

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 evolution 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 eclecticism 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 of 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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