrymandering game described by Fernando Sanchez, Isidore Dorpenyo, and Jennifer Sano-Franchini (2021). Still others engaged students in service learning to teach about social justice, like Nora K. Rivera and Laura Gonzales (2021), who adopt a "critical" service-learning component to their courses in order to take action.

Historicizing social justice is key part of creating activities that can help students understand these issues. Jones and Walton (2018) provide a detailed classroom heuristic for these concepts (pp. 260-261). Further, Haas and Eble (2018) identify that "inequitable rules and conditions informed by ideological assumptions" have always shaped the movement of people, resources and information (p. 4): society has been making value-laden, unequal judgments about the distribution of resources for a long time. Students discussed selections from these texts to understand social justice.

Kendi's *How to Be an Antiracist* also helped students understand social justice. The professor-activist defines equity: "Racial equity is when two or more racial groups are standing on relatively equal footing" (p.18). He gives the example of racial inequity: a 30% racial gap in home ownership nationally between White and Black and Latinx families (Kendi, 2019, p. 18). These tangible examples helped students understand the impacts of inequity.

Six Students' Evolving Definitions of Social Justice at a Small State School

I collected six students' texts and interviewed five of the students in my Social Justice TPC elective at our small, Hispanic-Serving Institution. My central research question was "How do students define social justice after a semester of a social justice class?"

My Social Justice Technical and Professional Communication (TPC) elective contained four units. First, I had students reflect on their positionality (Walton, Moore & Jones, 2019). The second unit I based on Harper's (2021) social media assignment. Students practiced critical analyses of websites and social media. The third unit was service learning where we: read/gave social-justice themed books to kids grades K-3, packed supply backpacks for Afghan refugees, taught thank-you note writing, wrote a grant for a university food pantry, which was funded, and started a website for the local community kitchen, which was used. In the fourth unit, I asked students to reflect on the course in a final definition of social justice.

I collected student definitions of social justice from August of 2021 and December 2021. This study was approved by New Mexico Tech's Institutional Review Board, but with the condition that I did not use student grades or my comments on classwork. My 30-minute interview protocol was in part text-based, and I mined student assignments before the interview to identify points of change or reflection to clarify. I transcribed and synthesized their responses to the interviews, and triangulated this data with their textual data from assignments.

Participants chose their own pseudonyms. Two White males, Ryan and Bart, participated in this study. Also, four Latina females (Cara, Jennifer, Rene and Mary) participated in this study, comprising 75% of the Social Justice class. This was a small class, but reflective of our small state university (less than 2,000 students). Demographics did reflect our university is a Hispanic-Serving Institution, but more women than men enrolled in the class, which was unusual for our male-majority campus but typical for our TPC program. Participants ranged in year from sophomores to seniors, and the majority were majors in technical communication.

Nuanced, Subtle Change in Social Justice Definitions

Four students from this study claimed little or no change in their definitions of social justice over the course of the semester. All students had some exposure to the concept before the class; Jennifer commented that she had "social justice leanings." Cara commented: "I can tell I was looking back at the stuff you pulled from my journals and it seems like a lot of it is shaped by my internship last summer." For these students, changes in their definitions of social justice were subtle.

One student, Jennifer, added action to her definition. In August, she defined social justice as "Giving minorities a platform to speak about their oppression." In her

final reflection, Jennifer adds to this: "I also think social justice can mean just bettering your community even in small ways." She stated at the beginning of her reflection that pivotal points in the class that influenced her definition were the hands-on service activities to engage with change at our local community level.

Another student highlighted the importance of context in enacting social justice. Mary wrote in August that social justice was "letting those of oppressed groups have a space where they can share their experiences and offer steps others can take to challenge the status quo." Her revised definition in December added action and contextual components in terms of tactics and strategies, and she notes, "Not all tactics and or strategies are going to work the same everywhere." Mary was focused on localized actions.

Gradual Student Change Over the Course

Bart demonstrated some gradual change in his definition of social justice. Bart initially commented on his being one of few males in the class: "And so I just wanted to make sure to not overstep, I guess, or just be very aware of this situation and not say something out of pocket." Bart was unused to being in the minority in a class. However, Bart became much more comfortable in class discussion over the course of the semester. Bart commented in his final reflection, "I've learned that social justice is about using your abilities in combination with the capabilities of a community to find solutions to issues they are experiencing." He emphasized both his role and the contextual needs of the community in addressing social justice issues.

Substantial Student Change in a Social Justice Definition

Ryan revealed dramatic change in his definition of social justice. He commented that he did not have much experience with diversity: "So just seeing other cultures, and people, sometimes is a bit of a shock to me." He mentioned in our interview "I always thought, you always hear the term "social justice warrior". And that was always my impression. I'm like, "Oh, it's the class of caring." He further discussed the meme with three people of different heights seeing over a fence into a baseball game. He mentioned that he initially worried about how "unfair" this was because in his words, "the tall guy works to get tall, and because the shorter guy didn't work for it, he was given everything he needed to get tall in the end." Ryan expressed in class and in his reading responses that he was worried about the redistribution of resources.

Ryan's final reflection articulates in one compact sentence the change in his perspective: "Ultimately, I believe that social justice is the action of doing what you can to help bring about a just distribution in wealth, opportunities and privileges." This "just distribution of wealth, opportunities and privileges" in Ryan's definition closely mirrors that of Haas and Eble (2018), Jones and Walton (2018) and Kendi (2019) and the emphasis on distributing goods and resources. Ryan internalized the concept of "doing what you can" to give everyone equity in terms of opportunities and was no longer worried about this equity taking away from him.

Ryan's change in perspective influenced his actions in the spring semester. He petitioned the Chemistry department to change their testing proctoring to be more equitable for all students, and he was interested in protecting student security. Ryan found a way to use his expertise as a Computer Science student to benefit other students and enact social justice.

Growing the Impact of a Social Justice Class

One semester of a social justice class is like one semester of writing: it is a start toward greater change. Jennifer Bay (2022) summarizes the hope for teaching social justice in the TPC classroom: "Moreover, just as we know about the teaching of writing, educating students to dismantle institutional and systemic injustices against marginalized individuals will not happen in one semester" (p. 218). Most of the changes experienced by students were subtle and nuanced.

There is the possibility to grow the impact of my elective course by addressing all students, not just TPC majors. Cara commented that she wished the class would be offered more often. When I asked her why, she replied, "I think it's [social justice] an important thing to touch on that is relevant to any degree because you're probably going to come across social justice issues in, I'd say in pretty much any field. So it's really relevant." The next time I offer this course, I will widely advertise this to all advisors and faculty for their students across the disciplines.

Limitations to this study are that it focused on one institution and 8 students. Future work could compare how social justice is taught in different states, drawing from qualitative research to provide rich description on how institutional and state context impact the teaching of social justice.

I believe that this course and others like it have the potential for lasting impact, even in subtle changes in student behavior. Just as social justice is not always flashy with people carrying signs, it is through local tactics and strategies (Peterson, 2018) and most importantly hands-on actions for change, that we can best prepare our students to enter this complex professional environment as conscious citizens.

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The Editing for Justice Program: Piloting a Community-Based Learning Social Justice Project in Technical and Professional Communication

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Abstract: This FOCUS piece highlights the Editing for Justice (E4J) program, a collaboration between Authors Inside and Cal Poly, SLO's Technical and Professional Communication (TPC) Certificate and English Department that implements Clem and Cheek's (2022) inclusive editing paradigm (IEP) to educate students about recidivism while cultivating their professional communication skills. It concludes with recommendations for TPC programs interested in adapting similar projects into their curriculum on nonprofit or civic writing, editing, and publishing.

Keywords: academic-industry collaboration, client-based projects, community-based learning, editing, social justice

Introduction

Editing for Justice (E4J) is a community-university partnership between Authors Inside, a 501(c)(3) nonprofit that works with currently and previously incarcerated writers, and faculty/students in California Polytechnic State University, San Luis Obispo's (Cal Poly) Technical and Professional Communication (TPC) Certificate and English Department. E4J is a curricular innovation which enacts Sam Clem and Ryan Cheek's (2022) inclusive editing paradigm (IEP). It also teaches students about recidivism and helps them gain valuable professional communication skills applicable to the editing industry. This article describes the E4J project case and offers adaptations for other TPC programs.

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Exigency

Since the mid-2000s, TPC has attempted to integrate social justice into its mission, programs, and curriculum (Jones, Moore, & Walton, 2016). The inclusive editing paradigm (IEP) introduced by Clem and Cheek (2022) challenges neoliberal approaches to editing that uphold standard language ideology. Cheek (2020) classified neoliberalism as "a socio-political-economic philosophy that subordinates the institutions of government to market forces" (p. 8). Drawing on this conception of neoliberalism, Clem and Cheek (2022) describe neoliberal pedagogy as "the cooptation of the public good that we call education by corporate philosophy and interests" (p. 145). In contrast to neoliberal pedagogy, IEP holds that "any editing practice should be localized and contextualized to the intersections of positionality, privilege, and power that might exist in the editing situation" (p. 141). The method involves teaching students about the ways that American Standard English (ASE) maintains structural racism and oppression, while training editors to "care for a text rather than police it" (p. 142). The E4J project allowed our team to put IEP into practice in a community-engaged capacity. The project also responded to the following:

- Need to address high recidivism rates in the state of California, with about 50% of released individuals returning to prison within two years ("Recidivism of Felony Offenders in California")
- Efficacy of prison writing and publishing programs such as Authors Inside in raising social awareness about the lived experiences of incarcerated people (Toso, 2016), promoting healing (Gu, 2018), and decreasing recidivism (Kashubu & Masterson, 2022)
- Community partners' need for additional editors to help relieve their publishing bottleneck. Given the organization's inclusion in PEN America's guidebook, *The Sentences That Create Us: Crafting a Writer's Life In Prison*, the organization receives countless manuscripts from across the United States
- Potential for storytelling and creative expression to serve as powerful tools for rehabilitation and personal growth among incarcerated individuals, yet lacking systematic integration into correctional education programs (Kashuba & Masterson, 2022)
- TPC and the English major students' interest in careers in editing and publishing

Organizational Contexts

Authors Inside is largely run by formerly incarcerated writers, or "peers." Through their first-hand understanding of the challenges faced by individuals in the criminal justice system, peers provide writing resources, mentor writers, and deliver workshops on topics ranging from trauma-informed writing to anger reduction. This programming aims to reduce and prevent juvenile crime, foster safe communities, and enhance the welfare of youth and families. Incarceration often poses profound isolation upon individuals, leading to disconnection and further

marginalization. Written communication offers incarcerated individuals a powerful means of connection and expression. Moreover, books authored by incarcerated and formerly incarcerated individuals offer invaluable insights crucial for parole board hearings, and facilitate successful reentry into society. By expanding employment opportunities, aiding in resume building, and participating in speaking engagements, these initiatives aim to empower individuals and contribute to reducing recidivism rates, fostering a cycle of positive change and self-renewal within the community.

For this project, Authors Inside partnered with Cal Poly. We received a grant that enabled us to pay three student project managers (all English majors, two with a focus in TPC), pay a consultation fee to Authors Inside, and pay two faculty PIs (both in the English Department, one an assistant professor and director of TPC and the other an assistant professor specializing in Indigenous literatures, decolonial praxis, and editing and publishing). We also used the grant to purchase books previously published by Authors Inside, which we integrated into our training program. Finally, the grant allowed us to cover refreshments and guest parking for training sessions. In addition to the paid project management students, two unpaid students (both English majors, one in TPC) participated in the project as editors. The pair earned course credit using ENGL 400: Special Problems for Advanced Undergraduates. For the TPC student, ENGL 400 counted toward their required TPC practicum. For the other student, the editing project counted as their major senior project.

Method

During the 2023-2024 academic year, our team completed the following project stages:

1. Establish a working relationship between the nonprofit, faculty PIs, and students.
2. Develop and run editor training sessions.
3. Edit two manuscripts.
4. Create technical documentation and a style guide to ensure program sustainability.

Part 1: Establishing a Working Relationship between the Nonprofit, Faculty PIs, and Students

Project management practices helped establish the working relationship necessary to facilitate project goals and provide student project managers with hands-on experience. Our team initially chose Notion, a multi-faceted organizational software, as a means of coordinating team efforts and documenting project progress. However, due to the inconsistent use of Notion by most team members, we later diffused our work across different platforms to accommodate team members and expedite work.

Authors Inside provided a Nondisclosure Agreement (NDA) to the faculty members and students who participated in the Editing for Justice project. The NDA outlined the sensitive and confidential nature of the work and advised team members to protect potential inmate names, addresses, manuscripts, and other personal written materials.

Further, we used a Memorandum of Understanding (MOU), a harm reduction protocol and social contract for negotiating asymmetrical power relationships. As community-university collaborators, we are aware of the extractive relationship that universities often enact under the guise of research when working with community-based organizations. The MOU enabled those with less power (students and community members) to express their needs throughout the project. Our MOU established responsibilities for equitably distributing labor. Each party was responsible for 1) interrupting behavior or practices that replicate structural inequity for collective redress, and 2) communicating with transparency so that all decisions are consensus-based. The MOU also listed organizational responsibilities determined according to our levels of compensation, institutional power, and professional qualifications. Finally, it included a commitment to envision ways to shape the project for everyone's mutual benefit.

Part 2: Develop and Run Editor Training Sessions

Workshop 1

The first workshop established project goals and team members' working relationships. Authors Inside introduced the nonprofit's history and vision, reviewed past publications and approaches to publishing, and discussed the necessity of an NDA. Then, we discussed editor responsibilities, organizational logistics, and the MOU. We ended the workshop by reviewing the resources required to ensure ethical approaches to a project that centers on vulnerable imprisoned populations, as well as instructions for "flagging" triggering or problematic passages for discussion.

Workshop 2

The second workshop invited reflection about our personal experiences with community interactions and the lessons that can be drawn from those experiences for the project. We also reviewed our respective responsibilities according to the MOU. Then, students considered the ways in which we might be sensitive to the transformative power of storytelling for both author and reader as they embarked on the process of editing manuscripts by vulnerable people. We elaborated upon this question with a brief presentation of writing center pedagogies, led by a student tutor and project assistant. In this presentation, the student introduced conversation-focused writing instruction for equitable relationship building, as this technique does not assume academic authority over the text. We ended this workshop with a discussion of "flagged" content in the manuscripts and considerations for problem-solving around such content.

Workshop 3

The third workshop necessitated a review of the responsibilities of upholding the NDA and the consequences of not doing so. At this point in the process, editors had made significant progress on formatting manuscripts and had specific questions for the nonprofit about the degrees of editing required for each manuscript. Our nonprofit partner shared their Editing Criteria with the editors to guide our norming session in real-time, as well as the upcoming independent editing work conducted over the upcoming term. We established a distribution of labor among the editors and research assistants and made plans for sharing our project results in a formally written article manuscript.

Part 3: Edit Two Manuscripts

Here, we describe the student editors' process of manuscript editing, including reviewing the original manuscripts and cross-referencing to make sure that the new manuscripts matched the originals.

Editors first formatted the manuscripts, converting text to paragraph style and correcting errors that occurred during the transcription process, such as all-caps text and missed punctuation. Occasionally, the transcribing software would miss a few letters in a word, so editors double-checked spelling against the original, handwritten manuscript. Then, editors carefully read each line, addressing punctuation and grammar for clarity. At times, editors had to work to glean potentially intended meanings, either due to aspects of the authors' handwriting or phrases and spellings with which editors were unfamiliar. Editors used Microsoft Word's track changes and comment features to record edits and call attention to any points of confusion. Throughout the editing process, editors were to remain conscious of our goal: to clarify the text and improve its readability without altering the author's voice or treading on their creative ground. Students also conferred with each other, reviewing each other's assigned sections to make sure edits were consistent.

Part 4: Create Technical Documentation and a Style Guide to Ensure Program Sustainability

Students created an in-house style guide to codify the organization's manuscript reviewing standards. Unlike style guides that maintain strict adherence to ASE, our approach was to preserve the author's voice and tone. Because the stories we encountered aim to promote healing within the incarcerated authors and their audience, removing their personal voices would also remove authenticity. This applies to the project's overall goal of combining social justice with TPC: editors prioritized clarity and voice so the narratives could better communicate the messages of incarcerated authors and resonate with readers.

Students also created project documentation to establish norms and guide future project participants. One student created a project management handbook designed to educate and advise future student project managers on different processes

associated with their role in the collaborative space. This handbook was created with a social awareness component meant to raise awareness of the varying power dynamics at work in the partnership.

Finally, the MOU was a form of technical documentation that embedded the team's social justice values, established ethical relationship building, and set boundaries around equitable labor distribution.

Benefits

This project provided multiple benefits to the community partners, students, and academic programs. The community partner benefited from outsourcing the manuscripts to students for editing assistance. Furthermore, outcomes for the community partner included a style guide and project handbook to aid in sustainable program growth. Student editors enhanced their editing skills, technical documentation skills, client communication skills, and social justice awareness. Being exposed to the stories of incarcerated writers helped deepen students' understanding of recidivism and prison abolition. In addition to exposure to diverse voices, students found the process of working with these manuscripts (transcribing and formatting them) to be a unique challenge that not many TPC or English students get to experience. Working with the manuscripts' raw, unpolished texts gave students the benefit of interacting with genuine literary voices of marginalized community members.

This project benefited our TPC program and can benefit other institutions' TPC programs because it exposed students to community-driven, social justice-oriented technical editing and writing, and provided a tangible enactment of the IEP. While TPC sometimes struggles to reconcile social justice-oriented approaches with its pragmatic, economic roots, E4J provides a contact zone between disparate groups who can collaborate to work on community challenges.

Challenges and Recommendations

In addition to program successes, we faced several challenges. The manuscripts selected for the E4J project were randomly picked from participants' submissions without regard to housing location. However, it became apparent early in the editing process that, had we connected with incarcerated writers from California Men's Colony in San Luis Obispo, California, Authors Inside's E4J program would have facilitated a more seamless collaboration, fostering easier communication between local authors and editors. Thus, we recommend that future E4J programs use materials from writers incarcerated near the university editing site.

The project primarily involved editing the authors' initial drafts, a critical stage for evaluating the project's suitability and alignment with the organization's mission. This phase involved meticulous typing and reading through the text to identify areas of improvement and assess the project's potential for advancement, while subsequent editing rounds primarily focused on proofreading and applying author revisions. Future projects might provide students with a style guide earlier in

the process, as we developed the style guide after students had already begun initial editing. Further, we recommend that other programs provide more hands-on demonstrations of how to edit material without changing authors' voices. Such instruction would attend to the organization's mission to prepare individuals for potential release on parole by challenging word choices while being true to trauma and the impact it has on individuals and the community.

Another key challenge of this project was managing cross-functional communication, or the exchange of information between Authors Inside staff, faculty, students, and the authors whose manuscripts we edited. Our team used various approaches to project management, with some team members preferring a more structured and defined organizational style and others preferring a more fluid organizational style. For instance, our team struggled to identify suitable meeting times. Creating an optimal meeting strategy and schedule to accommodate the needs of students, faculty, and project partners may improve knowledge gaps. Finally, regular correspondence between the nonprofit program manager and students is needed to ensure that student editors understand how to balance authorial voice and readability.

Conclusion

The E4J program offers one model for a community-university curricular innovation, ideally suited to TPC programs and English departments, that amplifies incarcerated authors' voices, enacts the IEP, and teaches students about recidivism, all in the context of TPC. We are optimistic that other programs will find inspiration for collaborations that build connections between various aspects of English Studies, redirect resources to marginalized communities, and reimagine community editing and publishing.

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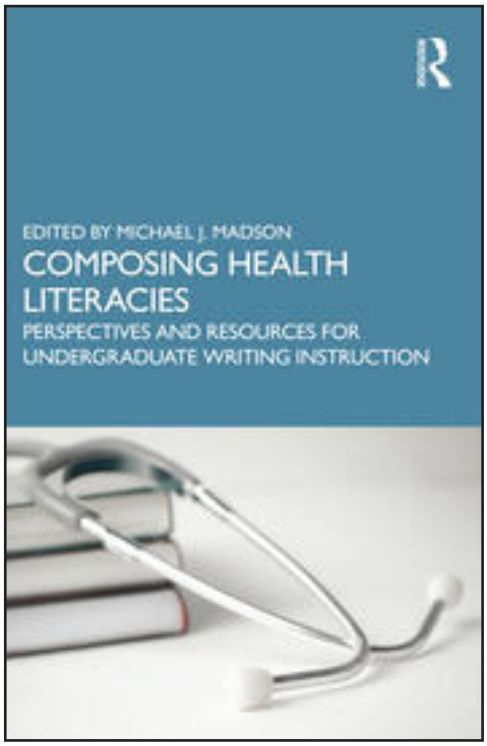

Composing Health Literacies: Perspectives and Resources for Undergraduate Writing instruction

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Editor Michael Madson once again compiles an excellent collection of scholars who speak to theoretical and pragmatic ways of teaching students about health literacies and writing practices. Similar to his previous collection Teaching Writing in the Health Professions: Perspectives, Problems, and Practices (Fall 2022 Programmatic Perspectives), this volume also answers the call for more scholarship on writing in the health professions by explicitly connecting health literacy with undergraduate writing instruction. In his introduction, Madson frames this book as an answer to the global health literacy crisis—a crisis of adults lacking basic knowledge about their health that leads to poor decision-making, possibly leading to hospitalization, rehospitalization, or premature death (p. 1). This well-defined exigency leads Madson to compile a book that views undergraduate writing instruction as a solution to the health literacy crisis.

What follows in the book are three majors sections that examine different aspects of health literacy in undergraduate writing education. Part one explores assignments and courses. Part two examines programmatic profiles that include significant health literacy writing instruction, and three provides theories and field studies that inform classroom instruction.

The primary audience of this book are instructors teaching undergraduate students pursuing health-related professions, and instructors teaching undergraduate students seeking careers outside of the healthcare industry; critical thought about health literacy is needed regardless of one's major or career.

Part One: Assignments and Courses

The largest section of the book is dedicated to giving readers details about writing assignments and exams that can be implemented in undergraduate writing courses. In the chapter "Engaging Health Literacies Through Multimodal Projects in First-Year Writing," Karen Diane Groller provides descriptions of three major assignments in her first-year writing course that is on the topic of health literacy. Her positions as associate professor of nursing and public health and the director of first-year writing uniquely situates her to combine the fields of health literacy and composition. Through the framework of Anne Beaufort's five knowledge domains, she has her students analyze health literacy memes, compose a research paper on health literacy, and create a public service announcement with either a visual infographic or podcast.

While Groller presents three different assignments, the next chapter by Kasey Larson et al. provides analysis and rationale for an argumentative essay assignment that proposes a solution to a health literacy problem. This writing assignment is composed of several different sections: evaluating the health literacy problem through a survey of literature to determine the issues and significance of the problem; identifying a proposed original solution with an actionable component; and justifying the proposed solution with clear reasoning that also addresses potential opposition to their solution (p. 36-37).

The next two chapters focus on teaching students about a single concept within health literacy writing instruction. Allison Walker's chapter explores empathy and Jarron Slater's chapter examines rhetorical aesthetics. In Walker's chapter, she presents four assignments that she calls "empathy adventures" (p. 59) that gets students in the undergraduate writing classroom to think and experience empathy. In Slater's chapter, he explains three different exams he uses in a writing class that emphasizes health literacies where the exams specifically focus on teaching rhetorical aesthetics which he defines as the ability to listen and understand the experiences of oneself and others — a concept easily linked to Walker's definition of empathy.

The last chapter is Michael Klein's "Cross-Disciplinary Vaccine Education through Campus-Community Partnerships" where he explains his personal experience teaching the upper-division course Writing in the Health Sciences. The chapter

includes how Klein invited his students to wrestle with vaccine debates by partnering with local clients and agencies in the state of Virginia to create better health literacy education materials.

Parts Two and Three: Programs and Extensions

Part Two consists of three chapters: a chapter about a mixed methods approach to understanding faculty members' perceptions of students' writing in the Health and Science Department of one university, a chapter about a case study of the reflective writing curriculum in a Bachelor of Science (BS) in Health Sciences program, and a chapter explaining a curriculum overview of a BS in Healthcare Studies. The first chapter of this section is by Lucy Bryan Malenke and is titled "Context Matters: Identifying Strategic Opportunities to Support Health Literacies Through Writing Interventions." In this mixed methods study, the author invites Health and Science faculty to give their opinion on the state of writing in their particular program through the method of a survey with an additional follow-up interview that comprised of questions related to the quality of students' writing abilities, writing assignments, writing resources, and perceptions of the campus' Writing Center. While participating faculty agreed that writing is important, the faculty also expressed dissatisfaction or ambivalence about their students' writing abilities, not confident that the students are adequately prepared for their graduate work or future careers.

The next two chapters in Part Two are more focused on curriculum development. Yuko Taniguchi et al. use reflective writing assignments across four years of a BS in Health Studies program to empower students to think about their experiences and turn them into learning. Madson et al. also discuss curriculum by explaining in detail their curriculum for the BS in Healthcare Studies at the Medical University of South Carolina. This chapter covers the programmatic outcomes of this program and lists several of this program's courses along with descriptions for Academic and Scientific Writing, Overview of the US Health Care System, Evaluation of Health Promotion, Rural Public Health, etc.

Part Three also consists of three chapters. In the chapter "Cultural Health Navigation and Health Literacy: Implications for the Undergraduate Writing Curriculum," Katherine Morelli discusses the pedagogical implications of her research project studying a group of multilingual and multicultural health navigators who work at a refugee pediatric clinic. Based on field research, she concludes that several factors must be embedded in undergraduate writing courses including navigating differences of language and culture; understanding the rhetorical knowledge of different workspaces; adapting to new technologies and forms of communication; and engaging in service-learning projects. Like Morelli, authors Charles Woods and Noah Wason draw conclusions based on an event—in their case, the Apple Watch Series and its connection to tracking personal health. The scholars put forward the proposition that undergraduate writing students need to understand and grapple with the ethics of data tracking devices such as those implemented in the Apple Watch Series. The last chapter of the book is by Kirk St. Amant, "Creating Content for Contexts of Care: A Cognitive Approach to Achieving Health Literacies Through Usability." He argues that prototype theory

("how individuals recognize locations, persons, and items") is a helpful lens for the usability testing of healthcare materials (p. 207).

Overall, this edited work by Madson provides an invaluable resource for both TPC program directors and TPC instructors who are looking for new and innovative ways to incorporate health literacies into writing instruction and curriculum. Whether readers are looking for specific assignments for first-year writing, assignments for upper-level health literacy classes, or examples of curriculum descriptions and outcomes related to health literacy in writing instruction, this book is a wonderful reference for scholars and instructors who are both new and seasoned in the field of writing in the health professions—an excellent addition to the field of technical and professional communication.

Author Information

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