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"I THINK THERE IS A PLACE FOR SMALL PROGRAMS:" ADVOCATING, IMPLEMENTING, AND SUSTAINING TPC PROGRAMS IN SMALL US INSTITUTIONS

by

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Requirements for the Degree of

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ABSTRACT

"I THINK THERE IS A PLACE FOR SMALL PROGRAMS:" ADVOCATING, IMPLEMENTING, AND SUSTAINING TPC PROGRAMS IN SMALL US INSTITUTIONS

Martha Lynn Russell
Old Dominion University, 2023
Director: Dr. Daniel Richards

Technical and Professional Communication (TPC) programs in small institutions compose of over a third of all programs in the US, yet this space has been understudied by most scholars. To fill this gap, this dissertation presents findings from one-hour interviews with twenty-six TPC program directors in small US institutions with undergraduate populations of less than six thousand. The results of this dissertation include the ways that small institutions are advocating, implementing, and sustaining their TPC program in unique ways with implications for how any TPC programs regardless of size can learn from these findings.

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This dissertation is dedicated to the all the faculty working at small institutions whose work matters, even if their labor goes mostly unseen.

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It would be a lie to say that this dissertation exists solely on my own self-determination. Without the sacrifice, time, and love of so many people, this dissertation would not exist, so I want to acknowledge several people who were integral to the creation of this dissertation:

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CHAPTER I

INTRODUCTION

My academic story is not conventional. I am 29 years old running a Writing Center and Writing Across the Curriculum program, writing and assessing my college's online first year composition (FYC) courses, and teaching two or three courses each semester. My official title is Assistant Professor of English and Writing Program Administrator, yet I only have a master's degree in English Literature. After graduating with my master's degree, I got a full-time position where I now teach anything related to rhetoric and composition (including technical writing) since the three other English faculty members at my small institution have degrees in literature. Most days, I sway back and forth between being grateful for my incredible positionality and being completely insecure about the decisions that I make, fearing that I do not have enough experience and degrees to support those decisions.

But somehow between these joys and insecurities, I discovered a love for technical communication. During my days getting a master's degree at the University of South Florida, I was the research assistant to the director of composition where I met people who encouraged me to pursue technical writing as a subset of composition studies. So, during my days taking doctoral courses at Old Dominion University, I took classes in technical communication pedagogies and theories. It was the combination of both of these experiences that led me to the field of technical communication that offered me a way to help students write practically and ethically. The field of technical and professional communication (TPC) fulfilled my desire to aid students in transitioning to the workplace and to teach a discipline with a strong allegiance to ethics and justice – in short, it is meaningful work that I want to do the rest of my life.

Unfortunately, my local teaching institution (at the time of my hire) had no opportunities to teach technical communication, either as a course in the English Department or as a service course to another department. Instead, I spent my time running the Writing Center and teaching courses in the English Department. In the fall of 2019, my institution changed from being a liberal arts college with a large general education curriculum to a comprehensive college with a small general education curriculum. These changes catalyzed administration to approach me in creating a Writing Across the Curriculum (WAC) program since the course Expository Writing had been ousted from the general education curriculum. So, in the fall of 2020 amidst a pandemic, I launched our college's Writing Across the Curriculum program; and much to my surprise, the program was a success.

Faculty were eager to serve on the WAC committee, participate in WAC workshops led by faculty members in various fields, and engage in a monthly WAC book club. Writing in the Discipline courses and rubrics were implemented with so much affirmation and support from all disciplines (at least they did not complain to my face). Two notable relationships were created during this time: engineering and biology. I had chosen department chairs from both of these disciplines to serve on the WAC committee which started informal conversations about technical writing and its importance. Since I work at a small institution, much of the interdisciplinary collaborations happen in the hallways and cafeteria meals where curriculum decisions are made. It was through these collaborations that I am able to co-teach a physics lab where I teach technical writing and grade lab reports with an engineering professor. In addition, the biology department decided to change their undergraduate four-year plans to include a three-credit course titled "Introduction to Professional and Technical Writing" exclusively taught by me and required by all Biology majors.

I could not believe it. Through WAC, I was able to co-teach technical writing with the engineering department and teach my own course in the biology department. In the spring of 2022, I taught Introduction to Professional and Technical Writing for the first time with only four students enrolled (students who just wanted to take the class for fun since the new course catalog had not come out yet with the new requirements for the Biology major). I was ecstatic. A course that I had been wanting to teach for a while was finally coming into existence and I could apply the theories and pedagogies that I had learned in my doctoral courses.

While preparing for the three-credit course, I wanted to know the current scholarship on TPC (technical and professional communication) in small colleges. Much to my dismay, my initial search led me to scholarship that seemed to only grapple with exigencies concerning larger TPC departments and curriculum. For example, Williams and Ilysasova (2021) discuss their experience of separating their TPC program from the English Department, and Farris and Wilson (2022) present their findings from an analysis of 60 graduate syllabi and identify how the field is defining the foundations of technical communication. Neither of these works were helpful in thinking through my local context and lack of resources. Since I am the only TPC faculty member in my local context, I wondered if I could even start a TPC program at my institution with the lack of resources and technology of larger schools. I was not even sure if a TPC minor was possible. Were large institutions the only places where a TPC program could thrive?

One source that has been helped me think through this programmatic question is Johnson et al.'s (2017) *Lean Technical Communication* where the authors state that their book "springs from our belief that programs can innovate sustainability – even under seemingly dire circumstances – and that now is the right time to do that work" (p. xx). Through their steps and suggestions for program creation and sustainability, the authors continue to repeat their belief

that there is no perfect moment to start a TPC program; in fact, faculty who wait around for the right technology, support, funding, faculty, etc. might not ever create a TPC program. This belief gave me hope that a TPC program was eventually possible at my small institution even if the program starts with service courses in other disciplines. This realization made me curious as to how other small institutions have integrated and implemented TPC programs and curriculum into their courses.

Research Questions

These musings concerning my own intuitional context have led me to my dissertation's research questions: Do TPC programs exist in small four-year US institutions?[1] If so, how do TPC program directors and faculty at small US institutions advocate, implement, and sustain their TPC programs? It does seem through a cursory scan of scholarship that small and large institutions operate differently even though they can provide similar undergraduate degrees and affirm similar ideologies. For instance, all institutions might value interdisciplinarity, but a larger institution might have to formally initiate interdisciplinarity through official meetings and documents, while a smaller institution might create these relationships informally through hallway and cafeteria conversations that occurred serendipitously (Pitts, 2010). Obviously, large institutions may have the advantages of more TPC faculty and a bigger student population; but does this mean that TPC cannot thrive in small institutions? With a quick look at most small colleges' websites, many of them have had literature and/or creative writing majors for decades (and sometimes centuries), but is TPC different enough from these majors that it has more exigencies that prevent its existence in small institutions? To steal a phrase from Johnson et al.'s book, is there such a thing as too lean TPC? These questions have led me to this dissertation

[1] For the purposes of this dissertation, I define "small" as 6000 undergraduates or less. This rationale is explained later.

project where I study the identity of TPC programs and curriculum in small institutional contexts, examining if it exists and (if it does exist) how TPC is advocated, implemented, and sustained.

Framework of Identity and Sustainability

To answer my research questions, my dissertation positions itself using a framework of identity and sustainability to conduct this work. Identity is something every field, not just TPC, has had to grapple with in order to be a discipline. Identity controls the boundaries of the field: what gets included and what is excluded. If a discipline's boundaries are too narrow, it can create unnecessary silos of information that can prevent the field from contributing something meaningful; if a discipline's boundaries are too broad, it risks trying to specialize in too much – to specialize in everything is to specialize in nothing.

One of the most recognizable essays about TPC and identity is Carolyn Miller's (1979) "A Humanistic Rationale for Technical Writing." In 2020, Miller revisited this essay and provided a statement on what she was trying to accomplish in writing this work: "It was an effort to figure out how I was going to fit in" (p. 443). In 1979, Miller was questioning her own scholarly identity and discipline's identity, asking questions about the boundaries between writing, rhetoric, and workplaces. She wanted to fit in somewhere; she wanted an identity to embrace. Miller believes the success of her article was not because it was groundbreaking but because "it struck a nerve that motivated others in what was then the field of technical writing as it struggled to form an academic and intellectual identity" (p. 447). Her article was powerful because it motivated others to enter this conversation about identity – of naming who we are, what we do, and why we do it. I realize that identities are never static, but Miller's article reminds us that we need to be motivated to name ourselves and this struggle is part of our

identity. Clearly, the identity of TPC in 1979 is very different from today (we do not refer to discipline as technical writing as much), but that does not negate the purpose of naming ourselves.

And it is this concept – struggling to continuously name our identity – that leads to sustainability. When we fail to continually name our identities and boundaries of the TPC field, we fail to create a sustainable field. It is no surprise that programs, TPC or not, who continuously improve their identities are programs that continuously sustain. Though my literature review goes into more depth concerning the relationship between identity and sustainability, Schreiber and Melonçon (2019) are an excellent example of how identity leads to sustainability. Their article not only names TPC program administrators' (TPC PA) identities in relation to other programs, institutions, departments, fields, faculty, industries, and pedagogies but additionally names a sustainable growth method that works against stagnation. If the authors had just accomplished the work of identity naming, it would have provided an identity of TPC PA's in that moment in time, but it would not provide a sustainable identity for the future. The authors do more than name an identity; they provide a continuous improvement model called GRAM where administrators are encouraged to gather data about their programs, read about the multiple perspectives concerning their program, analyze the data gathered about their programs, and make changes based on this data (p. 262-263). For these scholars, the naming of identity leads to sustainability.

My Research

My research uses this framework of identity and sustainability as the basis for my dissertation to understand small college identities in order to work towards sustainability in these small spaces. Because a comprehensive understanding has not been conducted in small schools,

my dissertation does this identity work because it interviews TPC faculty on how they are able to advocate, implement, and sustain their TPC programs – naming the programs in their current state. While identity work is the main work of this dissertation, I agree with Schreiber and Melonçon (2019) that identity work is important because it can lead to sustainability. When one school sees another peer school's identity in how it advocates, implements, and sustains (or not) its TPC program, the one school is motivated to create a sustainable program themselves based on reflections from the peer school's program. Like the ways that Miller in 1979 motivated her readers to reflect on their identities to move towards a more sustainable field, we too can still use this model today to identify and sustain TPC programs in small colleges and universities.

The audience of this dissertation is multifaceted. When writing this dissertation, I envisioned the readers of the journal *Programmatic Perspectives* and attendees of CPTSC as the people with the more interest in my research. Within these audiences, the most obvious audience is those faculty from small institutions who either have a TPC program or thinking about starting a TPC program. Another audience for this dissertation is those faculty from any size institution with a TPC program. As suggested in my advocating, implementing, and sustaining chapters, many small institutions' challenges are the same challenges at any size institution, so TPC faculty from any institution can benefit from this dissertation. I encourage my readers to engage with the narratives that I present, thinking about ways that my participants' stories relate to their local contexts and how my readers can better advocate, implement, and sustain their own TPC programs. One of my favorite parts about going to academic conferences is just listening to how other people teach and administer their programs, so I hope my readers can think of my dissertation as an insider's look into twenty-six different institutions and how they operate.

As for the content and structure of this dissertation, it presents a study that works towards understanding TPC small four-year institutions through quantitative and qualitative methods. It begins with a literature review that maps the current conversations in the development of TPC in small institutional contexts by tracing some conversations in TPC curriculum design, empirical programmatic research, a few case studies, and book chapters published on small TPC contexts, and the history of small institutions represented in CPTSC. The next section explains the methods and definitions of my dissertation and answers my first research question: Do TPC programs exist in small four-year US institutions? Working with Lisa Melonçon's TPC database, I am able to provide the current percentages concerning small US institutions with a TPC program that allowed me to pinpoint TPC faculty to contact for an interview. After this chapter, the next three chapters answer my second research question: how do TPC program directors and faculty at small US institutions advocate, implement, and sustain their TPC programs? Each chapter provides answers to interviews with 26 institutions that fit the profile of my research into the chapter titles of advocating, implementing, and sustaining. Lastly, this dissertation concludes with a chapter dedicated to building the bridge between identity and sustainability, providing insights into what my study found, how it connects to the current TPC scholarship, and how other TPC schools can reflect on other TPC identities to think towards their own sustainability.

Chapter Overviews

This section describes each of the chapters of my dissertation in more detail, summarizing their scope and main points.

Chapter Two: Literature Review

This chapter reviews the current scholarship related to my research questions. It first broadly discusses TPC program design and curriculum at large, not focusing on small institutions, because it is important to name the field's consensus on this topic since this

scholarship becomes the basis for the questions that I ask my participants. After this broad topic, the literature review specifically examines how the TPC field has approached empirical programmatic research. While no empirical programmatic research has been conducted specifically on small institutions, it is important to argue the value of these studies for the sustainability of the TPC pedagogical field. Next, the chapter turns to the few case studies that showcase different TPC programs at small US institutions from journals like *Programmatic Perspectives*. There are not many; but the few that exist shed light on the affordances and exigencies of these small spaces. Lastly, the literature review turns to the conference proceedings of the Conference on Programs in Technical and Scientific Communication (CPTSC) to map the ways that small institutions are present at CPTSC from the beginning of its inception to examine the way small institutions have been contributing to the TPC field for a while – proving that small institutions are a substantial part of TPC identity.

Chapter Three: Methods

This chapter is split into two parts: quantitative methods and qualitative methods. While I do not create my own quantitative method for this dissertation, I build on the quantitative methods of a TPC database that already exists to pinpoint the exact institutions that fit the parameters of the study, which is also described this section. The second part of this chapter uses these qualitative methods to contact participants to participate in my study. This IRB-approved qualitative method details the organization of the interview as well as the questions that I asked participants. The latter half of this section describes the 26 institutions that volunteered to conduct one-hour interviews with me, explaining the types of institutions and faculty where these TPC programs exist.

Chapter Four: Advocating

Chapters four through six summarize the answers to the interview questions in the categories of advocating, implementing, and sustaining; chapter four provides summaries from the interviewee's answers pertaining to the topic of advocating – a topic that connects to the creation and history of the TPC program. This chapter's scope starts from the program's inception to anything prior to its current states, covering changes in courses, program titles, faculty, departments, and administration. While only eleven people new how their program got started, most of the participants in my study could easily talk about changes that they had made to the program according to their personal history with the program. This section also includes information about three failing and failed TPC programs and what in their histories led to their failures according to the interviewee.

Chapter Five: Implementing

This chapter specifically summarizes how the participants in my study implemented technology and partnerships in their TPC program. My participants lamented about the lack of technological support and training for their program's faculty and students, so this section captures the details of their complaints as well as the common ways that TPC faculty use technology in their programs. Additionally, summaries are provided from a few faculty members who either do not explicitly or minimally teach technology in their curriculum. Next, the second half of this chapter addresses TPC partnerships. While the conversation about technology was overwhelmingly negative, the conversation about partnerships was overwhelmingly positive. The last half of chapter five reviews the ways that small institution's TPC programs collaborate with other English faculty, non-Humanities faculty, alumni, workplace professionals, and local and national organizations in connection to course assignments and internships.

Chapter Six: Sustaining

This chapter summarizes particular topics related to a program's sustainability: recruitment, assessment, professional development, and future improvements to the program. Recruitment was a struggle for my participants, so this section outlines specific struggles that faculty members have experienced that also includes some success stories. Assessment was approached very differently by all of my participants, covering a wide range of complaints and successes in their institutional, departmental, and specific programmatic assessment requirements. Professional development was available to all of my participants, but my study showcases a wide range of different types of professional development provided TPC faculty. And the future improvements section captures the aspirations that TPC program directors and faculty have for their near and future ideas for their program.

Chapter Seven: Discussion and Conclusion

This last chapter returns to the framework of identity and sustainability laid in this introduction chapter. It first names of identities of the TPC programs summarized in the fourth, fifth, and sixth chapters of this dissertation, and then compares these identities to the voices represented in my literature review. Next, there is a section on the implications for small institutions in the form of reflective questions based off of the TPC identities I collected from small institutions. Lastly, I reflect on my own institutional space, comment on my dissertation's limitations, and possible directions for future research.

With its lack of scholarship, TPC programs in small institutions offer a rich avenue of scholarship for both other small institutions and the TPC field at large. Overall, readers of this dissertation gain insights into the programmatic practices of TPC programs in small institutions that they can reflect on and apply to their local contexts.

CHAPTER II

LITERATURE REVIEW

The TPC field has a history of un/re/defining itself (Durack, 1997; Dobrin, 1983; Johnson-Eilola, 1996; Rutter, 1991; Slack et al., 1993, Walton et al., 2019). It is no surprise that articles for the 1980s and 1990s grapple with the identity of the TPC field, trying to name what the field is and what the field does – trying to define itself for the sake of ethos and sustainability. For example, Dobrin's (1983) famously defined technical writing as "writing that accommodates technology to the user" (p. 118). In his anthologized article "What's Technical about Technical Writing," he grapples with the adjective "technical" in the phrase "technical writing" since it is not like medical writing where there is a discipline of medicine and not a discipline of technics (p. 108). He concludes with his specific definition because he believes that it focuses more on writing (noun) rather than its adjective (technology), focusing more on the user rather than the reader. While technology is critical to the production of writing, Dobrin posits that the field needs to focus on technological practices of writing and not be a field that just studies technology.

In reaction to Dobrin's definition, Durack (1997) provided a definition of technical communication that is more inclusive of women; she believes that technical writing (1) "exists within government and industry, as well as in the intersection between private and public spheres, (2) has a close relationship to technology, (3) often seeks to make tacit knowledge explicit" (p. 41). She points out that history – including the history of TPC – is deeply gendered, leaving out critical female women's contributions in technical, scientific, and medical achievements. Her definition problematizes the restricting binaries of public and private spaces, household and industry stereotypes, and masculine and feminine labor inequalities. While

Durack admits that no definition can statically capture past and future changes of technical communication, she believes her new definition of technical communication is more inclusive of historically gendered spaces of work, workplace, and technology.

Dobrin and Durack were by no means the only scholars to posit definitions of technical writing/communication/writer. Rutter (1991) agreed with Dobrin's definition but adds his own emphasis on the rhetorical nature of technical communication that rejects objectivism, positivism, expediency, and pragmatism as the basis for technical communication. Because technical communicators rely on knowledge and practice, this scholar believes that it is only through rhetorical study that technical communicators can understand these knowledge and labor constructs ethically. Slack et al. (1993) defined the status of the technical writer as an author: technical writers do not merely transmit or translate knowledge but are authors of knowledge themselves – articulators of meaning. Technical communicators do not merely interpret messages between sender and receive; rather, technical communicators regardless if they obtain the recognition of authorship are always complicit in power relations – the "production, reproduction, or subversion of relations of power" (Slack et al., 1993, p. 172). Walton et al. (2019) recognize Slack et al.'s theories of power in relation to technical communicators but take this definition a step further by naming spaces and structures of oppression in relation to race, class, sex, etc. In reference to Slack et al, Walton et al. argue that their theories were important to naming political and power relations but did not go far enough in naming the oppressed groups in which these powers affect. Instead of definitions of technical communication, Walton et al. spend the majority of their manifesto defining justice, oppression, and action in relation to technical communicators.

In response to this plethora of definitions, Schreiber and Melonçon (2022) take the field in a different direction. They argue that it is through the means of identity and not definitions that TPC scholars come to understand the purpose and knowledge of the TPC discipline (p. 6). Instead of being consumed with questions of defining the TPC field, these scholars argue that sustainability will only occur when TPC scholars turn to questions and concerns about identity – creating a direct correlation between identity and sustainability. When scholars purposely reflect on their own histories, rhetorics, theories, ethics, methods, and pedagogies, not only will they better their local TPC contexts but they create a sustainable future for TPC research. The naming of identity – of who we are, what we value, and what we do – seems to better capture the complexities of the TPC field than mere squabbles over definitions. We should be able to answer questions concerning the identity of who we are, what we value, and what we do – even if these answers are ever evolving because it is this approach that makes a sustainable field. In short, I agree with Schreiber and Melonçon (2022) that naming our identities leads to our sustainability.

My grappling with identity and sustainability has led me to ask questions about small institutions' TPC programs. What are the identities of small institutions? How do these spaces build sustainable programs? These small institutions, that are often neglected spaces in TPC research, constitute about 37% of all TPC programs in the US, housing 121 programs out of the field's total 324 programs (Melonçon, 2022). These numbers mean that small institutions house over a third of the field's programs, yet the field's journals include barely a handful of small school's reflective narratives and contain no scholarship on a collective understanding of the types and situations of the 121 programs. These numbers prove that small institutions have always had an identity even if scholarship has not adequately named that identity, so why are their narratives absent from scholarship? Maybe it is because many small institutions do not

require a scholarship component for employment like other institutions with different requirements for tenure. Maybe it is because scholars in small institutions do not want to write about their size, finding other avenues of scholarship a better use of their time and interest. Maybe they just enjoy attending conferences without the impetus to produce in published journals. While we could sit around and come up with more plausible theories for this lack of scholarship, I am more interested in action – in naming the identities of small institutions' TPC programs and showing how these small spaces contribute (and having be contributing for a long while now) to the collective identity of the TPC field.

To do this sustainable identity work, this literature review situates itself in a unique way. Ideally, this review would summarize small school's programmatic research of the past, but there is no comprehensive list of small schools' TPC programs that my research can build off of. Instead, this literature review examines the threads of past scholarship that influence my research. It first reviews the literature on what the field has said about the development of TPC programs' design and curriculum, knowing these general principles across all levels of institutional size gives guidance for looking at small institutions' TPC programs. Second, this literature review turns to the history of empirical programmatic TPC research by looking at how the field approaches this type of sustainable research and what the field has collected concerning comprehensive studies of TPC undergraduate programs. Since my dissertation uses empirical programmatic research to pinpoint the exact institutions that I interviewed, I argue why this method is useful for my study and a sustainable method of inquiry for the TPC field at large, with examples from comprehensive data collections from all TPC programs in the US. Next, I examine the few pieces of scholarship that mention and address small school locations. As stated earlier, there is no scholarship on small institutional programmatic research that captures its

current state in the US but there are a few case studies and reflective pieces that come from these small spaces that are worth mentioning. Though I cannot make conclusions about the whole field based on a few case studies, this section serves to name the few singular identities that do exist in research, which I use to influence the questions that I ask my interviewees from small schools. Finally, my literature review ends with a detailed history of the CPTSC conference and how colleagues from small schools have been at the conference in almost every year, showing that small school voices have been around since 1974 and have been a part of TPC identity even if they have not been named until now.

In short, mapping the scholarship of TPC program design, research, and histories influences my understanding and naming of small school identities for a sustainable future in these spaces.

TPC Program Design and Curriculum

The first strand of my literature review examines TPC program design and curriculum. Since I collect data on how small colleges and universities design their TPC programs and curriculum, this section provides the discourse around these topics so that in my discussion section of my results I can compare what scholarship is saying to what small schools are actually doing. While the field might not have addressed a comprehensive understanding of TPC programs in small schools, they have addressed the design of TPC programs and curriculum.

A major discussion about TPC programs is the actual development of the degree itself. For the purposes of this dissertation, a program is defined as generally encompassing majors, minors, concentrations, emphases, tracks, and specializations – something that can appear on a person’s transcript (Harner & Rich, 2005; Melonçon, 2014). The first bachelor degree in technical writing and editing was first established in 1958 by Carnegie Mellon University

(Melonçon, 2014), and today the TPC discipline has experienced a 17 percent growth rate in the last five years to now include 87 TPC degree programs, 66 online TPC degree programs, 143 TPC minors, 34 PhD programs, and 104 master's degree programs in the US (Melonçon & Schreiber, 2018; Melonçon, 2022).

Recently, Melonçon (forthcoming) provided an example of what an exemplar undergraduate degree program might look like that includes outcomes, curricular expectations, required courses, elective courses, and a required portfolio for a total of 36 credit hours. By the end of their time in college, undergraduates of TPC programs should be able to demonstrate high competencies in rhetoric, writing, technology, design, ethics, research, and collaboration. These outcomes are delineated throughout the program with courses like a required Introduction to TPC and a Capstone Course that introduces and synthesizes the theories and practices of TPC. Students in this exemplar program also take a course is visual communication, editing, content management, theory, and two classes in technology. Melonçon additionally encourages programs to incorporate two specialty courses where students choose from courses they have higher interests in such as design, business, engineering, science, specific type of communication (marketing, public relations, crisis, etc.), usability/user experience, health and medicine, intercultural, geography, planning, GIS, user experience, and/or computer science.

In addition to scholarship on curriculum development, scholars have also addressed how to start a TPC program. Johnson et al. (2018) address TPC program development in their book *Lean Technical Communication: Toward Sustainable Program Innovation* where they provide insights into developing undergraduate and graduate programs. Though these scholars are by no means the first to present approaches to TPC programs (Bridgeford et al., 2014; Franke et al., 2010; Tillery & Nagelhout, 2015), they differentiate themselves through a holistic step-by-step

approach to TPC programs as opposed to presenting various perspectives through an anthology. Johnson et al. argue that strong TPC programs respond to the needs of their institutional context, regulate costs and technologies to meet market demands, optimize physical and online spaces for learning, and increase diversity in students and faculty (Johnson et al., 2018, p. xv, xix). Their subsequent chapters address challenges in creating and sustaining TPC programs and curriculum such as "building and maintaining change, funding, technology deficits, [and] expanding/reimagining the role of technical communication programs" (p. xvi).

Based on the needs of TPC programs, Johnson et al. (2018) provide a model for lean TPC by incorporating seven tenets for starting and sustaining a TPC program. Their first tenant is that programs should focus on their values, not their deficiencies. While it might be easy to focus on the obstacles of a program, understanding the values of the universities, department, faculty, and individual TPC professors helps create and sustain a program that prudently aligns with the values of the institution. But sometimes these values also need to sometimes be critiqued and changed, just like TPC programs. Stagnant programs are the ones that die, and it takes discretion on knowing how fast a program should innovate and disrupt previous practices, but successful programs always are innovating and disrupting (p. 19-20). The authors third tenant is that TPC should be "rooted in local needs and aims at social responsibility" where programs care deeply about equity and equality both in their classrooms and in relation to community partners (p. 21). Johnson et al. prioritize the regulation of cost, promotion of efficiency, and enhancement of visibility as other critical components of program sustainability. I am interested in this book primarily because I am interested in how small schools are using lean means to create and sustain their programs.

With the rise of TPC programs in the US also comes the rise of questions as to what competencies should be in these programs; and many scholars have addressed these exigencies including Cook (2002) and Clegg et al. (2021). Back when the TPC field was relatively younger, Cook (2002) proposed a theoretical framework of six literacies that should be addressed in TPC programs and curricula: basic, rhetorical, social, technological, ethical, and critical. She defined basic literacy as being able to write well and clearly, rhetorical literacy as being able to identify audience and purpose, social literacy as being able to collaborate with other stakeholders, technological literacy as being able to critique and use different technologies, ethical literacy as being able to uphold ethical standards, and critical literacy as being able to recognize and critique ideologies and power structures (Cook, 2002). Almost twenty years after Cook (2002), Clegg et al. (2021) published an article on their analysis of 376 program student learning outcomes in 47 institutions that had undergraduate degree programs in TPC (p. 21). Through qualitative coding, they found that the top four outcomes of TPC programs are rhetoric, writing, technology, and design. Compared with Cook, three out of four of these outcomes are three of Cook's literacies: basic, rhetorical, and technology. Cook's literacies also overlap with Clegg et al.'s ethics, collaboration, critical thinking, and culture categories showing how Cook's theoretical framework is still applicable to today's TPC undergraduate outcomes.

While Cook and Clegg et al. show how the TPC curriculum has similar literacies and outcomes in the last twenty years, other scholars also reveal similarities in TPC coursework. For example, the editing course is the most common class in TPC curriculum (Melonçon, 2022) and fifty-five TPC programs offer some type of capstone course (Melonçon & Schreiber, 2018). Other similar classes include topics in design (Kitalong, 2018; Brumberger, 2018; Bridgeford, 2018; Lane, 2021a), technology (Harper, 2021; Klein, 2021), and content management (Lauren,

2018; Bridgeford, 2020). And the amount of scholarship on how these topics and other TPC topics should be taught is enormous (Dubinsky, 2004a; Bridgeford et al., 2004; Bridgeford, 2018; Flanagan & Albers, 2019; Haas & Eble, 2018; Bridgeford, 2020).

For example, Dubinsky's (2004b) anthology covered theories, histories, and ethics that influence TPC teaching, such as Miller's (1979) humanistic lens for technical writing, Johnson's (2004) and Moore's (2004) tension over instrumentalism, and Thralls and Blyler's (1993) social constructivist pedagogy. This anthology also encompassed topics in user-center design, workplace practices, cross-cultural competencies, digital environments, and future work in technical communication.

Bridgeford et al. (2004) built on Dubinsky's work in their anthology *Innovative Approaches to Teaching Technical Communication*, splitting their contributions into three sections: pedagogical perspectives, pedagogical practices, and pedagogical partnerships. Dubinsky (2004a) has a chapter on his belief that technical communication classes should be framed, not as problem-solving courses, but as service learning courses. Williamson and Sweany's (2004) chapter discussed the benefits and challenges of co-teaching a class in computer science, and Bridgeford (2004) provided examples of literature that she embeds in her technical communication curriculum to encourage rhetorical reflection. Several chapters of this book also advocated for client-based projects where students can gain experience with workplace professionals.

Other anthologies do not focus on every aspect that could affect the teaching of technical communication but simply focus on how to teach the core competencies of this field to students. Bridgeford (2018) does this type of work in her anthology *Teaching Professional and Technical Communication: A Practicum in a Book*. In her introduction, she defined the core competencies

that teachers need to integrate into their classes as the following: (1) audience analysis and purpose, (2) information design, (3) content and project management, and (4) ethics and style (p. 7-11). Each chapter of this book addressed an aspect of one of the core competencies and provided more specific understandings and assignments that can help teach each competency.

A more recent anthology on teaching technical communication takes an even narrower approach that specifically examines how to incorporate more social justice pedagogy into classes for both undergraduate and graduate students (Haas & Eble, 2018). The chapters cover anything from theoretical frameworks like feminism and Black epistemology that could be used in an assignment to advocacy work that provides students with hands on experience in their communities. The editors of this collection sought to address the topics of social justice and globalization by admitting that injustices happen within technical communication, but it is also through technical communication pedagogy that teachers can work against these injustices (Haas & Eble, 2018).

It is also important to note that anthologies do not have to cover such a wide range of topics as previously mentioned; they could cover how to teach one class or how to teach one topic (Flanagan & Albers, 2019; Bridgeford, 2020). For example, in Flanagan and Albers' (2019) book *Editing in the Modern Classroom*, they traced the current state of the editing class (many times found in technical communication curriculum) in both graduate and undergraduate contexts. The editors found that though many degree programs require editing classes, there is little pedagogical support for these classes. Their collection answers this exigency by providing chapters on theoretical lenses, software inclusion, psychological dimensions, and international contexts. Another book that is even smaller in scope is Bridgeford's (2020) anthology that only focuses on the topic of content management. Like Flanagan and Albers, Bridgeford (2020) also

argued that this topic of her book addresses a gap in pedagogy, so her anthology defines and provides assignments that instructors can incorporate into their classes concerning the collection and management of data for technical communicators in the workplace.

To add to these conversations on pedagogy is Klein's (2021) anthology titled *Effective Teaching of Technical Communication: Theory, Practice, and Application* published by the WAC Clearinghouse. This book builds on the work of previous scholars to address the themes of expanding pedagogy, shaping curriculum, incorporating technology, and engaging community in regard to TPC curriculum. It addresses practical questions like the development of internship classes that teach students soft skills (Bay, 2021), the incorporation of social justice issues in the teaching of design principles (Lane, 2021b), and ethical concerns through plain language theories and exercises in class discussions on Kantian, Aristotelian, feminist, utilitarian, and environmental ethics (Dreher, 2021). This anthology also addresses revisions to TPC courses in order to more effectively address the current social justice turn (Chen, 2021) and meet industry standards and terminologies as outlined by the Society of Technical Communication (Newmark & Bartolotta, 2021). The last section includes scholarship on the topic of engaging the community through TPC methods such as visual communication, scientific literacy, workplace trainings, and technical forms.

All of these articles, monographs, and anthologies demonstrate that the field of TPC cares about the development of its programs' design and curriculum, and I use this information to compare it to what small schools are doing in their programs and curriculum.

TPC Empirical Programmatic Research

The second strand of this literature review looks at programmatic research, specifically empirical programmatic research. Though program data collection of small schools has not been

done, programmatic research as a field has been addressed in the scholarship and continues to be a method used by TPC scholars. Since I use empirical programmatic research in my dissertation, it is helpful to name the ways the field has already used this method in the past as well as name the comprehensive studies that have been conducted on US TPC programs throughout the years.

Since TPC has its own dedicated journal to TPC programs, *Programmatic Perspectives*, it is no surprise that several TPC scholars choose this discourse for the home of their research. In 2016, this journal came out with a special issue on programmatic research where the introduction posed the question "What counts as programmatic research?" (Breuch & Sadler, 2016). Their answer to this question included a mixture of both "systematic, methodologically-driven data collection" as evidenced in the issue's articles and assessment discussions as evidenced in the issue's program showcases (p. 2). The articles in this special issue collected data through case studies, archival methods, and qualitative methods while the program showcases used years of program assessment data and interview data from one institution.

These methods are comparable to Melonçon and St.Amant's (2018) five-year study on what the TPC field uses as research which resulted in finding that TPC research mostly uses surveys, interviews, usability tests, observations and focus groups with the addition of case studies, experiments, and ethnographies. But these findings also came with a warning:

> TPC's empirical research pales in size compared with the field's use of textual and rhetorical methods. But as a third of the field's scholarly output, empirical research and the methods used to produce it is a necessary and important dimension of the field's scholarly identity. Thus, the field needs to pay attention to the practice and process of empirical investigations to ensure that the findings are credible and trustworthy to readers within and outside of the field. For a field that claims it is interdisciplinary and is

> connected to a variety of practices, little of our empirical research would hold up to outside scrutiny, and most of that is due to the methods chosen and how those methods are used in practice and described in print. (Melonçon & St.Amant's , 2018, p. 148-149)

This warning critiques the field's overreliance on textual and rhetorical methods that in many cases do not count as research in other fields and benefits the articles' authors more than their readers. Many years prior, Charney (1996) warns about this same shortcoming in the TPC field when she writes, "By producing numerous individual subjective studies, we have constructed a broad shallow array of information, in which one study may touch loosely on another but in which no deep or complex networks of inferences and hypotheses are forged or tested" (p. 297). She goes on to say that despite scientists not being as conscious about the dangers of positivism as they should be, at least their methods engage in collective knowledge-making with empirical studies.

Both Melonçon and St.Amant and Charney influenced my choice in using empirical programmatic research in my dissertation. While I could have chosen a case study or ethnography to understand the culture of one small school, pulling data from all TPC programs from all small schools in the country provides the field with a statement about identity rather than one un-replicable example. I am not arguing that case studies and ethnographies are useless, but the field of TPC needs more wide-spread research that the field can build off of. I wish there was an article published in the early 2000s on TPC programs in small schools so that I can build off and compare the numbers that I find in my research – yet all I can find is a few small school case studies from a decade ago, and some of those schools do not even have a TPC program anymore (Pitts, 2010; Kungel & Hathaway, 2010; Yonker & Zerbe, 2010; Harner, 2010; Ford & Lanier, 2011). And even if I only studied the case studies that do exist, I would just have my own

subjective textual-analysis of the studies with no ability or data to state something about the field as a whole. In short, a textual-analysis-only approach to TPC research (or any research for that matter) limits the knowledge creation that the field can produce. The field has historically (and rightfully) denounced positivism as part of its research methods but I believe this intense rejection has also prevented the field from creating statements about the field as a whole – an important element of sustainable research methods and critical for identity work. Why cannot the field of TPC be the pioneers of a rhetorically and ethically-based approach to empirical methods?

My dissertation answers this question with a conclusion that provides a statement about all TPC programs in small institutions with an undergraduate size of less than six thousand. This data allows me to make suggestions for small institutions – not just anecdotal information. Yes, I am still using interviews to supplement the empirical data, but my textual analysis is founded on my empirical methods. This approach creates a replicable study where in ten years another researcher can conduct my same dissertation study to continue understanding the identities of small colleges and universities; but unlike me, they will have a dataset to build upon.

Though I critique the TPC field's lack of small school scholarship, I do recognize that TPC empirical programmatic research of the total TPC field does exist in the literature. The first time TPC attempted to quantify the current state of TPC programs was in 1976 where Pearsall and Sullivan found that the field had 12 undergraduate degree programs, and Pearsall et al. in 1981 found 28 programs from 18 different schools. In 2005, Harner and Rich mapped curricular trends in TPC undergraduate curriculum from 80 bachelor degrees at the time; in 2010, Yeats and Thompson collected data from 147 institutions where 62 of them offered bachelor degrees, undergraduate certificates, and/or a minor in TPC; and in 2013, Henschel and Melonçon conducted a follow-up study from the 2005 study that found 185 undergraduate programs in the

U.S., representing a 131% increase. Today, Melonçon's TechComm Programmatic Central houses the most up-to-date information on the TPC's degree programs, emphasis degree programs, undergraduate certificates, minors, master's degree programs, graduate certificates, PhD programs, and online degree programs. The Society for Technical Communication even directs its members to this site for information on academic TPC programs.

These studies from a few scholars in various years demonstrate how empirical programmatic research produces collective knowledge-making that builds an identity for the field of TPC throughout its history. It is the only way we know that the field is growing and how it is growing. While studies from the 1970s and 1980s might seem outdated for the field of technical communication, these studies actually become imperative for tracing TPC's history by comparing newer data to older data in order to determine the growth of the field. It is this programmatic knowledge-making that I implement in my dissertation study to understanding the identities of small institutions in hopes that other scholars will also find this area of research valuable to the identity of TPC. For example, I hope some other dissertation students in 2030 will take up my work again to compare my numbers to theirs – building a sustainable way of mapping identity.

TPC Small School Programs

As state previously, there is little scholarship on TPC programs in small institutional contexts, potentially implying that there are no differences between TPC in small and large institutional contexts or that the field has simply not addressed this subject due to its nascent state or that TPC small school scholars do not have the capacity to write about their small contexts or that small school scholars are more interested in writing about other topics that are not related to their current situation (just to name a few possibilities). While some scholarship

briefly mentions small institutional contexts (Johnson et al., 2018), there is no scholarship on empirical programmatic data collection from these colleges and universities and very little scholarship from scholars working and writing about their TPC programs and curriculum in their small contexts, suggesting a gap in the field that needs to be studied further. Therefore, this strand of the literature review maps what voices do exist from small colleges and universities, mainly as narratives and case studies in TPC anthologies and *Programmatic Perspectives'* program showcases.

From the little scholarship the field does contain, it has been demonstrated these small institutions have their own unique problems apart from larger institutions. For example, Sapp (2006) discusses the "lone ranger" position where a junior non-tenured faculty member is hired to create and run a TPC program by themselves. These individuals experience the overwhelming amount of time and effort to support a TPC program, intellectual loneliness from having no colleagues in the same discipline, and elitism coming from an English Department that thinks literature is far superior to TPC and composition studies. Sapp's article proves that smaller institutions have their own unique exigencies and affordances.

One example of scholarship from a small institution is from Pitts (2010) who worked at Ohio Northern University which is listed as a "four-year, small, highly residential" institution that has a student population of 2,817 in the fall of 2020 according to the Carnegie Classification system ("Ohio Northern University"). His article titled "Composing and Revising the Professional Writing Program at Ohio Northern University: A Case Study" narrates his journey of being hired in the year 2000 as an assistant professor to create and administer the professional writing program and major. At the time of his article, the English major was the second largest major on campus with over one hundred students in the department. Since his university had a

long history of supporting the professionalization of a liberal arts education, Pitts received only support in his endeavor to create a professional writing track in the English Major that later became a professional writing major (Pitts, 2010).

When he arrived, plans had already been in place for a professional writing (PW) major that only included non-fiction courses common in most journalism degrees. Another obstacle included the placement of the PW major in the English Department where liberal arts courses were required. Pitts specifically mentions that the PW major's placement in the English Department with no discussions of moving it reflects his small university context and limitations (p. 134). Situated in these conflicting expectations, Pitts decided to define his program in the following way: "The purpose of the PW program at Ohio Northern […] was to help students understand themselves as I had come to understand myself, as both worker and writer, as postmodern subject and marketable agent" (p. 134). These goals for the program led to delete courses from the program like Magazine Practicum, Reading for the Senior Essay, Fiction Writing, and Literary Criticism which were replaced with Desktop Publishing, Writing in the Public Sphere, Cultural Studies, Rhetorical Theory, and Editing (just to name a few) (p. 145-150). Through his approach to creating the PW major, Pitts found that his small institution forced him to think through professional-based and humanities-based goals, the need for interdisciplinarity across academic departments (in his case, the Communications department), emphasis on the writing part of professional writing, and a positive relationship between faculty and administration (p. 130, 141).

Pitts' narrative brings up age old debates about the relationship of the TPC program to the English Department and university at large. With several small schools having a liberal arts tradition, these types of schools can have additional challenges depending on the chair's

preferences and dean's vision. In recent years, many schools have decided to transition from a liberal arts college to a comprehensive university which again can initiate conflicting ideologies about education within departments and university administrators. Connors (1982) traces these tensions in the field since the beginning of TPC's inception; for example, Connors claims that the field has been squabbling over the placement of the TPC course since 1920 (p. 17). And while Connors lauds the increase of tenure-track jobs in the 1970s, he still recognizes that there will always be tensions in the TPC field that scholars need to and have continually addressed. In response to both Pitts and Connors, my interview questions to small schools' TPC faculty specifically inquired about TPC faculty relationships to English Departments and university administrators to see if there were positive or negative. Based off of Pitts' situation, this question acknowledges that there are differences between liberal arts institutions and tech schools, so the exigencies might be different. Therefore, my qualitative section of addresses how small schools are approaching these relationships.

Another case study from a "four-year, small, highly residential" institution as defined by the Carnegie Classification system is Southwest Minnesota State University. Henning and Bemer (2021) share their insights from this TPC program during the COVID-19 pandemic in their article titled "Program Administration that Works During a Pandemic: Ecopreneurial Strategies and Lean Technical Communication Tenets." Their program took an ecopreneurial (EP) and lean approach to TPC that helped support them through the pandemic. Their lean technical communication (LTC) approach comes from Johnson et al.'s (2018) book where Henning and Bemer found many applicable tenants but also found that the tenant of disruption was not helpful in their small institutional setting. Johnson et al. state that disruption "requires us to challenge the established mechanisms that coordinate program work to encourage innovation and support

sustainability" (p. 6). In reference to this tenant, Henning and Bemer claim, "The concept of disruption is not one we typically value as surviving on a small campus depends heavily upon creating alliances and demonstrating how the work we do supports both the university's and state system's missions" (p. 78). Here these authors point out the tension of what works at a large institutional context where the TPC program has more power might not work in a small context where the TPC program might not have the luxury of power. Instead of a focus on disruption, these scholars argue that interdisciplinary collaborations are easier to create and sustain because faculty are always passing by other faculty in impromptu hallway conversations (p. 81).

The case studies of both Pitts (2010) and Henning and Bemer (2021) demonstrate the power and necessity of interdisciplinarity concerning TPC programs in small school contexts: small schools have to create partnerships with the English Department and other departments for sustainability. Latterell (2003) discusses the importance of this principle in her article "Technical and Professional Communication Programs and The Small College Setting: Opportunities and Challenges." While many larger institutions privilege specialists who only teach one type of course, many small institutions privilege generalists who can teach several different types of courses and who have disciplinary training (p. 326). As mentioned earlier, a newly hired TPC professor might find themselves to be lone ranger, but Lattrell argues that many small institutions with liberal arts traditions call on TPC scholars to play key roles in curriculum development and campus-wide projects (p. 327). This kind of power given to TPC professors may allow for more co-taught courses or more courses taught in various majors by different professors. Of course, these affordances can also lead TPC professors into the challenge of teaching more service courses that could lead to the struggles of supporting and teaching the courses in their major's curriculum, making budgets tight and staffing sometimes difficult.

Lattrell ends her article with a call for more research to be conducted in small institutional settings where many TPC professors and undergraduate students find themselves. And my dissertation responds to this call.

Additional scholarship that contains small school TPC programs comes from Kungl and Hathaway (2010) and Yonker and Zerbe (2010) who are all professors at small schools in Pennsylvania. Kungl and Hathaway both teach at Shippensburg University which had an undergraduate population of 5,324 in the fall of 2020. Their book chapter discusses the creation of a technical/professional communications minor through an interdisciplinary approach, explaining how the origins of this minor started with university discussions about creating more professional skills courses in a liberal education dominated curriculum. These discussions catalyzed the creation of a writing emphasis within the English major to allow for English majors to be more than just educators, and this change increased the interest in a TPC minor. Knowing that there was no way to create a minor without interdisciplinary help, Kungel and Hathaway brought together a committee of professors across various departments to create the Technical and Professional Skills Committee. This committee brought together a list of courses to implement in the new minor: Computer Design I & II (Art Department), Advertising Copy Writing (Communications/Journalism Department), Ethical Issues and Computer Technology (History and Philosophy Department), Technical/Professional Communication II (English Department), Web Programming (Computer Science), and Organizational Communications (Speech/Theater Department). While the committee wanted students to have choices within the minor, students were not allowed to take more than two courses from any of the departments. To approve this minor, the committee presented to the Chancellor’s Office information about TPC minors in other local schools, increase of members at local STC chapters, and current job trends

in TPC in order to approve the minor in the fall of 2003. While at the time, the authors were still developing and revising the minor's assessments, they had thirteen students in the first semester of the program's birth.

Kungl and Hathaway's book chapter connects to my dissertation in several ways. First, it is a narrative from a small school creating a TPC program – even if that program is just a TPC minor. It is yet another confirmation that TPC exists in small school spaces even with limited faculty. Second, this study shows how small schools with limited faculty can still have a robust program that meets student and industry needs. One of my questions to interviewees for my qualitative data collection is about interdisciplinarity between departments: does it exist and benefit the TPC program? I am interested in the ways that small schools approach interdisciplinarity and multidisciplinary work within their spaces.

The other small Pennsylvania school with a TPC program is York College of Pennsylvania which has a total undergraduate enrollment of 3748 in the fall of 2020. Yonker and Zerbe's (2010) book chapter from the anthology *The New Normal: Pressures on Technical Communication Programs in the Age of Austerity* grapples with the struggles of sustaining a TPC major. Since the program was first started in 2002, they have experienced enrollment decline, lack of technological upgrades, and challenges with faculty-industry collaborations. While declining enrollment trends match those of the university's overall enrollment, it was still frustrating to celebrate the 100th TPC major in the department and then experience a 25% decline in majors during the following years. The authors mused about why this trend is happening, possibly because of the recession but also because many students and faculty still perceive majors in the humanities lead to no real substantive careers. One practical small way of increasing majors is to ask the university's writing tutors and writing fellows to look out for

strong writers, then faculty reach out to those writers about the department's TPC minor and major. Another challenge facing Yonker and Zerbe is the cost of technology – the cost of the software and the cost of faculty development to teach the software. When the college froze departmental budgets, the TPC faculty were forced to consider requiring lab fees in classes like Digital Writing and Document Design. They were able to fund the purchase of several Adobe programs but the college's computers were so old that they could not run the programs. These events required the TPC program to ask itself the following question: "Should the program be responsible for teaching its professional writing majors how to use specific software?" (p. 75). The answer to this question led the scholars to reevaluate their curriculum and technologies based on their small-budget circumstances. Because technologies can become obsolete at a rapid pace, the department decided to focus more on theoretical and ethical approaches to technology instead of just teaching technologies. But since technologies are still important, they incorporated "New Tool Demo" assignments where students were responsible for learning a new technology of their choice and presenting an artifact created with the technology (p. 77). The last challenge addressed by Yonker and Zerbe's book chapter is faculty development. With lack of funds, the department had to find creative ways of keeping its faculty engaged with industry. Some of the ways that York College of Pennsylvania has addressed this challenge is to require faculty to have interviews with Web designers and content writers and to ask faculty to consider consulting for local businesses to bring their experiences back to the classroom. Though these interviews and consultations place the faculty in unfamiliar spaces, this approach was a highly successful way of implementing faculty development in nontraditional ways.

Yonker and Zerbe's (2010) book chapter addresses affordances and challenges of a small school space. Their work intersects with my dissertation because they represent a small school

with a TPC program that names their challenges and finds creative ways of overcoming the lack of funds and faculty. Small schools like York College of Pennsylvania not only have a TPC program, but they are also able to be resilient in times of economic instability. The topics that they address are also topics asked in the interview portion of my dissertation, specifically on the topic of technology and faculty development.

Another avenue where small colleges and universities appear is in the "Program Showcase" section of the journal *Programmatic Perspectives*. This section of the journal provides a space for a program to discuss their own degree requirements and local contexts; this section relies more on reflective narratives rather than empirical methods but is still valuable for tracing the voices of some small schools. The following paragraphs map the programs at small schools that have less than six thousand undergraduates with a TPC program. I do want to acknowledge that small school conversations do exist around the service course (Gulbrandsen, 2012) and master's degrees (Adkins & Frick, 2009) in *Programmatic Perspectives* but I am not collecting data about these topics for my dissertation so they will not appear in my literature review. I am only interested in small schools' TPC undergraduate programs.

The three small institutions with program showcases are Cedarville University (CU), New Mexico Institute of Mining and Technology (New Mexico Tech), and Michigan Technological University (Michigan Tech). All three of these schools and authors appear frequently in the journal as well as the conference proceedings from CPTSC. The first school to appear in the program showcases is Cedarville University with the piece written by Sandi Harner (2010) that focusses on the development and history of their TPC undergraduate major. *Programmatic Perspectives* as a journal was established in 2009 with its first publication that same year; it was only a year later that a small school appeared in its section on program

showcases, possibly implying that the field affirms small schools as legitimate spaces of knowledge and learning, with robust programs worth mentioning and replicating.

CU is a Baptist university located in Cedarville, Ohio with 3,038 undergraduate students in the fall of 2009, with 31 students declaring TPC as their major. As the director of the TPC program, Harner wrote that the idea for the program began in 1984 when the then-chair of the Department of Language and Literature asked his colleagues what could they do to make their majors more marketable. Harner spoke up and said that creating a TPC program could answer this need, and all agreed that she should run the program. This conversation led her to enroll in the 35th Annual Technical Writing Institute for Teachers at Rensselaer Polytechnic Institute which still had the leading scholars in TPC at that time. This experience led her to submit a proposal to CU for a professional writing minor that included the following courses: Style and Mechanics, Professional Writing, High Technology for Professional Writers, Report Writing and Technical Editing, and Advanced Professional Writing. In 1992, CU hired an additional faculty member with a MA in technical and scientific communication from Southern Polytechnic with significant work experience from IBM in Atlanta; this hire also allowed the change from a TPC minor to a major. And in 1999, the department official changed the name of the major from professional writing to technical and communication and added several new classes for a total of fifteen required classes in the major. Later, other courses were added in production tools, portfolios, and internships in 2002 and visual rhetoric, online design, and instruction design in 2009. At the time of this program showcase's publication, there were three TPC faculty with Harner as one of them acting as the director and founder who has felt support from her chair, department, and university throughout the whole TPC creation process.

Harner's program showcase is important to my dissertation because it shows the history and development of an undergraduate major – something that just data collection of TPC programs will not reveal. The second part of my data collection is interviews that asks questions pertaining to the creation and evolution of TPC programs, listening to how directors navigate their department and university contexts as well as hiring and financial support. While Harner has a relatively old program and supportive community, not all programs can boast of these wonderful environments, so my qualitative section of this dissertation adds narratives like Harner's to the field of TPC.

The next program showcase to appear in *Programmatic Perspectives* was in 2011 written by Ford and Lanier from New Mexico Tech and titled "If You Build It They Will Come: Establishing a Research Group at New Mexico Tech to Increase Campus Visibility of the Technical Communication Program." As the only degree in their Humanities Department, these authors' claim that they have one of the "longest standing BS in Technical Communication programs in the country" yet they struggled with low class status in their university context that was science and engineering focused (p. 96). To earn a higher status, Ford and Lanier realized that they needed to prove themselves as legitimate researchers to their colleagues, so they decided to first study research groups at Colorado State University and University of Memphis and second to create the Applied Communication Research Group at New Mexico Tech. Out of this research group came a massively funded redesign of the school's content management systems, benefiting faculty, students, and TPC undergraduates. TPC faculty and students worked on this massive project for nine months with so much success that faculty and community partners now submit projects to the research group that continues to increase visibility of the TPC major but also provides incredible experience for their major's students. Despite these

successes, Ford and Lanier end their piece with a problem they have yet to solve: lack of TPC faculty. With the classes and research projects increasing, so does their workload. Ford and Lanier are the only TPC faculty at New Mexico Tech so they are hoping that their research group might also give them access to colleagues who have experience in TPC and who might also consider teaching some TPC classes.

This program showcase demonstrates the importance and need to cultivate ethos – and that ethos can be developed in a small school of 1229 undergraduates (fall 2020) with only two TPC faculty. Ford and Lanier's study is important to my dissertation because it ties directly to one of my interview questions: how does your TPC program create ethos in your department and with your university at large? Ford and Lanier show that ethos can be linked to the visibility and status of a department which ties directly to financial and collegial funding that can increase the quality of a TPC undergraduate program – and this ethos can be developed with as little as two TPC faculty members.

The last program showcase from an undergraduate TPC program in *Programmatic Perspectives* was from Michigan Technological University (MTU). Brady et al. (2012) explained the history of assessment over the fifteen years of MTU's TPC major by informing the reader about three separate approaches that were implemented over the years: system-centered, user-centered, and participatory approaches. System-centered assessment mainly relied on the end product but lacked assessment on rhetorical and user awareness. Practically, this looked like students turning in various workplace genres in their final portfolios that had undefined audiences and missing user testing. In 2004, MTU changed its assessment metrics to be user-centered, requiring students to take more classes in user design. But this approach ended up failing because it was only assessed by one faculty member which felt like busywork to many of

the senior TPC majors who saw no connections between it and the careers that they were about to start. Finally, in 2007, MTU built on the ideas of user-centered assessment to create a participatory assessment that incorporated multiple stakeholder voices to assess portfolios. When portfolios were turned in to the department, TPC graduates, advisory board members, STC committee members, faculty, and the program director all gave comments on these portfolios – making these meaningful learning experiences for the students. This assessment also created a bridge between the academic and industry divide by including industry stakeholders to be a part of assessment. Participatory assessment also includes the inclusion of student voices; for example, MTU sends out an exit survey for all graduating seniors to understand what they experienced while in the program and how they thought the program could be improved. Many of them wanted more interactions with industry leaders so MTU implemented a senior oral presentation component that was presented in front of MTU's advisory board which was exclusively made up of community leaders – connecting students to their community.

MTU's program showcase connects to my research because I ask an interview question about assessment which is another component that does not appear on college and university websites. MTU demonstrated that their history of assessment has evolved, and this evolvement is also symmetrical to current TPC trends, specifically going from system-based to user-centered. This case study also influenced my interviews concerning community evolvement: do small schools engage with community and industry leaders? Interestingly, MTU approaches assessment as a way to involve community leaders which is one among many ways of incorporating local communities.

CPTSC's Conference Proceedings: A History of Small School Identity

The CPTSC conference has been around since 1974, bringing TPC faculty, administrators, and researchers together for discussions on programs, research, career opportunities, curriculum development, and evaluation ("About Us," 2022). Their mission is to "advance the study and teaching of technical, professional, and scientific communication across the globe" ("About Us," 2022). This portion of the literature review provides a CPTSC conference timeline of presentations, institutions, and topics from professors at small US institutions to show how small institutions with TPC components have existed for decades. It first starts with several highlights from the timeline that shows the amount of contributions that small schools bring to the field; and then this section presents a year-by-year timeline of all presenters from small colleges and universities from 1974-2019. Though conference proceedings are not peer-reviewed publications, small schools appear the most in these spaces as opposed to journals; therefore, they become prime research spaces for mapping the identity of small colleges and universities – proving that they have been part of TPC identity since CPTSC's inception.

CPTSC Conference Proceedings: Major Contributions

Some of the major contributions from the timeline include reoccurring institutions, very small institutions, and military institutions. Some of the reoccurring small schools that are represented and continually contribute to the TPC discourse are Michigan Technological, Southern Polytechnic State University, Cedarville University, Rensselaer Polytechnic Institute (RPI), Case Western Reserve University, New Mexico Institute of Mining and Technology (New Mexico Tech), and Illinois Institute of Technology. In 1978, RPI was the first small school to host the CPTSC, and New Mexico Tech was the first to host a panel with all five presenters from the same small school. Though not as frequent, colleges with less than one thousand

undergraduate students are also present at the conference from schools like McKendree University, St. Norbert College, Alderson Broaddus University, and William Peace University – proving that discussions about TPC programs and curriculum are happening in the smallest of spaces. And even small military schools like United States Air Force Academy and Virginia Military Institute attend and contribute to the conference.

Other contributions comprise of notable TPC scholars who either started at a small school or are still working at a small school today. Some of the voices that appear in this literature review are Mary Lay, Johndan Johnson-Eilola, Dale Sullivan, Jessica Lauer, Karla Saari Kitalong, Cynthia Selfe, Stuart Selber, Joanna Schreiber, Robert R, Johnson, and Lisa Driskall. Many of these people are highly anthologized and win awards from 4Cs, ATTW, and CPTSC for their contributions to the TPC field – proving that small institutions' scholars produce meaningful work in the field.

And these TPC scholars as well as all of the other small institution presenters discussed a wide variety of topics over the years: history and development of his technical writing program at this institution (Andrews, 1974), internship programs (Losano, 1974), the role and definition of technical writing (Carson 1977), TPC programs' relationship with university administration (Rubens, 1979), TPC course identity in humanities departments (Samuels, 1981), engineering courses in TPC curriculum (Lay, 1986), technical writing certificates (Pfeiffer, 1987), TPC evaluative measures for programs (Yee, 1990), computer integration into TPC curriculum (Selber, 1993), TPC service learning courses and social action (Brooks, 1995), students resisting the TPC introductory course (Sullivan, 2000), time management and goal setting skills (Clark, 2004), TPC program blogs (Mott & Ford, 2005), institution's global partnerships (Sapp, 2008), military veterans and TPC (Hart, 2011), social media in TPC curriculum (Harner, 2015), TPC

program assessment through advisory boards (Lauer, 2017), and interdisciplinarity and grant writing (Brewer, 2019). Clearly, small colleges and universities are historically and presently a part of TPC programmatic identity, even if we have not named it until now.

CPTSC's Conference Proceedings: 1974-2019

In regards to small college voices, it is no surprise that most universities in the first year of the conference had over six thousand undergraduate students with schools like the University of Minnesota, Boston University, Carnegie-Mellon University, South Dakota State University, Iowa State University, and University of Wisconsin-Stout. Out of the twenty conference attendees at this first conference, nine of them were from the University of Minnesota which in 1974 had a total of over thirty thousand undergraduate students, a far cry from being a small college voice.

But out of these twenty participants, two of the presentations were from small schools: Michigan Technological University and Rensselaer Polytechnic Institute. Clarence Andrews (1974) from Michigan Tech discussed the history and development of his technical writing program at this institution which at the time had about five thousand students, 95% being male (p. 45). A few years prior, his colleague Sachs created six new courses in technical writing in the topics of writing, editing, graphics, and publishing which produced about 2-4 graduates per year who were easily placed into careers. He recently rewrote this program to have more technology and science courses to produce information experts as graduates who have a broad understanding of film, magazine, radio, print media, and TV – not just graduates who can write manuals (p. 45).

The other small school voice was from Rensselaer Polytechnic Institute. Though enrollment information is not available from RPI in 1974, there were 5,346 full-time undergraduate students in the fall of 2010 which is a relatively small institution compared to the

other universities present at the CPTSC conference. This private institution is located in Troy, New York and boasts of being the oldest technological university in the English-speaking world established in 1824. In relation to the TPC field, RPI has graduated several prominent doctorates and hired several notable TPC faculty: Carolyn Miller, Cheryl Geisler, and Jay Gould (just to name a few).

The presenter from RPI at the first conference of CPTSC was Wayne Losano whose presentation was titled “Internship Programs and Job Interviews at R.P.I.” In this short conference paper, Losano discusses the unique internship program at RPI where students use their January term for a short internship. He lists several benefits of this internship, including how students are able to apply their coursework to industry, how faculty are able to gage the relevance of their curriculum, and how the technical communication department can keep up with industry trends. The internship additionally forces students to practice their interview skills and keep their resumes and dossiers up to date for future graduation and job placement. Losano believes that faculty should not oversell their students’ skills since the student benefits way more from the internship than the company. Some ways that he has strengthened student and industry relations is to cut out Sunday job ads in the newspaper and bring them to class to pass out to the students; this practice keeps faculty and students engaged in industry (Losano, 1974, p. 13-19).

In the years 1975 and 1976, Losano returned to the conference bringing his colleagues Frank Hammet, Bruce Lee, Jerome Nelson, and Jan Robbins. Unfortunately, not all of their conference papers were archived but the ones from Nelson and Robbins have been preserved. Their presentation is titled “Communication Theory and Technical Communication” where they address the following question: “How do we establish an appropriate transfer of learning from the theory/research/data level to the practical field?” (p. 31). They grapple with the dichotomy of

theory and practice explaining how their doctoral technical communication program is more grounded in theories and research whereas their master's degree is more focused in the practical field of technical communication (p. 31). Ultimately, they argue that faculty need to implicitly teach theory for transfer and not just assume that faculty's graduates are applying theories like information and communication theory to their research and workplaces.

The late seventies also brought back returners and newcomers. One returner in 1975 was Andrews from Michigan Tech. In 1975, he presented about how he replaced the technical writing major with a new Scientific and Technological Communication major with 45-credits in communication classes and 45 credits in science and technology classes. The major challenge of this new program is recruitment because most people do not know the about the concept of technical communication so he sent newsletters to local science teachers in the high schools to bolster TPC students. Another presentation from a small school was from Richard Davis (1977). He taught in the school of engineering from the Air Force Institute of Technology and presented on the failure to incorporate a STC certification into his program because of STC's lack of response to his inquires.

In the years that followed, Rensselaer Polytechnic Institute faculty continued to return to the CPTSC conference – continuing the voices of small schools. For example, Carson (1977) presented on the role and definition of technical writing and concluded on the need for a liberal arts approach to the modern technical communication degree. Gould (1978) became the editor of the technical writing journal and gave his remarks at the conference concerning the global conversation of TPC in Australia, England, Norway, Sweden, Israel, and France. Rubens (1979) muses over the scene at RPI where administration only approves initiatives with the words "science" and "technology" in them and where hiring can become tricking depending on what

credentials enhance the department. In 1980, David Carson became the president of the CPTSC and Carolyn Miller (recent graduate of RPI) became its treasurer. Clearly, RPI has a strong voice in the early years of CPTSC.

Other small college voices are scattered throughout the early eighties in CPTSC's conference proceedings coming from Case Western Reserve University (CWRU), Michigan Technological University, Alderson Broaddus University, and Chapman College. Marilyn Schauer Samuels from Case Western Reserve University (currently 5792 undergraduates) presented papers at three consecutive conferences from 1981-1983 with the following paper titles: Technical Writing at CWRU: A Possible Bridge Between the Humanities and Technology; Possible Applications of Cognitive Science and Problem Solving; and Teaching Problem Solving Strategies in the Technical Communication Classroom. Her first presentation focuses on the confusion of the purpose of a technical writing class was any of the humanities or science departments on campus; she found that many faculty and students did not know about or understand its value or existence at the university. Her second and third presentations focus on the theme of problem solving where her second presentation argues that technical writing teachers need more human cognitive engineering to teach technical reading and writing and her third presentation presents problems that she solved in the TPC program at CWRU by hiring a tenured associate professor and two tenure-track assistant professors.

Additionally, the early eighties also saw presentations from Phillip Rubens (1980) from Michigan Tech, Barbara Smith (1982) from Alderson Broaddus University and Richard Watson (1984) from Chapman College. Michigan Tech's professor from the Department of Humanities gave a talk on the computer impact of teaching TPC through computer assisted instruction. Alderson Broaddus University is the smallest college to be represented at the conference with a

total of 766 undergraduate students enrolled (citation here). As an associate professor of literature and writing, Smith's presentation urged participants to move away from the lecture-based model of education to a "Guided Design" model that increases decision-making and problem-solving in technical writing students by teaching analysis, evaluation, and synthesis. This model was implemented with much success in her college's Advanced Technical Writing course and several introductory technical writing course (p. 98).

Even though Smith's local context was small, she was still able to implement technical writing courses. Though Chapman College is not as small about Alderson Broaddus University, it is still relatively small at 4910 undergraduates in 2010. Watson was an associate professor of communication and English at Chapman College and his presentation argued that technical communicators need to be able to think in the fields that that produce; universities need to stop producing technical communicators who can only succeed in the humanities. Watson believes this connects to the ever contested status of the technical writer, as either subordinate to the technical team she is on or co-creators with the team she is on. Pulling from Kuhn, the author argues that technical communicators need to be competent at assessing "field-paradigms" in order to gain status and validity (p. 165).

The mid to late eighties saw the return of previous small colleges and also saw some new faces. Samuels from Case Western Reserve University returned in the years 1985, 1986, and 1988. In 1985, her presentation was titled "Is there funding for individual and group research in technical communication?" where she grapples with the problem of her work not being scientific enough to apply for NSF funding but also not humanistic enough to apply for NEH funding (p. 87). She concludes that the CPTSC should play a more active role and getting its members funding so that professors do not have to rely on the little funds provided by their individual

institutions. In 1986, her presentation was titled "What is quality in a technical/scientific communication program administrator?" where she describes the fluid nature of TPC administrators who have to constantly re-establish their purpose to both faculty and students. And in 1988, Samuels builds upon her previous research in her presentation "Taking Control of How Others View Us" by encouraging participants to loyal to their TPC convictions and critiquing NCTE and 4Cs for their lack of TPC support.

Samuels was not the only small college faculty member represented; Mary Lay also contributed presentations in each year from 1986-1989. TPC scholars might recognize this name because her work is sometimes anthologized; for example, Johnson-Eilola and Selber (2004) anthologize her essay "Feminist Theory and the Redefinition of Technical Communication" in their book *Central Works in Technical Communication*. At the time of her presentations, Lay was working as the chair and associate professor in the department of technical communication at Clarkson University which has an undergraduate population of just under three thousand students. Her 1986 presentation focuses on one of her student's success at taking classes in engineering to prepare him for the work of being a technical communicator in that area; Clarkson's TPC degree requires graduates to pick a technical concentration so that he can get used to the discourse and technology of that particular field before graduating (p. 73). Lay's 1987 presentation titled "The Metaphor of the Web: A Link Between Collaborative Writing and Gender Studies" serves as a precursor to her interest in TPC's intersection with gender studies. And her 1988 presentation is a survey from nine TPC professors who narrate the successes and challenges of their job.

Though Lay certainly dominated the small college voice in CPTSC, there were other notable voices in the late eighties. Murphy and Dyrud (1986) from Oregon Institute of

Technology gave a presentation on their institution's new technical communication's option with in the Communication's major that includes classes like technical report writing, fundamentals of speech, discussion of processes, technical editing, advanced technical journalism, documentation development, proposal and grant writing, and theories and applications of communication (p. 10-11). William Pfeiffer (1987) from the Southern College of Technology gave a presentation on his college's new technical writing certificate. He states that "My comments this morning will show how one college, with limited resources, reached out to the business and industrial community to satisfy an obvious need" (p. 1). His certificate program was the first in the state of Georgia. Susan Feinberg (1987) from Illinoi Institute of Technology gave a presentation titled "Designing a Model for Collaboration" where she provides an outline of how to teach best practices for collaboration in a business setting. And Wahstrom (1988) from Michigan Technological University discussed the ambiguity of the differences between graduate and undergraduate TPC curriculum and called the STC and academia to set up better parameters between these two degrees (p. 7).

Unfortunately, CPTSC did not archive the conference proceedings from 1989 but several colleagues were present from a variety of small institutions: Caro Barnum (Lehigh University), Owen Brady (Clarkson University), Gleen Broadhead (College of Redwoods), Susan Feinberg (Illinois Institute of Technology), Mary Lay (Clarkson University), and Pfeiffer (Southern College of Technology).

Like Southern College of Technology that dominated the small college discourse in the eighties, two different schools dominated the small college discourse in the early nineties: (1) New Mexico Institute of Mining and Technology and (2) Michigan Technological University.

Out of the twenty-two presentations from small schools from 1990-1995, seven of them are from New Mexico Tech and seven of them are from Michigan Tech.

New Mexico Tech was established in 1889 to teach mining specialties at the college level that has a little less than two thousand undergraduate students. The seven presenters from this school included Carole Yee (1990, 1995), Lynn Deming (1991), Jim Corey (1992, 1995), Johndan Johnson-Eilola (1993), and Charles Campbell (1994). Out of this list, Johndan Johnson-Eilola stands out as an exemplar TPC scholar who has won the CCCC Best Collection of Essays in Technical or Scientific Communication for his edited collection Solving Problems in Technical Communication (2013) and who has also won the NCTE Best Collection of Essays on Technical or Scientific Writing Award for Central Works: Landmark Essays in Technical Communication (2004).

Johnson-Eilola and his colleagues at New Mexico Institute of Mining and Technology brought many different topics to the CPTSC conference. Yee (1990) argues to TPC program administrators need more robust evaluative measures to determine the quality of their program that specifically conducts a self-study on the cultures that make up the program (p. 34-36). Deming (1991) discusses the technical communication program at New Mexico Tech in how they developed student internships, alumni feedback, faculty involvement, faculty training, professional journals, and a corporate board (p. 55). Deming argues that all TPC programs need a corporate board to evaluate curriculum, connect students to industry, and continually introduce faculty to current marketplace trends. Corey presented a paper titled “TC 101: Orientation to Technical Communication, or Bringing Out the Frustrated Teacher in Your Industrial Colleague” where he builds on the foundation of Deming’s work by arguing how his institution was able to

use the introductory technical communication class to bring in guest lectures in TPC from contacts through the advisory board mentioned in Deming's paper (p. 14-17).

In the years 1993-1995, Johnson-Eilola, Campbell, Corey, and Yee all represented New Mexico Tech. Johnson-Eilola discusses the ramifications of postmodern capitalism and post-hierarchical and how TPC faculty need to address the ethically and pragmatic these issues in their classrooms. Campbell (1994) takes an interesting approach to TPC by argue for the art of improvisation in TPC pedagogies. TPC cannot become a discipline that blindly memorizes style books because this does not prepare them for the improvisation need to work collaboratively across disciplines and industries (p. 47). In 1995, Corey and Yee both presented. Corey mused about how many of his senior internship reports demonstrated exemplar computer skills but abominable prose skills, implying that his program needs more focus on writing skills and not becoming so obsessed with so many computer classes (p. 17). Yee urges faculty to teach "microethnographies" as part of service projects that teach students about postmodern subjectivities, Black people, and justice (p. 52-53).

The other institution equally contributed in the early nineties was Michigan Tech, totally seven presentations: Cooper (1990, 1994), Aller (1992, 1994), Selber (1993), and Selfe (1995). Notably two of these presenters would later be anthologized in *Central Works in Technical Communication*: Selber's article "Beyond Skill Building: Challenges Facing Technical Communication Teachers in the Computer Age" and Selfe and Selfe's article "The Politics of the Interface: Power and Its Exercise in Electronic Contact Zones." At the time of the CPTSC conference, Selber (1993) was a PhD candidate at Michigan Tech who presented a paper on computer integration into TPC curriculum, describing the challenges for teachers and a model to use for better integration (p. 51). Selfe gave two presentations in the same year where one of

them challenged the audience to reject the myth that technological change always produces positive social change (Selfe, 1995, p. 1) and one of them co-presented with Selber (now at Clarkson University) on how to prepare TPC graduate students to navigate the academic job environment after graduation (Selber & Selfe, 1995, p. 46).

The other two presenters from Michigan Tech were Cooper and Aller. In 1990, Cooper gave a presentation on the need to view TPC as a virtuous practice, not just a skill to be used. Her presentation pulled extensively from Socrates and Aristotle to claim that rhetoric should be in TPC curriculum and integrated with morality and politics to produce ethical social action (p. 6). In 1994, Cooper built off her previous presentation and argued that TPC should be practical rhetoric where students and professionals know their obligation to work and write ethically that calls other to equally act ethnically (p. 51). Aller also gave two presentations in the years 1992 and 1994 that provided information on her current engineering TPC courses and that continued reflections on the placement of TPC in English, Communication, or another academic department.

While New Mexico Tech and Michigan Tech appear the most in the early nineties, other schools were still present at the conference: Southern College of Technology, Rensselaer Polytechnic Institute, and Millikin University. Smith (1993, 1994) and Rainey (1994, 1995) were both from Southern College of Technology. Smith (1993) discusses the benefits his college's 12 member advisory board and Smith (1994) updates CPTSC members on his college's Master of Science in Technical Communication degree and a Bachelor of Science degree in Technical and Professional Communication that includes 20 credit hours in technology, an optional internship, and coursework in math and science (p. 27). Rainey (1994) discusses a survey of 50 TPC programs that he will send out inquiring about students, job placement, faculty, schedules,

library, program support, budgets, and plans, and Rainey (1995) also calls for a more robust research program in TPC that has clear agendas and research questions.

Zappen (1994) from RPI and Brooks (1995) from Millikin University were the outliers in small colleges voices but these voices are still worth mentioning. Like Rainey, Zappen (1994) was also interested in research in TPC. He claims that the current research in TPC is not easily passed along to students because the field makes contradictory statements on feminist theory, collaboration, social perspectives, etc. These contradictory statements make it difficult for teachers to know whether they should use textbooks or research to teach their classes; therefore, Zappen calls for a more homogenous research agenda that focuses where research shows agreement in the field rather than schizophrenic good ideas (p. 54-55). Brooks (1995) was the Director of the Writing Major at Millikin University which is located in Decatur, Illinois with a student population of 2,340 in 2011. His paper presentation was titled “Technical Communication and Service Learning: Integrating Profession and Community” and he argued that TPC professors need to use the TPC service learning courses to promote awareness and action in regards to social action through service learning opportunities.

The late nineties brought about many of the same people from previous years: Rainey (1996, 1997), Yee (1997), Smith (1997, 1998), and Samuels. Southern College of Technology changed its name to Southern Polytechnic State University but its undergraduate enrollment stayed about the same at just over five thousand undergraduates. Rainey presented his results from a survey of two thousand technical communicators in industry for a minimum of two years; and in 1997, Rainey conducted another survey of academic-industry advisory boards from thirty different institutions and he compares universities without advisory boards to universities without them. Yee (1997) discusses the need of TPC to share history and theories of composition

studies, not being as two distinct disciplines as once believed. Smith returns again to CPTSC from Southern Polytechnic State University in the years 1997 and 1998. In his first paper, Smith argues that that internet has presented a specific moment to internationalize TPC curriculum with classes like International Technical Communication, International Issues in Science and Technology, Additional Foreign Language, Comparative Cultures, and a study abroad intern ship (p. 118). His second paper argues that there can be problems when integrating international concentrations in TPC undergraduate and graduate degrees but his institution has found success in partnering with the European Transfer Credit System (p. 74). Lastly, Samuels from CWRU to receive the Honorary Distinguished Service Award for her two terms as CPTSC president.

Michigan Tech continued to dominate the TPC discourse in the late nineties with its own returners and newcomers totaling fourteen presentations from 1996-1999. Cooper (1996, 1997, 1999) gave three presentations on a postmodern approach to TPC, TPC theories' connections to the real world, and an enterprise-based approach to engineering education. Sullivan (1998, 1999) best known for his anthologized article titled "Political-Ethical Implications of Defining Technical Communication as a Practice" gave two presentations on the topics of the academic-practitioner divide and TPC web designers. Selfe and Selfe (1997) discussed the benefits of a technologically rich TPC facilities, and Atkinson and Aller (1997) talked about the overlaps between technical communication and technical curriculum. Other Michigan Tech presentations during the late nineties included the topics of TPC at GM (Hundleby, 1996), TPC professional identity (Williamson, 1996), TPC cultural representations (Kitalong, 1996), technical literacies (Heaps, 1996), TPC job search process (Praetorius, 1998), and historians of TPC (Praetorius, 1999).

But there were not only returning representation from small colleges, there were also new colleagues and institutions represented. Barnum (1997) from Southern Polytechnic State University presented for the first time at CPTSC on how SPSU was partners with a few companies where students get to work with real people in industry on real product. Harner (1988) presented for the first time, coming from Cedarville College which has a little over four thousand undergraduate students. She argues that the field has outgrown the term "technical writer" that is no longer used the STC but she poses the question if the field has outgrown the term "technical communicator" and it needs to adopt more industry-based language like information developer? (p. 59). Davis (1999) from Mercer University takes up a different set of exigencies in her interest in TPC's relationship to engineering. She calls for the TPC field to learn more about ABET accreditation and how it intersects with writing assessment, even considering becoming partners with engineering educators in the ABET group.

At the turn of the century, small colleges and universities continued to attend the CPTSC conference with contributions to their field. Out of the eleven presentations from these institutions, six of them were professors from Michigan Tech who addressed issues such as industry-ready graduates (Tews et al., 2000), the information technology false dichotomy (Johnson, 2000), students resisting the TPC introductory course (Sullivan, 2000), students resisting the TPC advanced course (Jobst, 2000), participatory design (Moore, 2000), and engineering enterprise initiatives (Aller & Clancey, 2000). In addition to Michigan Tech, Clarkson University has two presentations. Faber (2000) encouraged participants to use a corporate assessment model in TPC course development, and Johnson-Eilola (2000) argues that TPC pedagogies need to rethink their approach to TPC writing as not always the production of original texts. Other presentations from Montana Technological University, Mercer University,

and Case Western Reserve University included scholarship on TPC adaptation for different careers (Praetorius, 2000), TPC's placement in a department and how that placement affects the program (Davis, 2000), and critical action in TPC industry and curriculum (Grabill & Porter, 2000).

In the year of 2001, CPTSC conference hosted six presentations from smalls institutions. Yee (2001) discussed the creation of a survey to be sent on the ATTW listserv that inquired about faculty TPC degrees, backgrounds, and development as well as student' understanding of their TPC programs, degrees, certificates, and transfer options. Barnum (2001) returning again from SPSU presented on usability studies and how the new millennium is requiring students to be responsible for all content and design in any medium (p. 44). Faber (2001) and Johnson-Eilola (2001) both came from Clarkson University with two separate conference proceedings. Faber gave a presentation on the importance of studying management theories to incorporate them into TPC programs, providing several resources to CPTSC participants on books to read in this genre. Johnson-Eilola (2001) presented on the effects of the computer revolution on communication and how it has fundamentally changed (p. 71). Carliner (2001) from Bentley College discussed the implementation of an undergraduate and graduate certificates in information design because students did not seem drawn to the phrase "technical communication" possibly because industry rarely uses this phrase (p. 77). And Feinberg (2001) from Illinois Institute of Technology presented on two case studies of incorporating industries into graduate classes. The first case study was a successful partnership where both the museum staff and graduate students benefited from usability testing of the museum's website; but another partnership with another company was less successful because the company treated the graduate students are unpaid employees with unattainable project deadlines. From both of these experience, Feinberg learned that

student's rights need to be clearly established as well as determine project ownership before the project begins (p. 91).

In 2002, Johnson-Eilola again returned to CPTSC for a co-presentation with Faber, both from Clarkson University. They spoke about a new software that they are working on called Crateware where TPC teachers can more seamlessly share course content and assignments (p. 41). Other familiar small college voices also returned to this conference this year. Rainey (2002) gave a presentation on technical writing and online distance education, specifically the setbacks of university bureaucracy, out-of-state tuition, lack of student discipline, and instructors' lack of online abilities (p. 63). Feinberg (2002) also returned again to discuss a specific problem that has arisen at Illinois Institute of Technology: teaching software or teaching theory and research. Her paper addresses the advantages and disadvantages of this divide and how her faculty have approached these questions (p. 81). In addition to returners, there were also new representations from small colleges. Driskill (2002) from Rice University appears for the first time at this conference; later she would be anthologized in Johnson-Eilola's *Central Works in Technical Communication* for her article "Understanding the Writing Context in Organization." Her conference proceedings includes concepts of "writing to learn" where students are required to focus on their prose and "learning to write" where students are asked to write for a fictional audience like a corporate office or other industry setting (p. 53). Mott (2002) was also new to the conference but his institution had been represented at the conference many times: New Mexico Tech. Like many conversations in CPTSC, he talked about the problems in curriculum concerning the theory vs. practice binary (p. 89). The last newcomer in 2002 was Dayton from Southern Polytechnic State University, another school that has been well represented in the history of CPTSC. Dayton's interests focused on the new doctoral degree to be approved by Utah

State University, explaining and pondering some of the courses and perceptions of the future degree (p. 90).

In 2003, six voices from small schools were present. Harner (2003) gave two presentations: one on comparing 12 TPC undergraduate programs and one on encouraging the field to focus more on TPC communities of practice (p. 19, 32). Rainey (2003) also gave two presentations: one on discussing TPC authority and one on contemplating the new technologies that TPC curriculum should integrate (p. 20, 29). Other small school presentations included topics on interdiscipilinarity in TPC curriculum (Driskill & Zeleznik, 2003, p. 42), video production in TPC curriculum (Praetorius, 2003, p. 47), pedagogies in creating and evaluating interfaces (Hart-Davidson, 2003, p. 48), and collaborations with the Universidad de la Habana for teaching and research (Sapp, 2003, p. 56).

In 2004, small college representation rose from six presentations to eight presentations. Rainey, Turner, and Dayton (2004) from SPSU conducted a study of management expectations on workplace skills and found that the most important skill is collaboration with experts and co-workers (p. 16), and Harner (2004) from Cedarville University also conducted a study on 100 TPC degree programs to trace the field’s commonalities in curriculum, internships, portfolios, and general requirements (p. 18). Zappen (2004) called for more civic engagement and gave an example how his students were able to develop a youth-services information system for Rensselaer Coutn (p. 22). This year also brought some new small college representatives from Rose-Hulman Institute of Technology and Houston Baptist University. House, Watt, and Williams (2004) talked about their Professional Engineering Genres Project at this small college that collected sample engineering workplace documents from their program’s alumni which helped keep their students and curriculum up to date (p. 35). And Houston Baptist University

was represented by Clark (2004) who advocates for more discussions with students about time management and goal setting skills, something that professors internalize themselves but never explicitly teach. This exigency came from Clark's local context where students take 3-4 courses per quarter in addition to community service hours required (p. 60).

Other small school voices in 2004 were Feinberg, Ford, and Mott. Though Feinberg at this point had presented several times, she took her research to a new area: computer games. She discusses her students' development of a CD-ROM based 3-dimensional computer game to help parents and student navigate financial aid questions – making classroom project meaningful and useful for actual users (p. 81). Ford (2004) also takes a new in her research interests by focusing on ways to recruit high school students to TPC programs like a summer mini course in TPC and a Consulting Scientist program where faculty go and speak on high school campuses (p. 87). Lastly, Ford's colleague Mott (2004) presented on a similar topic, but instead of attracting high school students to the TPC major, he focused on community college transfer students and ways to get them to see TPC as a viable major and career (p. 88)

The following year saw significantly less presentations with only three small schools in attendance. Faber (2005) from Clarkson University co-presented with Salvo from Purdue University in a presentation titled "Nanoscience and the Symbolic Capital Research." They define nanoscience as "an emergent cross-disciplinary field involving molecular-level research in biology, chemistry, electronics, and physics. Nanotechnology refers to the applications and the manufacturing processes of this work at the molecular level" (p. 34). Since the government funding so much nanoscience technology, these presenters inquire about TPC's role in nanoscience education and communication. Mott and Ford (2005) both from New Mexico Tech talked about their institution's TPC program blog that connect faculty and students to the TPC

advisory board (p. 89). And Rainey (2005) grapples with the similarities of ethics in TPC disciplines and profession (p. 100).

The 2006 CPTSC conference held in San Francisco, California had seven presentations from small institutions, discussing a wide range of topics. The two presentations from professors at Illinois Institute of Technology focused on an expansion of certificates and degrees and less on defining the TPC discipline (Broadhead & O'Connell, 2006, p. 48) and explained an assessment tool for evaluating a global and cross-cultural aspects of TPC curriculum (Feinberg & Filimon, 2006, p. 77). Other topics discussed by the small schools present were teaching content management (Mott, 2006), increasing degree options in TPC graduate and undergraduate degrees (Henschel, 2006), initiating a long-term collaboration between CPTSC and the American Society for Information Science and Technology (Driskill, 2006), improving TPC graduate degrees (Allen, 2006), and reexamining the purpose of TPC certifications (Rainey, 2006).

The 2007 conference experienced the return of Fairfield University, Illinois Institute of Technology, and Southern Polytechnic State University who by now regularly featured professors each year. Sapp (2007) called for more studies of TPC programs with only one TPC faculty, particularly exploring the impacts of when this "lone ranger" goes on sabbatical after receiving tenure and there is no one who knows the programs or curriculum (p. 50). Stolley (2007) argued for more Web-design courses where multiple TPC courses implement web skills instead of just having one designated web-design course (p. 94). And Nunes (2007) discussed the challenges of his home institution's (Southern Polytechnic State University) dual degree partnership with Northeast Normal University in Changchun located in northeast China. Both institutions participated in an exchange program where students spent a semester abroad at the other institution but this sometimes led to confusion as to what courses would transfer back to

their home institution. As Nunes continues to navigate the benefits and challenges of the dual degree program, he hopes that the labor of scheduling will be worth the experience for his students (p. 105).

In 2008, the reoccurring small schools were present. Stolley (2008) from the previous year gave a presentation on free and open source software in distance education (p. 12), Lanier and Ford (2008) gave potential options TPC faculty research funds in liberal arts colleges where funding for TPC can be scarce (p. 14), and Sapp talked about his institution's global partnership with a university Nicaragua (p. 16). This year also brought on newcomer: Miner (2008) from St. Norbert College located in Wisconsin with a little less than two thousand undergraduate students. Miner focused on the role of grant training for both faculty and students, asking questions of how grants should be implemented in TPC curriculum (p. 38).

No small colleges were represented at the 2009 CPTSC conference, possibly because the conference was held in Denmark but this is mere speculation. Notably, there were also significantly less presentations overall, with 27 presentations while the previous year had 75 presentations overall.

In 2010, small colleges were back on the agenda of presenters from New Mexico Tech and SPSU as well as a new school: University of Findlay. Newmark (2010) and Ford and Lanier (2010) from New Mexico Tech gave presentations on a new undergraduate TPC journal where students could learn to write for an academic audience (Newmark) and on a new remodel of their TPC undergraduate lab to include more updated technologies (Ford & Lanier). Returning for his fifth presentation at CPTSC, Smith (2010) from SPSU talked about the new creation of a BA degree in Media Arts, revisions to undergraduate TPC concentrations, and changes to the curriculum's foundational TPC courses (p. 21). The newcomer from the University of Findlay

discussed the impacts of a situation where his students were only able to use computer-mediated communication for the duration of a project (Hayenga, 2010, p. 19).

The 2011 CPTSC conference had the largest small school presentations to date as well as the largest of amount of new schools represented: Virginia Military Institute, Lebanon Valley College, Longwood University, Westfield State University, and Kettering University. Virginia Military Institute had presentations about military veterans and TPC (Hart, 2011, p. 43) and what academia should know about veteran employment (Thompson, 2011, p. 43). Lebanon Valley College professor Kline (2011) co-presented with Barker from Texas Tech on building communities of practice for professionalism, and Longwood University professor Welch (2011) discussed rhetoric in her TPC master's degree program. Westfield State University was represented by Seldel (2011) who co-presented with McDaniel from Pittsburg State University on the topic of navigating industry partners when a professor is the only TPC faculty at an institution (p. 51). And Schneider (2011) from Kettering University considered the ways that entrepreneurships could partner with TPC professors in public, private, and community colleges (p. 56).

Not surprisingly, 2011 also brought back several returning small college scholars like Hayenga, Harner, Barnum, and Smith. Two scholars from the University of Findlay gave separate presentations on creating an TPC advisory board made up of exclusively STCs (Hayenga, 2011, p. 15) and another presentation from Hoyenga (2011) where the abstract was not included but the title is "Vocationalism, Advisory Boards, and Institutional Identity Shifts: The Terrible Triad" (p. 22). Harner (2011) returned again from Cedarville University to engage in multiple sessions: one as a panelist and one as a presenter. She sat on a panel of nine panelists to converse on the latest TPC perspectives of research grants and also presented at another

session on the successes of bringing the advisory board to campus to talk to TPC students about getting a job and creating a professional portfolio (p. 29). The last two returning scholars came from Southern Polytechnic State University. Barnum (2011) shared about a new TPC lab she incorporated into her university program where clients and students could work on project together, and Smith (2011) described the mentorship and internship programs at SPSU.

In 2012, Michigan Tech was the most present small school voice with fourteen presentations. These presentations dialogued about TPC administration (Kitalong, 2012), labor (Brady, 2012), feminism (Seigel, 2012), service learning (Ren, 2012), critical history (Johnson, 2012), productive exchange (Brady et al., 2012), role-playing (Kaunonen, 2012), multimodal genre of the STEm presentation (Cassell, 2012), metaphors (Markve, 2012), international usability testing (Chong, 2012), campus climate (Matthews, 2012), students' perspectives (Kennedy & Harris, 2012), business practices (Kitalong-Will, 2012), and management practices (Schreiber, 2012). But in addition to Michigan Tech, Westfield State University, Illinois Institute of Technology, and Missouri Western State University were all present at the conference, speaking on a variety of topics: diversity and inclusion (Seidel, 2012), application of TPC to workplace (Schaefer, 2012), campus IT (Stolley, 2012), and video game culture (Charlton, 2012).

Unfortunately, the 2013 CPTSC conference proceedings are not available to the public, but the conference from 2014 is available – and has fifteen abstracts from small colleges and universities. This conference was the first to have a whole panel from a small institution. Five scholars from New Mexico Tech presented on a panel titled "Across Disciplinary Lines: Fostering Connections and Seizing Opportunities at New Mexico Tech." Not surprisingly, Michigan Tech also gave three presentations on the topics of programmatic redesign (Brady,

2014), local and global contexts (Dorpenyo, 2014), and an interdisciplinary approach to visual communication for TPC curriculum (Beatty, 2014). Returning member Harner (2014) from Cedarville University spoke on how to incorporate theory into TPC curriculum and her colleague Carrington (2014) discussed definitions and brands of an effective TPC program. Additionally, there were five other small schools at this conference from Southern Polytechnic State University, Worcester Polytechnic Institute, Fitchburg State University, York College, and Fairfield University. These scholars provided insights into industry trends (Smith, 2014), TPC mentorship (deWinter, 2014), preparing for external audit (Sides, 2014), TPC in the private college (Yonker, 2014), and TPC program administrator loneliness (Sapp, 2014).

The years 2015 and 2016 saw a strong representation of small schools with eight presenters in 2015 and twelve presenters in 2016. These scholars contributed to rich TPC conversations in TPC programmatic research (Söderlund & Kramer-Simpson, 2015), social media in TPC curriculum (Harner, 2015), students' concerns about employment (Carrington, 2015), TPC application for education majors (Phelps & Suchanec, 2016), TPC cognitive and writing skills (Sides, 2016), service learning projects (Kramer-Simpson, 2016; Ralston, 2016), multi-modal research (Lauer & Brady, 2016), pedagogical skills in industry (Harner, 2016), and user experience methods (Carrington, 2016). These two years also comprised of a four-person plan from New Mexico Tech titled "Technical Communication Client Projects and Non-Profit Partnerships: Programmatic Research, Student Voices, and Future Directions" and a three-person panel from Mercer University titled "Facilitating and assessing successful student collaboration."

Moving to 2017 brought about more collaborative presentations in addition to the more tradition single-paper presentation. Pennell and Welsh from the University of Mt. Olive co-presented with Getto from East Carolina University ponder the importance of cross-cultural

experiences, mentorships for academic/industry transitions, and public speaking in online TPC courses (Getto et al., 2017). Other collaborators included four teachers from Fitchburg State University who presented on using user-centered design to empower first generation students for success in TPC courses (Howe et al., 2017); a co-presentation between Johnson from Michigan Tech and Melonçon from the University of South Florida on the topic of branding TPC (Johnson & Melonçon, 2017), and a presentation on TPC recruitment strategies from Kitalong (Michigan Tech), Jose (Grand Valley), and Miner (University of Central Missouri). In addition to collaborative presentation, the conference housed several single presentations on program administrator problems (Kitalong, 2017), service learning for retention (Santee, 2017), and TPC program assessment through advisory boards (Lauer, 2017).

2018 was a typical year of small school representations with a total of six collaborative and individual presentations. Chong collaborated with Rice-Bailey (2018) from Milwaukee School of Engineering to provide current trends in undergraduate acquisition of technological skills, and Kafka collaborated with Carrington from Cedarville University on the application of RABBITT to user experience. Other collaborations included a group of researchers from Oregon Institution of Technology who discussed strategies for implementing service learning projects in general education courses to improve profession communication competencies (Lancaster et al., 2018). Other small school institutions presented on trends in TPC classrooms (Nichols et al., 2018), justice and TPC (Turner et al., 2018), data fluency in TPC curriculum (Masters, 2018), and employment trends for TPC curriculum updates (Brewer, 2018).

2019 is the last year with available conference proceedings to the public. There were nine presentations total from Milwaukee School of Engineering, High Point University, Fitchburg State University, Mercer University, Santa Clara University, Francis Marion University,

Framingham State University, Winthrop University, Frostburg State University, and Michigan Technological University. These institutions' professors brought rich discussions to the conference this year with topics like TPC artistic creativity (Rice-Bailey et al., 2019), social justice and tiny houses (Trauth, 2019), TPC in a liberal arts university (Sylvia et al. 2019), interdisciplinarity and grant writing (Brewer, 2019), UX and internships (Turner & Voss, 2019), UX and writing program design (Masters & Fillenwarth, 2019), cultivating TPC community (Coyne, 2019), interdisciplinary expectations in the TPC service course (Ralston et al., 2019), and collaborations with Chinese universities (Morris et al., 2019).

This comprehensive analysis of CPTSC's conference proceedings proves how small schools' voices have been present in almost every year of the conference's existence. And while the topic of small schools is not as prevalent in journals, these conference proceedings show that they are still apart of TPC's programmatic identity.

Conclusion

The different strands of this literature review serve to name the current identities of small colleges and universities in hopes of creating a sustainable future for these spaces. While there are very few articles in scholarly journals about TPC programs in small schools, this reality does not mean that they do not exist. When I first started my research by examining journals, I was not even sure that my topic was going to be viable because I could not find much scholarship on the topic. And then, to my surprise, a third of all TPC programs are in schools with undergraduate populations of less than six thousand. Not only was I excited that I now had a viable dissertation topic, but that small schools significantly contribute to the TPC field even if they are not mentioned in journal articles. Originally, I went into this dissertation with the idea that I had to create new knowledge – a new idea, theory, or method. But I am doing none of

those. Instead of I am naming a space that simply has not been named because TPC journals do not determine the only reality of TPC in practice. Small colleges and universities push back against this epistemological view of scholarship because knowledge does not come from one source only – and as it turns out, CPTSC's conference proceedings reveal more of small institutions' identities than does TPC's journals.

As stated in this literature review' beginning, all the different strands of scholarship in this chapter contribute to my understanding and interpretation of the narratives presented in chapters four, five, and six of this dissertation. This literature review also contributes to the types of questions that I asked my interviewees as stated in chapters three. In short, this literature review has laid the groundwork for understanding what exists in scholarship in regard to small institutions, so the next section explains the method of data collection in order to fill the gap this gap in scholarship.

CHAPTER III

METHODS

To build upon the rich conversations concerning TPC programs, programmatic research, small four-year institutions, and small institutions' presence in CPTSC, this dissertation project poses the following two research questions: Do TPC programs exist in small four-year US institutions? If so, how do TPC program directors and faculty at small US institutions advocate, implement, and sustain their TPC programs? This dissertation answers the first question by using Lisa Melonçon's comprehensive database of all TPC programs in America to identify the small four-year US institutions that have a TPC program; and then, this dissertation answers the second question by collecting qualitative data through interviews with some of the TPC faculty at these small institutions concerning the topics of advocacy, implementation, and sustainability. Both methods serve to understand the current state of small universities and colleges in the US that house TPC programs, and both of these methods affirm the need for technical communication scholars to use both quantitative and qualitative methods by recognizing the affordances and challenges of each type of knowledge collection (Charney, 1996). Particularly in my study, the qualitative methods build off the quantitative methods. Without the comprehensive knowledge of the TPC field, I would not know who to email and interview for my qualitative research. And though this dissertation mainly focuses on the analysis of my qualitative data, the quantitative methods support my qualitative methods by providing a comprehensive view of small TPC programs in the United States which pinpoints the TPC programs that appear in my qualitative analysis chapters.

To do this work, this chapter first explains my quantitative methods by describing the ways I took Lisa Melonçon's comprehensive database of all TPC programs and narrowed it

down to the 121 institutions that fit the parameters of my dissertation. And then, the second half of this chapter explains my process for conducting and coding the interviews from 26 out of the 121 institutions. This section also includes graphics pertaining to the amount of students in each program, number of faculty who teach in the program, the types of programs at these institutions, and the Carnegie Classification of each institution in my study.

Quantitative Methods

And as mentioned earlier in the literature review, this dissertation is not the first to conduct research in regards to the identity of TPC programs in the United States. In 2005, Harner and Rich mapped curricular trends in TPC undergraduate curriculum from 80 bachelor degrees at the time; in 2010, Yeats and Thompson collected data from 147 institutions where 62 of them offered bachelor degrees, undergraduate certificates, and/or a minor in TPC; and in 2013, Melonçon and Henschel conducted a follow-up study from the 2005 study that found 185 undergraduate programs in the U.S., representing a 131% increase. These scholars collected data on the total landscape of TPC programs, so this dissertation will not be re-collecting data on all TPC programs; rather, this dissertation only examines the identity of small four-year institutions with undergraduate populations of six thousand or less where sometimes TPC programs exist but sometimes do not. With this focus, I am not looking at all TPC programs; rather, I am exclusively examining small institutions' TPC programs to fill a gap in scholarship on these institutions' identities.

For this project, quantitative methods were used to understand these small institutional identities by collecting data from four-year small colleges and universities who have a TPC program and/or curriculum. I define "small" as six thousand or less undergraduate students. While this is a somewhat arbitrary number, I chose it because there seemed to be a significant

leap between six thousand to eight or nine thousand undergraduate populations; it also took out large endowment small schools that generally are over six thousand in undergraduate population. For the purposes of this dissertation, a program is defined as generally encompassing majors, minors, concentrations, emphases, tracks, and specializations – something that can appear on a person's transcript (Harner & Rich, 2005; Melonçon, 2014). Therefore, if a small college has an undergraduate minor and not an undergraduate major, my study considers this college to still have a program. Additionally, I differentiate between a programmatic focus and a pedagogical focus, where a programmatic focus examines administrative decisions concerning curriculum mapping, assessment, recruitment, etc. and a pedagogical lens examines approaches on how to teach the curriculum itself. For example, a programmatic focus is concerned about what classes to require in a degree and pedagogy is concerned about how to teach those courses (assignments, rubrics, class activities, etc.). My study is only concentrated on the programmatic lens rather than the pedagogical lens, but I realize that these two are not mutually exclusive. Obviously, pedagogy informs programmatic decisions and programmatic decisions inform pedagogy; but for the sake of scope, I have decided to just research programs as I am not collecting syllabi, assignment sheets, and other artifacts connected to the classroom experience.

To further narrow down my research, my study concentrated on undergraduate degrees, so associate and graduate degrees were considered out of the scope of this project though data collection still needs to be collected in these areas that are key parts of TPC identity. Additionally, my dissertation did not collect data from community colleges, but I do want to point out the similarities between my research and a recent article in *Programmatic Perspectives* by Bivens et al. (2020) titled "Locating Technical and Professional Communication at Two-Year Institutions." These scholars point out that research on two-year institutions has stalled in the last

thirty years and that their findings prove how TPC is thriving in these spaces. Similar to how Bivens et al. address the lack of research in community colleges, I see the lack of research in small four-year institutions.

Another important element that was not collected in this study is the implementation of service courses in TPC. This course is the type of technical communication course that is taught or co-taught by English faculty for another department like Biology, Engineering, Business, etc. Though these courses are important to the discipline of TPC, they are not indicators of whether a school has a TPC program or not. For example, the small school that I work at has a TPC introductory course but does not have a minor, major, track, or emphasis degree and therefore does not have a program and was not part of my data collection.

With the service course taken out of data collection, I only collected data concerning undergraduate population, TPC degree, TPC track/emphasis, and TPC minors. According to Melonçon's TechComm Programmatic Central (https://tek-ritr.com/techcomm-programmatic-central/), there are 324 institutions with a TPC program and 121 of those institutions are from small schools; therefore, my research only studied these 121 colleges and universities. Table 1 explains each data point with each question that aided in collecting the information needed:

Table 1

Collection of Quantitative Data

Data Point	Question	Explanation
Institution Population	How many undergraduate students does the university have?	This question ensures that I only collect data from institutions with undergraduate populations of less than 6000.

Table 1

Continued

Data Point	Question	Explanation
TPC Degree	Does the institution have a Technical Communication or Professional Writing degree (B.A.) or (B.S.)? If so, what is its exact title?	This data point will allow me to see if the institution has a formalized TPC program.
TPC Track/Emphasis	Does the institution have an English degree with a Technical Communication track or emphasis? If so, what is its exact title?	This data point will allow me to analyze how TPC lives in small contexts when there is no official program. A track/emphasis is different from a degree: a student can get a degree in English with a track in TPC and that is not the same as a TPC degree. I am defining the word "track" and "emphasis" as the same.
TPC Minors or Certificate	Does the institution offer a Technical Communication minor or certificate? If so, what is its exact title?	This data point will allow me to view if there are any minors or certificates at the institution.

This information was collected in an Excel spreadsheet from a total of 121 institutions that are listed as small four-year institutions with undergraduate populations of six thousand or less. These data points helped me answer my research question because they allowed me to assess if and how TPC programs are being disseminated in small institutional contexts.

With this collection of quantitative data, I can confidently answer my first research question: Do TPC programs exist in small four-year US institutions? Yes, TPC programs in small four-year US institutions make up 37% of all TPC programs.

Qualitative Methods

After gathering quantitative data concerning a comprehensive look at current TPC programs in small colleges and universities, I then collected qualitative data from stakeholders in 26 of these programs who were listed on Lisa Melonçon's database and who consented to an interview. While the quantitative data assisted in understanding what programs exist, these methods fail to understand the history and support of these programs that can only be collected through individual interviews, not institutional course catalogs and websites. Because of this exigency, this section explains the qualitative process of the recruiting, interviewing, and coding processes of the qualitative section of my dissertation.

Since my second research question focuses on how TPC exists in small institutions, I interviewed people on how they advocate, implement, and sustain these small TPC programs. Creswell and Creswell (2018) broadly define qualitative methods as the collection of observations, interviews, documents, visuals, and/or digital materials; but for the purposes of my study, I used individual interviews because this method captures what institutional websites and catalogs cannot.[2] To do this work, I recruited 29 participants from 26 different small four-year institutions that offer a TPC program, which could include a major, emphasis, track, minor, certificate, and/or courses. The participant number is 29 because two institutions wanted more than one person to attend the interview session because they believed more voices could better tell the story and situation of their TPC context. All the participants were faculty who currently teach in their institution's TPC program, either as a chair, TPC director, full professor, associate professor, or assistant professor. No adjuncts were interviewed in this study.

[2] Focus groups and group interviews were not used because many of the small institutions only had one person with TPC credentials. While I only required individual interviews, two of the people that I interviewed invited others into the Zoom conversation, so technically I had two group interviews that were my participants' choice.

To invite faculty to participate, I sent an invitational letter by email to their institution's email address found on their institution's website (see the Appendix for the exact wording of the email). Since there were 121 institutions that met the parameters of my study, I sent 121 individual emails to one faculty member at every single institution. Each email included general verbiage about my study and then also included the specific program that I was interested in talking to them about. For example, I always bolded the following clause in the email invitation: "and I was wondering if you would consider an online interview with me through Zoom about INSTITUTION's NAME English BA in Professional Writing and Rhetoric?" This bolding drew their attention to the specific program that their institution offered and made it clear to them what information I was trying to collect. This extra step in the process meant that I looked up each institution's specific program and program director's email. I emailed every institution, so the 26 interviews are the people who responded to my email and generously offered their time for this dissertation to happen.

While all the people I interviewed were faculty from small institutions with a TPC program, they were diverse in other ways like their terminal degrees, job titles, program types, and Carnegie Classification. For the purposes of understanding the backgrounds of the participants whose narratives appear in chapters four, five, and six, Table 2 showcases all the degrees of the people I interviewed:

Table 2

Types of Participant's Degrees

Degrees
12 PhD Rhetoric and Composition
7 PhD Technical Communication and Rhetoric
3 PhD Literature
2 MFA Creative Nonfiction and Fiction
1 PhD Applied Linguistics
1 PhD Rhetoric/Comp & MFA Fiction

This information was collected before the interview with the participant because most degrees can be found on universities' and colleges' websites, but I always double checked with the participant at the start of the interview to confirm their degree and title. Some people's information was inaccurate or vague on the institution's website, so the above degrees have been cross-checked with the participants.

Since there are not many technical communication doctoral degrees in America, it is not all that shocking that the type of degree with the most popularity is a PhD in Rhetoric and Composition. TPC professionals coming from a PhD Rhetoric and Composition program makes the most sense because TPC aligns best with the histories and theories of that academic disciplines as opposed to the fields of literature or creative writing. Notably, seven participants have PhD in Technical Communication and Rhetoric. All the other PhDs in Rhetoric and Composition were awarded by a wide variety of institutions across America, but the PhD in Technical Communication and Rhetoric only originates from one institution: Texas Tech

University. This institution, by far, was the most popular degree of my participants. Their PhD program still aligns with many of the values of traditional rhetoric and composition programs, including rhetorical theory and composition areas of emphasis, but they also include an emphasis called "Technical Communication and User-Centered Design" which concentrates more on workplace communication and management than possibly other rhetoric and composition programs. When I casually mentioned to my participant John the amount of Texas Tech graduates that existed in my student, he responded, "There was a point at which they called us the Evil Empire, […] but we all seem to be pretty successful right now. So if you're still interviewing us, we're doing what we're supposed to; Joyce's[3] vision turned out to be good." This vision seems to extend to small institutional contexts where TPC faculty are proud of their degree from Texas Tech to the point that my participant Sean who has a degree from Texas Tech convinced his colleague who has only a master's degree to complete her doctoral degree at Texas Tech. Clearly. Clearly, this doctoral program has had an impact on small institutional programs.

In addition to degrees in rhetoric and composition and technical communication and rhetoric, it is interesting that there were three program directors with MFAs – one in creative nonfiction and two in fiction. At larger institutions, a faculty member with an MFA running the TPC program seems absurd; but at these smaller institutions where faculty TPC expertise can be scarce, it might be that out of necessity faculty with MFAs have to direct and teach in the TPC program for it to exist. For example, Jake got a job at Northern Michigan University after graduating with his MFA in creative nonfiction and then spent five years teaching there; but after five years, the university would not renew his contract, so he was forced to find work outside of academia doing instructional design, copyediting, and all kinds of content creation. He spent

[3] This name refers to Joyce Locke Carter who was an Associate Professor at Texas Tech but now is the Department Chair at University of Arkansas Little Rock.

three years doing this type of work before he got his current faculty position directing his small institution's professional writing bachelor's degree.

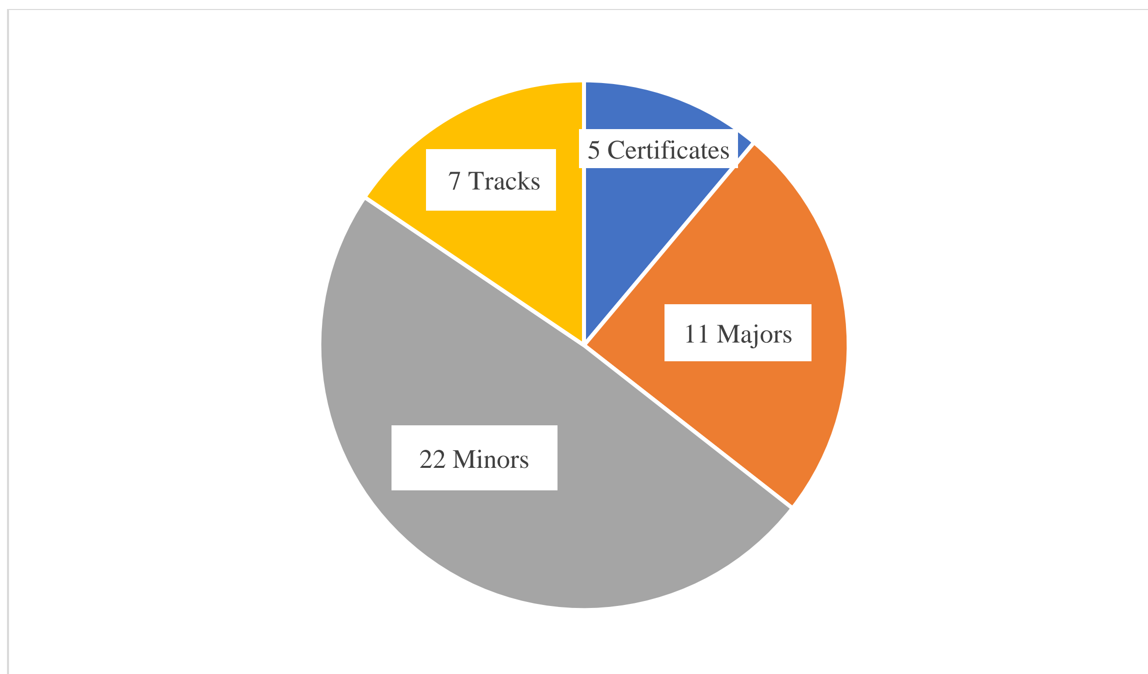
Another data point that I collected before conducting the interview was the interviewees' job titles. My study included 9 full professors, 12 associate professors, and 5 assistant professors. Many of them also had additional titles such as writing center director, WAC coordinator, director of institutional assessment, director of campus internships, director the center for teaching and learning, etc., but I was mainly interested in their full/associate/assistant rank since that can tell me more about their institutional power. With 21 participants at the rank of full or associate professor, it seems that many people working in small institutional contexts are getting promoted and taking on important roles in their local contexts, including the oversight of the TPC degree. Though none of my questions specifically asked about sabbaticals, six of the 26 participants mentioned that they were either on sabbatical (William) or about to go on sabbatical (Diane, Jake, Jane, Sandra, Stacy). This point is interesting because it might be assumed that small institutions could not afford sabbaticals or could not find faculty to teach the classes so that people could go on sabbaticals – but this does not seem the case for six of my interviewees. Sandra mentioned that taking sabbaticals at her small school was challenging but still doable. She explained how her writing center coordinator was supposed to take over her position and courses for the fall of 2022; but Sandra had to postpone her sabbatical to spring 2023 because the writing center coordinator needed more support in designing and teaching Sandra's courses – something that Sandra was willing to do.

Another data point that I collected prior to conducting the interview was information about the program available to me on the institution's website. I read as much about their program prior to the interview as possible so that I could potentially ask specific follow-up

questions directed at their unique program and context. Here in Figure 1 is the breakdown of all of the program types that I interviewed:

Figure 1

Types of TPC Programs



By far, the minor was the most popular program in the 26 institutions that I collected data from. This finding is not surprising since minors are less work, time, money, and faculty compared to creating and sustaining a major – but this logic would also assume that there would be more certificates. Many people also mentioned how much easier it is to create a minor rather than a major because majors are tied to accreditation, state standards, and assessments. Several faculty members in my interviews said that they do not assess their minors which made it easier to create and support them.

The last data point that I collected prior to the interview was the institution's Carnegie Classification (Table 3). This massive database was founded by the Carnegie Foundation for the Advancement of Teaching in 1970 which is now managed by the American Council of Education who gets their information for the database through IPEDS (Integrated Postsecondary Education Data System) and the College Board. It categorizes all US institutions into various components: basic classification, undergraduate instructional program, graduate instruction program, enrollment profile, undergraduate profile, and size and setting. Since my study only focuses on undergraduate programs, I looked up the undergraduate instructional program for all the colleges and universities that I interviewed:

Table 3

Instructional Program Status

Instructional Program	Definition
9 Balanced Arts & Sciences/Professions, some and high graduate coexistence	41–59% Arts/Science and Professional Fields
14 Professions plus Arts & Sciences, some graduate coexistence	60-79% Professional Fields
3 Professions Focus, some and high graduate coexistence	80%+ Professional Fields

While this information is by no means revolutionary, I do think that it is interesting to note that there were no schools that I interviewed in the Arts and Sciences category where 80% of bachelor's degrees are in the Arts and Sciences. Since many (not all) technical communication programs are housed or supported by English faculty, it is interesting that there were no schools

that I interviewed from this undergraduate classification since the English Department is housed in the Arts and Sciences. But the reason could just be chalked up to the current state of academia where most college and universities are moving towards STEM-dominant degrees. The three professions-focused institutions were a tech school, a school of engineering, and a college with the smallest population of all 121 schools at 761 undergraduates.

After collecting some preliminary data on the interviewee, their programs, and their institutions, I thus began to conduct one-hour interviews over Zoom. Creswell and Creswell describe these interviews as "involve[ing] unstructured and generally open-ended questions that are few in number and intended to elicit views and opinions from the participants" (p. 187). I chose the method of interviews because it allowed for more open conversation and fluid direction that a static survey cannot facilitate. Sometimes the best data collected was not originally in the question script, but rather at the very end of the session when the interviewees tend to reveal something fascinating that was not originally on the list of interview questions. Additionally, participants were not required to turn on their cameras, and any other accommodations requested by the participants were implemented. If participants requested to know the questions beforehand, I sent the list of questions that also included the IRB information to the participant a week before the meeting, but I emphasized that participants did not need to prepare for the meeting. An IRB application to ODU was submitted on July 6, 2022 and received approval August 15, 2022. Data was collected in the fall semester of 2022 from August to October, and participants' agreement to participate in the interview was the study's consent form.

For the interview procedures, my study implemented Creswell and Creswell's (2018) steps for semi-structured interviews: introduction, opening question, content questions, probes,

and closing instruction (p. 191). I first introduced myself by discussing my status as a doctoral candidate and explained the purpose of my study, and then I outlined the structure of the interview. Second, I asked for their verbal permission to record them, and then I started with opening questions that served as icebreaker questions inquiring about their pronouns, degrees, titles, job description, and arrival in the TPC field. Next, I asked content questions concerning the advocacy, implementation, and sustainability of their TPC program. Generally, these categories represented the past, present, and future of the TPC programs, understanding a holistic view of the program from its inception to future aspirations. Here in Table 3 is the list of interview questions:

Table 4

List of Participant Questions

Type of Question	Questions
Opening Questions	What is your pseudonym? What are your pronouns? What are your degrees in? Do you believe your training prepared you for your work? What is your title? What is your job description? How did you arrive in the technical communication field?
Advocating	Where did the idea for the technical communication program come from? How did the program start? Who were key stakeholders in making the program happen? Where there any particular challenges in starting the program? Would you say that your small institutional size created more challenges or benefits in creating a TPC program?
Implementing	What is the current curriculum in the program? Has it evolved over time? If so, how? How do other departments view the technical communication program?

Table 4

Continued

Type of Question	Questions
Implementing	Who approved funding for your program? Do you have any community partners and/or projects implemented in the program's curriculum? Do you have an advisory board? How does your department handle technology in regards to curriculum? What are defining features of your program? Have you found that your administration and department support the TPC program? What have been the challenges of implementing your program? What have been the biggest successes of your program? How many people teach in your program? What are their credentials? Are there any courses cross-listed with other departments? Do you have any TPC courses that are also general education courses? What kinds of students are currently in your program? How did they find the program? Is there a minimum amount of students for a class to make?
Sustaining	How many students are in your program? How do you assess your program? Do you have a future vision for your program? How do you recruit students to your program? Do you have faculty development for your program? Are there any future improvements you would like to see in your program? What resources have helped sustain your program? What advice would you give a professor starting a new TPC program?
Closing	Is there any further information that you would like to share that we have not covered?

These questions also included what Creswell and Creswell call probes where the interviewer uses phrases like "tell me more," "Can you explain your response more?," and "What does 'not much' mean?" (p. 191). As recommended by these scholars, the last question was "is there any

further information that you would like to share that we have not covered?" (p. 191). This question signaled to the interviewee that the session was about to an end. Lastly, I ended the interview thanking the participant for their time and ensuring that their responses would remain confidential.

After collection of all twenty-six interviews, I implemented Creswell and Creswell's[4] five steps to the data analysis process: "(1) organize and prepare the data for analysis, […] read or look at all the data, […] start coding all of the data, […] generate a description and themes, […] and represent the description and themes" (p. 193-195). To enact these steps, I first downloaded the transcripts automatically generated by Zoom and then listened to all recordings again to check that the transcripts were accurate, making changes if necessary and making the document more readable by deleting unnecessary space. Next, I read over all the transcripts to get an overall impression of the tone, ideas, and meaning of the data. While listening and reading through these transcripts, I kept an interview journal where I jointed down my impressions of the participants' answers and some general thoughts about their answers.

After reading through the transcripts to get a general impression of its content, I started coding the data by uploading my transcripts to MAXQDA, a coding software used by many writing researchers (Geisler & Swarts, 2019). To code, I used a word or phrase to capture an aspect of the data, ideally a word or phrase from the actual language of the participants (Creswell & Creswell, 2018, p. 194). Both prefigured codes and emergent codes were used depending on the data, where prefigured codes are the interview questions and emergent codes are developed through the coding process. An example of a prefigured code is "history" because I specifically asked about the programs' history, and an example of an emergent code is "alumni" because I

[4] I chose Creswell & Creswell because it is a best-selling text on quantitative, qualitative, and mix methods research design.

did not specifically ask a question with this exact word in it, yet participants naturally gravitated to discussing their alumni. Lastly, I conducted Creswell and Creswell's final step by using the themes of advocating, implementing, sustaining as organizational subheadings for my dissertation chapter on the data's results, presented in narrative form using both short quotes and block quotes for analysis. Here in Table 4 is a table of outlining all of my prefigured and emergent codes:

Table 5

Compilation of Prefigured and Emergent Codes

Chapter Title	Prefigured Code(s)	Emergent Codes
Advocating	History	Beginnings Courses and Program Titles Faculty, Departments, and Administration Failed TPC Programs
Implementing	Technology	Accessibility and Insecurities IT Departments and Administration Design and UX Studies Computer Labs Software and Partnerships No Technological Instruction
	Partnerships	Administration and Institutional Partnerships Guest Speakers and Advisory Boards Organizational Partnerships Courses and Internships Challenges
Sustaining	Assessment	Problems and Challenges Frequency Solutions and Successes
	Recruitment	Problems and Challenges Solutions and Successes Direct and Indirect Recruiting Methods

Table 5

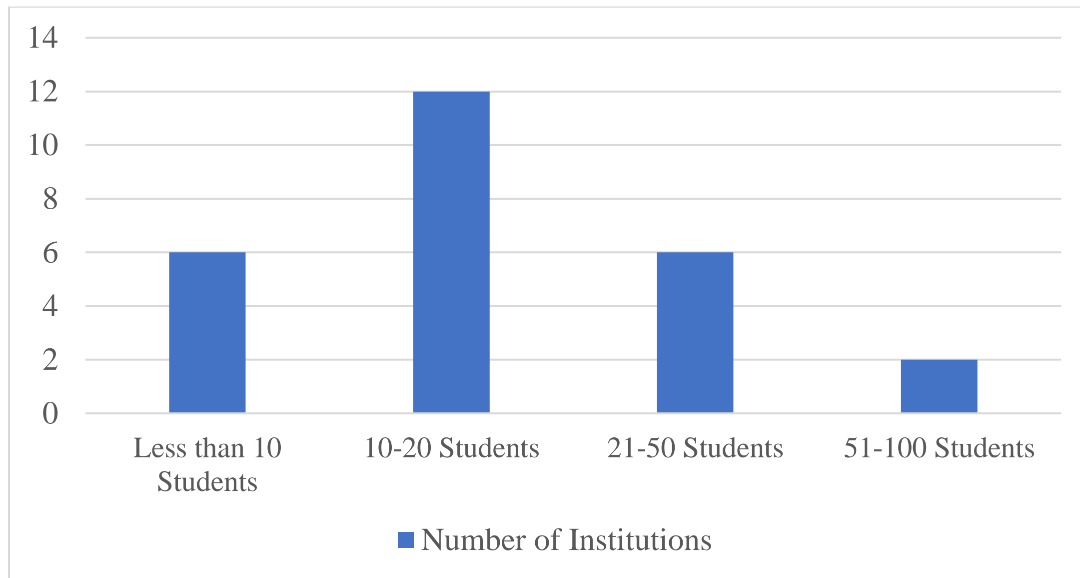
Continued

Chapter Title	Prefigured Code(s)	Emergent Codes
Sustaining	Professional Development (PD)	Institutional PD Contributions to PD Conferences Publications Miscellaneous
	Future Improvements	Student Numbers Faculty Hiring Technology Course Revisions Partnerships Graduate Degrees Social Justice

While most of the questions of the interview were open-ended and needed qualitative coding, there were two questions that required exact answers: How many students are in your program? How many faculty teach in your program? These questions were important to me because I wanted to see how big these programs were based on students and faculty; therefore, these numbers helped me gage how small or big these programs actually are. Here in Figure 2 is a graphic of the number of students per program:

Figure 2

Number of Undergraduate Students in Participating Institutions' TPC Programs

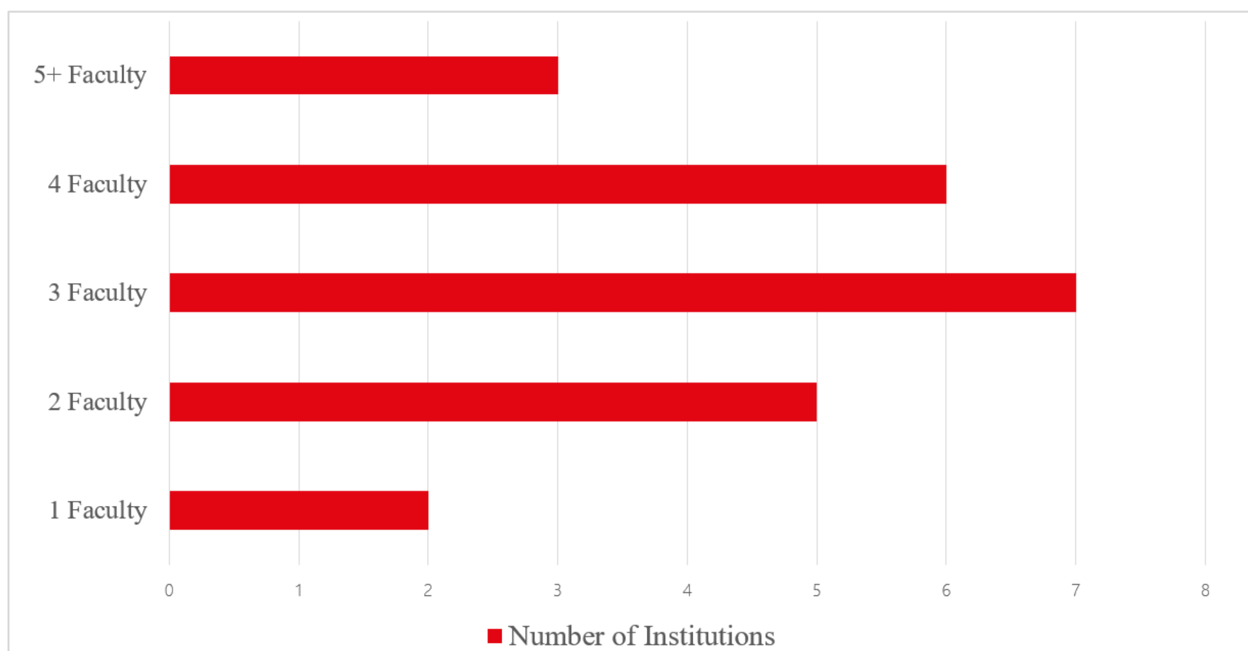


These numbers show a wide range of students in the program, with the smallest program having just three students and the largest program having somewhere around a hundred students. All participants bemoaned the lack of students in their program, some attributing it to COVID and the decrease of 18-year-olds attending college. Even Stacy whose institution had the most students in my study still talked about a time where her program had even more students.

The other more quantitative question that I asked was about how many people taught in the program. Here in Figure 3 are the answers collected:

Figure 3

Distribution of Institutions with TPC Faculty[5]



There are two faculty that I interviewed who teach every single class in the major: Ron and Jake. In Ron's situation, he is one of three English faculty where one of the professors is an Americanist specialist and the other is a European specialist; Ron's department had two additional full-time faculty that retired but administration would not allow them to hire anyone. Likewise, Jake also teaches every single class in the major. When I asked about the biggest challenge for his program, he pointed to the lack of faculty to support the program adequately and bemoaned how the students were only limited to his perspective and expertise:

[5] Three institutions did not know how many faculty taught in the program.

> I'm one guy with my own set of experiences and my own tastes, and I think you lose the diversity of perspective, the diversity of pedagogy, when you really have a primary professor. It's almost like I'm your home room teacher, you know, and you're just stuck with me. […] I think there's value in being able to sit at the feet, in a sense, of a variety of faculty, and students don't get that option. They've got one option for – Well, we have two professors who teach literature here [but] for writing stuff, like you know, I'm it. And I think that can be detrimental to a student's growth as a writer to only hear a single voice.

What was most surprising to me about both Ron and Jake's stories is that their program is a major, with no minor or certificate. Obviously, the more voices the broader the students' perspective, but I thought that the one-faculty program would be prevalent in a program with only a certificate: three courses taught by one faculty member. Though I did not ask Ron or Jake about what they thought of their one-person programs, both seemed to imply that it really harms the integrity of the TPC curriculum. Jake even mentioned moving the TPC major to be solely online so that adjuncts from industry could potentially teach it and not just him. He also mentioned that it might come down to just getting rid of the program all together.

Conclusion

This chapter has accomplished two components: answered one of my research questions and presented the procedures for answering my second research question. With the knowledge that 37% of all TPC programs are in small US institutions, the next three chapters present and analyze TPC faculty voices from 26 of those small institutions.

CHAPTER IV

ADVOCATING

The first aspect that I looked at in my transcript data was on the topic of advocating. For the purposes of this chapter, I define advocating as pertaining to the history of the TPC director's argument for the start, existence, and continual evolution of their TPC program. Obviously, sometimes advocating for a TPC program can both succeed and fail; nevertheless, program directors are always advocating in some form even if that advocating leads to failure as evidenced in two of the programs that I interviewed. And while in many ways TPC program directors are always advocating for their program, this chapter specifically examines the history of their advocacy work for their TPC program, so the following narrative presents events that happened prior to the program's present existence with information about the program's current state appearing in chapter five. Overall, this chapter focuses on how the program has changed since its inception – and sometimes the change is going from no program to a program. While I coded the transcripts with the prefigured code of "history," I found that specific emergent codes revealed themselves in four categories within history: (1) beginnings, (2) courses and program titles, (3) faculty, departments, and administration, and (4) failed TPC programs. Therefore, the following chapter is organized with these codes to show the kinds of programs that these TPC program directors inherited (or not) and the ways that they went about changing their programs – presenting a wide range of successes and challenges in these contexts.

Beginnings

A TPC program's inception can be hard to trace and find. Faculty come and go from programs and institutions quite regularly, either switching roles within an institution or switching institutions all together. While the TPC field is still relatively newer compared to the academic

fields of literature and rhetoric & composition, it is still old enough that many program directors at small institutions are not the person who started the program, especially the programs that have existed since the 1980s. Only eleven people out of twenty-six institutions in my study could name the beginning of their TPC program, whereas the remaining fifteen participants had no idea how the program got started though they did have some guesses. Some of my participants started their own TPC programs; therefore, they knew everything about program's inception. Yet others were not there for the program's inception or had only been at their current institution for 1-2 years where the program's beginning was never mentioned. There was also a few of my participants who generously contacted their library archivist, talked to a senior member of the English Department, or reached out to a retired faculty member to collect information for the interview with me. This section of this chapter specifically explains the actual inception of the program, (not the problems that happened ten years into the program), and the reasons why and how the program was started.

There was a plethora of reasons why the TPC program was started. Doug wanted a TPC program because it could make the English Department more marketable, and Jane thought the English Department needed a TPC program to better respond to the marketplace of the 21st century. Others started their TPC programs in response to institutional changes and parental concerns. In Theodore's case, his institution was pushing to be more professionalized in response to declining enrollments, so his institution's purpose was to equate every degree to a job – and a professional writing major sounded like a workplace job. Similarly, Elizabeth also responded to her institutional context when her institution moved to a hyper-focus on credentialling and micro-credentialling, making a clear path for creating a TPC certificate. And in Jake's institution, placing the word "professional" on an English major made it more marketable to parents who

were paying for their children's education in hopes of their children getting a higher paying job one day.

These beginnings point back to Pitts' (2010) history mentioned in this dissertation's literature review. For him, he started the TPC program in order professionalize liberal arts courses, much like many of my participants who look to markets and higher paying jobs as the exigency for starting the TPC program in the first place. While by no means a detriment, TPC does find itself straddling the divide between the liberal arts and professional education philosophies. In many ways, TPC will always reveal the tensions between different philosophies of education where a humanities education cares about ethical approaches to society yet can error on being oblivious to market trends and where a professional education cares about market trends yet can error on being oblivious (or intentionally ignoring) ethical approaches to society. It is interesting that the arguments of TPC being more marketable for the English Department are still used to argue for TPC's existence, arguments that have been around since the inception of the field.

Beyond initial inception, another interesting find in my research was the sequence of the program's creation. When trying to find patterns of which aspect of the program (certificate, minor, concentration, or major) came first, there seemed to be no overall pattern on which these components first formed. Several people talked about having service courses that predated the creation of the program (Jean, Doug, Izzy, Krista, Ron) that eventually turned into a minor or major, but theses service courses were not all the same. For example, when Jean arrived at her institution, the university had a technical writing course that creative writing faculty taught. With her background in rhetoric and composition, Jean was able to present her case to administration for a technical writing minor and it was approved. Likewise, Doug's institution had an intro class

for business majors that was taught by English faculty; based on that one course, he was able to argue for the skills that a PW program could provide the university. Another course that spurred on conversations about a TPC program was Izzy's granting writing class; his institution did not have the standard Introduction to Professional and Technical Writing, so it was his grant writing course (originally titled Hypertext Writing) servicing several majors that eventually produced his concentration and minor. Lastly, Krista's technical communication and business writing service courses made it feasible to create a collateral (i.e., certificate), minor, and major all at the same time.

Not surprisingly, many institutions began their TPC program with a minor and continue to only house a minor in their program with no certificate, major, or track (John, Sandra, Adam, Amy, Sarah, Izzy). Though John did not start his institution's minor, he knows that he was hired specifically to direct the minor that had been recently approved by administration, giving the English Department permission to hire someone with TPC experience. Sandra's institution also started with a minor, but her institution had no program director for it until she was hired; before her, several professors from the communication department taught in it. For Amy, the minor already existed before she arrived on campus and then she later developed the major. And for Sarah, the minor was originally a writing minor that morphed into a concentration within the English degree and then became a public relations major with writing & technical communication concentration.

It would seem that starting with the certificate, moving to the minor, and then ultimately creating a concentration or major would be the best progression for a college, but several participants stated that the major was the first element created in the TPC program (Jane, Jake, Stacy, Wendy). Instead of evolving from a service course, Jake, Wendy, and Jane all said that

their TPC major came from their generic writing major. When Jake came to his institution in 2012, there was a writing major that the institution changed to "professional writing" and expected Jake to make the changes to the curriculum to make this name change make sense. For Wendy, the creation of the degree started in the 1980s as an English degree with a writing emphasis that turned into an English Writing degree that ultimately changed to a Professional Writing and Rhetoric degree. Like Wendy, Jane's major originated in an English major with a writing track that became a Professional Writing major. Stacy's situation was a little more unique. Her institution was advocating for more online completion degrees per department, so Stacy created the online BA in Technical and Professional Writing to help working parents with flexibility and students who had been at the university more than four years to finally graduate.

This discourse on the evolution of the names and homes of TPC reflects similar findings from Sullivan and Porter's (1993) "Remapping Curricular Geography: Professional Writing in/and English." In their article, they show how TPC evolved from a service course taught only by adjuncts to an academic major taught by faculty credentialed in TPC research and application. Depending on how the English department approaches English (as a language, major or department), these authors argue that the vision of English greatly affects the placement and goal of the TPC major or minor, whether it is subordinate or equal to the academic field of literature. Evidence of this theory is seen in practice through the differing names that TPC has acquired over the decades, especially in the names of my participant's majors. As mapped by Sullivan and Porter, the evolution of literature to writing to technical communication also reflects the evolution of small institutions' majors' names. As evidenced in the narratives above, several of my participants are navigating these departmental politics but trying to create TPC names and placements that create ethos for their program, showing how TPC has evolved even further than

the one that Sullivan and Porter provide in their article. One participant who especially demonstrates this change in the field of English is Mary.

Out of all of the participants that I interviewed, Mary by far had the most knowledge about her TPC program because she has been directing the program since 1985 when she arrived at her small institution. When Mary graduated in the 1970s with a PhD in comparative literature, she landed her first job at Rutgers in the humanities and communication department teaching technical writing. Because she had taught expository writing and rhetoric during her graduate program, the university thought those skills could be easily transferred to technical writing courses. At the time, TPC was “just burgeoning onto the market” and Mary wanted to respond to this need. She said,

> Because I'm, among other things, I’m a market whore. College professors are remarkably stupid a lot of times about that, and it's like “I'll just do what I want to do, and then somebody will hire [me]”, […] I'm always looking for a niche. It's like, “oh if there's a need for that, let me get good at that.” And then there's a greater chance of me getting at the job.

In response to her “market whore” ideology, Mary co-authored a TPC textbook about translating technical language to lay audiences which she leveraged to land her at her current position in her small institution. She came into a professional writing program that the university wanted her to turn into a technical writing program, so she turned the major into three separate tracks: (1) professional writing, (2) technical writing, and (3) language, technology, and culture. Her department later dissolved all of the tracks into one Professional Writing major that gave students more flexibility to coursework and scheduling.

Mary's story shows the progression of literature to professional writing since she starts with a literature degree and moves on to creating degrees in professional writing. While she does not take her major all the way to the title of Technical Communication like Sullivan and Porter do, other participants push the authors' boundaries of establishing writing and TPC not as a major but as a department – not including literature in that department.

All of these inception stories point to the reality that TPC programs in small institutions still struggle with the same exigencies that the field had since its inception – still questioning where TPC belongs in academia.

Coursework and Program Titles

Another element connected to the history of the program is the change of its titles and coursework. Since TPC responds to real-time market trends and exigencies, it is important for technical writers and the programs that they graduate from also have agility when it comes to updates in the program, whether that is connected to new industry software or new movements within the academic field of TPC. This section specifically summarizes how participants have changed different elements throughout the history of their program like the program's name, course names, course content, and electives.

Depending on the size of the program and faculty who teach in the program, a TPC program can choose a more generalist approach to TPC where students get to choose from a wide-ranging list of TPC courses or a narrow approach where students have to take a mainly predetermined track of classes with a few classes of choice. For Bert's program, she felt that her original curriculum was just too much of a generalist approach, calling her curriculum "a smorgasbord of classes" with a "hodgepodge of electives." To make her program more focused with a clearer trajectory, Bert changed the curriculum to include four tracks within her Technical

Communication (BS) program: usability, instructional design, multimedia, and technical writing. She also changed some of different lab topics and added a research component to curriculum, providing a more robust curriculum that had definable skills and workplace competencies.

Though Diane did not as drastically change her curriculum as Bert, Diane felt that the biggest changes to the curriculum that needed to happen were in the program's electives. Before coming to her small institution, the program outsourced its TPC electives to other departments; for example, students could take a business management course from the business department to count for their TPC elective. Now, her program has specific TPC electives that are housed and taught within the TPC program – courses like social media and branding, special topics in social justice, and risk and crisis communication. In short, Diane uses the programs TPC electives to keep up with current trends in the field that are time sensitive and relevant.

Bert and Diane's narratives reflect similar sentiments of Latterell's (2003) article on TPC in small colleges. In the article, Latterell discusses the challenges and opportunities of TPC faculty who tend to be generalists of their field which allows them to teach multiple TPC courses as opposed to larger universities who might not allow their TPC faculty to teach as many classes. Unfortunately, Bert and Diane both reveal the drawbacks to being a generalist, causing the TPC curriculum to be less focused and having to outsource courses to other fields even if those other fields do not teach by the same ideologies of the TPC field. I believe that Bert and Diane are aware of this shortcoming of small colleges and are working against it without compromising the integrity of the curriculum.

Other faculty made more minor changes to the program. When first arriving at their respective institutions, many faculty were confused as to the purpose and content of some of the courses (Hannah, Krista, Diane, Wendy, Jake, Sarah). For example, Hannah stated that,

> the biggest challenge I found was the first semester I was here. They had a course called business writing, and [...] a course called technical writing, and there was so much overlap between the two courses. I just had a really hard time figuring out how to differentiate the classes. And [what] it boiled down to was understanding the student population and the majors that were being served by each class. And so I worked really hard on differentiating those two courses. We still have that model today. The overlap is quite a bit less.

Hannah ended up keeping these courses and titles, but she had to work really hard to make sure that they were not the same class with the same assignments. Likewise, Krista also found confusion in the introduction class to the professional writing program and an upper-level course titled “Foundations of Professional Writing.” Later, she found out that the purpose of the class was to teach grammar and basic sentence structure, so Krista revised the curriculum and named it “Editing and Publishing” to better meet the program’s purpose and needs of her students.

There were plenty of other confusing courses that my participants inherited when arriving at their small context. Diane inherited a class called “Professional Writing Workshop” which was supposed to be an instructional manual course and another class called “Media Studies,” so she changed the first class to “Documentation and Client Project Management” and the second class to “Social Media and Branding.” Wendy was hired to teach the course “Writing with Computers” which she changed to “Writing and Publishing.” And Krista came into a program with a course titled “Rhetoric of New Media” and no one had any idea what that course was about, so she changed it to Multimedia Writing.

The evolution of these courses’ content and title points to how TPC directors are grappling with what should be in their TPC program and what TPC program they inherited when

they got to the school. As seen in the above narratives, many TPC directors are just working with outdated names and content – desperate to update their programs to account for more accurate academic and industry standards. This is when small institutions could benefit so much from Cook's (2002) six TPC literacies: basic, rhetorical, social, technological, ethical, and critical. Even with her older article, Cook's literacies still provide an excellent framework for ensuring that TPC students understand the foundations of the field without taking classes with overlapping or outdated content. As discussed in my literature review, the TPC competencies from Cook's (2002) article and Clegg et al.'s (2021) article do not include many differences, proving how the TPC field has found stability in overall outcomes in their programs – something that any school regardless of size can rely on as advice for their program. Even with the TPC field ever evolving, it seems to have found a foundation that has worked the last two decades.

Other smaller changes in the curriculum included internship qualifications, new prefixes, and creation of a new minor based on new courses in the major. Krista advocated that all English majors take the internship requirement that was required in the Professional Writing major, arguing that all majors need to graduate with job experience. On the other hand, Wendy was determined to get her own set of prefixes for her concentration in professional writing. It made it easier for her students to locate the core courses they needed in order to graduate and take the appropriate course sequence.

Not only did the interviewees bring up the changes of courses but also the changes in program names (Manuel, Sean). Manuel's program used to be titled Technical and Professional Communication and he changed it to Professional Writing. The rationale behind this decision was that he believed the new title better reflected the journalistic and magazine direction that he was taking the program with a much larger emphasis in editing and publishing. With the name

change, Manuel was able to add more editing and publishing classes that he was able to develop into a minor that many literature and creative writing students take. Like Manuel, Sean also came into his position wanting to change the title of the program. Historically, his institution's TPC program was housed in the Communication Department and was titled Communication and Rhetoric. Because rhetoric does not translate into industry terms, Sean changed the title to Communication and Information Design, adding several more courses in UX to update the curriculum.

It is interesting to note that Manuel chose to change the title of his program from a focus on communication to a focus on writing. It seems that the TPC field has historically moved from writing to technical writing to technical communication; this progression is not the case for Manuel. Though this was not the focus of my dissertation, the naming of the TPC program differed widely from the 121 institutions that I sent interview invitations to, from technical writing, professional writing, and just writing to technical communication, professional communication, English communication, Science communication, and Communication and Information design. The reasons for a name change to TPC are vast and complex. Changes could have resulted from being more friendly to students and parents, being more removed from the Communication Department, being more closely aligned with the Communication Department, being more associated with higher paying jobs than other English majors, being better aligned with curricular changes, etc.

Notably, two participants indicated that there had been no changes to the program since they had been at the institution (John, Stacy). While John did not indicate why his minor had not changed in the five years of time at the small institution, Stacy provided a detailed reason why making no changes to her certificate, minor, or major was an intentional choice. Stacy's program

exists in a small institution that is part of a large R1 institution. Currently, the R1 institution's regulation is that if one of the smaller institutions within the R1 system has a degree than all of the other small institutions have to also have the degree. When the program was first formed, this policy was not in place, so Stacy's program was grandfathered in, despite the other smaller institutions in the R1 system not having her program. Stacy fears losing the program if she wants to make any curriculum changes, so she has decided to update course content rather than update course names and program titles as to keep a low profile. She indicated that she was interested in making changes to the program, but she does not have written documentation that she can actually keep her program or that she is grandfathered in from the updated policies. Since she has a thriving degree with around 100 students, Stacy has decided that the program is successful even if it still needs some updates.

While less conventional than other TPC programs, Stacy's strategic choice reflects one of Johnson et al.'s (2018) components of lean technical communication: responding to the needs of institutional context. In essence, Stacy is hyper aware of her unique situation and how her TPC program can thrive even with its bizarre constraints. It might not be revolutionary, but small colleges with adept knowledge of administration and academic policies can strategically support and sustain their programs – as clearly demonstrated in Stacy's situation.

Overall, this section shows how TPC directors are highly aware of institutional contexts and industry demands to effectively change (or not) their courses and program titles. In many ways, small institutions have the same challenges as large institutions and continue to work through tensions and questions that have been around since the beginning of the TPC field.

Faculty, Departments, and Administration

The next emergent code in the prefigured code of history is the topic of faculty and departments. These topics are not necessarily unique to small schools, since every TPC program has to navigate the hiring process, turnover rates, departmental squabbles, inter-departmental squabbles, and administration demands. But sometimes these challenges are exacerbated at small schools where the TPC program director is also the director of composition, writing across the curriculum, the writing center, and the Center for Teaching and Excellency. This section specifically focuses on the history of hiring and turnover challenges; alliances and dissentions between the TPC program and the Literature and Communication faculty; and support and tensions between TPC program and the institution's administration.

Part of the history of a TPC program is the challenge of trying to get people to teach in the program. Doug remarked, "Let's just fill it with other people because small schools frequently just need bodies […] that's a little too derivative, but you need people to teach the comp classes. So if you end up with slightly different sets of specializations, you kind of work with that." This comment speaks to the situation of many of the people that I interviewed: a large majority of them teach first year composition in addition to their TPC responsibilities. This job description might not be as appealing to some professionals in TPC which can make the hiring process seem like a desperate plea for anyone with any TPC experience to take the job, not a well-tailored job description that fits an expertise hole in the TPC curriculum. In Doug's case, two English literature faculty members had just retired so the administration wanted to start a TPC program; therefore, they were able to hire three TPC professionals and the department just had to figure out how to make it work.

While Doug's institution was desperate to get anyone to his institution to support the TPC program, Sandra and Theodore had the opposite problem: they struggled to get anyone to stay at their institution for any length of time. In Sandra's program, she consistently experiences TPC faculty leaving after three years at her institution, which means that she has to spend so much of her TPC responsibilities in hiring and transitioning new faculty into her program – a massive time suck. Likewise, Theodore was distraught when his two colleagues who had helped start the program left for retirement and another institution. For five years, he was the only TPC full-time professor at his university, teaching all of the TPC courses with a few adjunct instructors. More recently, administration approved two new TPC hires, so thankfully he is no longer the only person in the TPC program.

Sean's story was very similar to Theodore's story. Sean said that the biggest challenge in creating his program was trying to ensure that his program did not just consist of him only. He stated,

> I can't teach the whole minor […] that'd be unethical. That'd be unfair to the students just one instructor […] practically I couldn't do it, especially because of my other course offloads for administration. I just could not teach the number of courses that were needed. So that was one of the hardest things I had to work with and I frankly had a plan, for that was set to do that. But, uh, Covid, you know COVID derailed a lot of that.

Thankfully, Sean was able to find some more support in the Communication Department to help teach his courses, but he would still love to hire more TPC faculty to teach in this minor.

Other participants also vocalized this concern of struggling to find people to teach in the TPC curriculum – and some people got really creative. For example, the first coordinator of the TPC program at Krista's institution had a PhD in drama but she had extensive experience as a

technical writer for IBM. Another example of the struggle to find faculty is Manuel's institution. With the retirement of his school's TPC program, he struggled to find someone – anyone – to take the full-time job in his TPC program. Eventually, he hired someone who only had a master's degree but has thirteen years as a professional writer for Nationwide Insurance.

In addition to the challenges of hiring, small school TPC programs also have to navigate departmental politics within the departments that they exist. Krista and Jean felt the brunt of these politics from the literature professors in their department. Apparently, when the TPC program was first proposed for the institution the literature professors really pushed back because "our profession is teaching literature, and that's the only profession in the English department." At the time, the identity of the English Department was in literature and the professional writing major questioned that identity. Jean had the same experience with her literature faculty. She spent so much of her time trying to convince the literature faculty that a professional writing minor could be seen as a possible way to grow as an English Department. Even today, one of the changes she would like to see is the English Department to require an internship for all of its tracks, but the literature faculty believe that the internship should only be for the Writing and Professional Communication minor.

These participants who struggle with the hiring and sustaining of faculty reveal similar challenges that Sapp (2006) outlines in his article, "The Lone Ranger as Technical Writing Program Administrator." The reasons for a TPC faculty member either leaving their position or moving onto a different career are vast and by no means can be captured in a few narratives. But Sapp still provides some plausible reasons why TPC faculty hiring and sustaining is so difficult: TPC faculty not doing what they were hired to do, TPC faculty not properly trained for their positions, TPC faculty lack the support and respect of other faculty at the institution, TPC faculty

not adequately provided strategic planning or instructional resources for success, and TPC faculty receiving little appreciation for their expertise and scholarship in the TPC field. Though Sapp is not necessarily addressing only small institutions, his article captures the realities of hiring and retention that continues to exist in small institutions.

Not only do small schools experience tensions within their own departments, but also with other departments. Jane tried to partner with the Communication Department (academic field, not university admissions) but "they don't place well." One of the problems was that none of the faculty had degrees in Communication, so much of the guidance they gave students was wrong. Similarly, Ron had trouble with the Communication Department. They had recently left the College of Arts and Sciences and were trying to establish their identify in the Business Department, so they did not want to be associated with a Professional Writing minor in the English Department.

But other people found good partnerships in the Communication, Business, and Engineering Departments. Sean was hired to start a TPC program by a faculty member in the Communication Department. This person wanted to work closely in creating a program that incorporated some of the Communication courses into the TPC curriculum, like specific speech courses. Sarah also found friends in her Communication Department that took her in when her TPC program dissolved because her background in TPC allowed her to teach some courses in their curriculum. Additionally, Wendy found herself with a Journalism program that wanted to leave the Communication Department to be under her Writing and Rhetoric program that housed a specialization in professional writing. Their reasoning was that they wanted to be more associated with writing rather than speech. And for Jean, her minor was encouraged by the

Business Department who was instrumental in the support and creation of their Writing and Professional Communication minor.

Bert has made her TPC program's home within the Engineering Department. Though every program placement has their benefits and challenges, Bert had found overall that she is well-supported within the Engineering Department. The department requires a two-course sequence required by all Engineering majors and houses the Technical Communication (BS) and minor. Bert raved about how ABET (the accrediting body for Engineering) continually mentions the benefits of the TPC program within the Engineering Department, giving their Engineering students stronger communication skills.

As evidenced in the narratives above, most TPC programs find success in creating sustainable partnerships that in turn contribute to the sustainability of the program. The narratives presented above are similar to Henning and Bemer's story in this dissertation's literature review. Instead of focusing on disruption, these scholars found success in the cultivation of interdisciplinary collaborations which they believe are easier to create and sustain given the nature of small institution's contexts.

Now that the history of faculty and departments have been summarized, it is time to move to administration. What is the history of small school TPC programs and the institution's administration? The word "administration" can become an elusive word in academia because faculty members can take on administrative roles while still teaching courses. For the purposes for this next section, I am defining administration as referring to academic administrative staff members who are making decisions for the university like presidents, provosts, and deans. Since there is no one school that is the same, the following stories show both negative and positive support from administration.

Unfortunately, Doug and Amy had negative interactions with administration. Doug had an administrator want him to start a TPC program "to use Facebook appropriately" and "to program a Twitter." Doug discussed how he had to negotiate obnoxious and silly requests such as these requests throughout the creation of the TPC program. Amy also had struggles with her administration. In 2018, her administration decided to launch her TPC program in the middle of year which was the worst time to launch a program when admissions had already completely a majority of their major recruitment efforts. It seemed that administration was excited about the program but did not execute the program in the best way.

Ironically, Jean and Krista have differing opinions on administration. On one hand, Jean claims she was able to get her TPC program approved because there was hardly any administration at the time. Since the time of her program's approval in 2013, her institution has gone through a restructuring based on accreditation suggestions to bring in more administration staff positions. Now, Jean says that there is just so much bureaucracy now that she does not think her program would get approved, discussing how much she hates how big administration had become. On the other hand, Krista wants more administration. Krista talked about the downsides to small institutions is that there is hardly any administrative staff within departments. In some ways, Krista likes getting the job experience of having administrative duties, but it takes away from her teaching because her administrative duties become colossal.

While there were definitely stories about hating administration, there were several success stories like in the stories of Elizabeth and Hannah. Both of these people positioned their TPC programs to response to their administration initiatives. For Elizabeth, her administration was obsessed with credentialling and micro-credentialing for additional lines that students can put on their resume, so administration was very supportive of a TPC certificate for majors across

campus. For Hannah, her administration has really pushed original undergraduate research so Hannah made her course "Senior Seminar in Professional Writing" a course that has her TPC students create a study that collects data for their big research project. Hannah believes that some TPC programs can neglect research skills to focus on more "workplace skills" which she believes is a false dichotomy to create in the TPC field. She is thankful that her administration's emphasis in undergraduate research aligns with her desire for TPC students to conduct research.

Overall, stories about loving and hating departments and administration are not new to the TPC field or small institutions, and these stories point to the reality that small institutions have the challenges of any TPC program, with much of TPC scholarship addressing these shortcomings for decades.

Failed TPC Programs

While it might be easier to focus on the successes that are part of the history of TPC programs, this chapter would not be complete without discussing the turbulent histories of three participants who just recently got rid or are getting rid of their TPC program. The reasons for a failed program are always complicated with no two stories being the same, so this section tells the history of how Jake, Sarah, and Rose no longer have their TPC programs and the possible reasons why their programs failed.

When I asked Jake about the history of his TPC program, he responded, "I basically walked into a dying program." After working for industry for a while, Jake was so excited to get a tenure-track position directing a professional writing concentration within the English Department, but the program had one problem – it had no students. So in addition to teaching four on-campus classes and three online classes, Jake spent his time trying to recruit for his concentration through admissions events and through visiting high schools. For the amount of

time he spent recruiting, his program did not seem to be growing. He even tried doing hybrid classes to bolster the number of students in the program where his online students could participate in in-class discussions, but the administration pulled the plug on his initiative and said that he was no longer allowed to have hybrid classes; the reason is still unknown to Jake (his guess is it has to do something with accreditation). What finally put the program to rest was an assessment review of his program. In the spring of 2022, he graduated one student from the professional writing concentration and he only had one other student in the program, so administration told him to cut the program. He tried to "put it to sleep gracefully" by creating a writing concentration within the English Department that included both creative writing and professional writing courses. The fall of 2022 was the first year without his TPC program. He had kept some of the professional writing courses, but he had removed several of them from the curriculum; for example, several concepts from the now removed classes of Professional Writing I & II are now embedded in the copywriting and editing courses required by all English majors (literature and writing concentrations).

Jake's story is a sad one – his program did not fail from lack of trying to save it. First, it was his first job in academia and therefore first time chairing a TPC program. Sapp (2008) discusses this unfortunate reality of hiring assistant professors to chair departments when they do not have the experience to run a program successfully (p. 201). Academics would not hire a new PhD to be the chair of an English Department, so why would anyone think that hiring a new PhD would be a successful way of chairing a new TPC program? Yet this is the reality for several TPC faculty "lone rangers" – and is the case of Jake. Second, Jake tried to uphold one of Johnson et al.'s (2018) principles of lean technical communication – optimize physical and online spaces for learning – yet without the support of administration (the opposite of support), Jake could not

revive his TPC program through an online presence due to the lack of support and eventual rejection from his administration.

The next failed program was Rose's TPC minor. Rose's technical and professional communication minor was deleted from the university's catalog but not because the program did not have any students. Rose created the minor in 2001 to be an interdisciplinary minor with classes from a variety of departments across campus which meant that she was not the only person to teach in the minor. There was a lot of faculty and advisor buy-in to this minor and many alumni would come back to her to tell her about the integral part the minor played in their interview and current job position. Over the years, Rose continued to direct the minor and teach several classes in it, but her university kept giving her more and more administrative duties. It got to the point where Rose realized that she would like to pass on her TPC responsibilities to another fresher face because her workload was becoming so overwhelming, and she did not have the passion for the minor like she had in 2001. It got to the point where she just told her administration that she was not going to direct the minor and that they needed to hire someone else, but the administration refused to hire anyone and fixed the problem by just getting rid of the minor. When reflecting on this decision, Rose said,

> The sadness of its demise is that really it's an institutional failure to not support a program that is so universally liked. And they [administration] could say, "Well, it wasn't really that liked. You didn't have very many minors. You only had 15 minors or something like that, right?" But for those 15, they really got great jobs. I had a 100% job placement. I don't know what you want me to say. Literally everybody who took this minor [got a job].

While Rose is sad that the program no longer exists, she does not regret letting it go because she was getting so much burnout from the labor of running the program along with her other administrative duties.

Rose's positionality in her university is similar to other participants in my study. After being at the institution for some time, it seems that TPC faculty get more and more duties thrust upon them. Lattrell (2003) discusses this aspect of TPC faculty because many of them play key roles in curriculum development and campus-wide projects; and many times, these additional administrative duties indicate the success and quality of the TPC faculty, but these duties might also lead to less time spent on the quality of the TPC program or even burnout from the TPC program in additional all of the other duties of the faculty member. Understandably, Rose does not have the same passion for her TPC minor in 2022 that she had in 2001; but without a replacement, there does not seem any hope of continuing the program – another downside to Sapp's (2006) concept of lone ranger.

The last participant that I interviewed from a failed program was Sarah's TPC program. The history of her TPC program predates her coming to the university in 1999. When she came to the program, there was an English BA with concentrations in public relations and technical communication. Later, in 2018, the state accepted their proposal for a BS in Technical Communication which addressed all of the students' complaints about taking so many literature classes in the English BA program. Unfortunately, in 2019, Sarah's university declared financial exigency, so the board of governors hired a new president who had a history of gutting programs. In the past, each major had to graduate ten students a year to be considered a viable program, but the new president changed the rule to graduating ten students per concentration. The literature concentration was not graduating ten students a year; the creative writing concentration was only

graduating ten students a year; and the technical communication was only graduating eight or nine students a year. Based on these numbers, all programs in the English Department were dissolved – as well as the English Department. Sarah went from a department of 27 to a department of 10 that was relocated to the Communication Department. And because the university was under a state of financial exigency, they were allowed to fire tenured faculty. Sarah was allowed to keep the technical communication minor as long as she filled it with other classes that already exist in other majors. While she enjoys teaching in the Communication Department and has taught some fun classes like crisis and risk communication, she is really hoping to bring back her technical communication program with the BS she fought for back in 2018. Since her Communication Department has tracks in journalism and strategic communication, Sarah believes the Technical Communication degree would be a real added benefit.

Overall, while no one really loves to talk about a failed TPC program, this is a reality for some TPC programs, so it is beneficial to read about these failed programs to interpret what exactly led to their downfall – and many times, it is out of the control of TPC director.

Discussion and Conclusion

This chapter on the history of TPC programs in small schools contains both old and new insights in the evolution of programs, and not just small TPC programs. Of course, none of these schools received a free computer lab from IBM with 20 free computers to start their program like the University of Central Florida (Jones, 2015), but many of these small programs started similar to many medium and large schools like the University of Wyoming (Baalen-Wood & Knievel, 2015), University of Colorado at Colorado Springs (Ilyasova, 2013) and the University of Miami (McKee, 2016) where TPC was first introduced as a service course or an upper-level English

course that eventually morphed into a degree program. Additionally, many TPC programs – both small and large – oftentimes start with just one person. Maybe it is the WPA who has a PhD in rhetoric and composition; maybe it is the PhD in literature with technical writing experience; maybe it is the WAC director who was coerced by the business department to start a TPC degree; maybe it the Texas Tech graduate who graduated and then went to an institution with faculty having no TPC experience. My study shows that many small schools start with that one "lone ranger" in the program – but my study also shows that some of those schools never expanded beyond the one faculty member in TPC (as opposed to larger programs).

But I do not want this dissertation to turn into a large vs. small TPC programs war where I pick a winner at the end of the dissertation. Rather, the purpose of this dissertation to name the identities of small schools by examining these small spaces and learn from the challenges that they have. While my project is definitely focused on small schools, I invite my readers to make their own comparisons to the TPC contexts in their own schools – small, medium, and large. There are many aspects that I could reflect on from earlier in this chapter, but in this discussion section I want to particularly discuss institutional contexts, TPC electives, and the balance of administrative duties.

Though this is not a revolutionary find in my research, my study definitely affirms how much TPC is dependent on institutional context. Both Mary's and Stacy's stories about analyzing market trends and institutional expectations are key aspects of a successful TPC program. For Mary, knowing industry and higher education trends in the 1980s allowed her to get a tenure-track job and create a new TPC program in the nascent stages of the TPC field at large. For Stacy, knowing her institutional context even with its bizarre rules allowed her to sustain a robust program with around 100 majors – the largest program that I interviewed. These people did not

just have good intentions and dreams; these people analyzed their local contexts and thrived within them. Who stays as a director of a TPC program for 37 years? Who has a TPC program that rivals and even exceeds the number of majors at very large state schools? (Jones, 2015). These people are clearly doing something right with their programs.

A more nuanced way of adapting to industry and institutional contexts is through course electives. Since TPC is an ever-changing field, it is important that programs have curriculum that are flexible enough to meet current topics in a timely manner – and sometimes the curriculum committee does not work in a timely manner to update classes. This is why Bert and Diane use electives to have students grapple with current topics within industry and academia in their *Kairos* moment. Many programs either didn’t include electives at all or simply outsourced their electives to another department, but Bert and Diane used required special topics electives to address immediate topics within industry like risk management and within academia like social justice. They wanted a flexible curriculum that recognized how the field of TPC is not as static as literature, so sometimes an elective’s topic will only run once at their school because the topic met the conditions of the TPC field at that time.

The last element that the category of history reveals is the complexities of administrative duties. One aspect of administration that many of the participants discussed was burnout. Many participants discussed the overwhelming amount of administrative duties that they were assigned that did not necessarily count towards their contract but they were still expected to perform these duties. This brings up the benefits and challenges of hiring staff members to take on more administrative duties. The director of a TPC program does not necessarily have to individually email prospective students – a student worker or staff member could easily take on this role – but it seems that many of my participants were taking on this role. On the other hand, when the

admissions department takes on some of the TPC director's duties, the TPC director has more time to ensure their classes are robust and that the admissions department does not forget about the program. And in Jean's case, too much administration on the provost and dean levels seems to devalue the teaching of the curriculum and prioritize faculty getting into administration rather than learning.

How much administrative duties is too much? It seems that small schools really struggle with this answer and every institutional context is different. For example, Bert has been directing her TPC program since 1985 and is still going strong while Rose has directed her TPC program since 2001 and is super burnout and ready to give the reins of her program to someone else. Because there is no one else with her expertise in the institution, there is no one else to give program to so it just died. This is one of the downsides to the "lone ranger" phenomena at these small institutions – there is no one to take over a program when the TPC director is the only one who is able to run the program so burnout seems inevitable. It is definitely something to consider when newly minted PhDs graduates take a job at a small institution where they are the only person with any TPC experience.

This whole situation quickly becomes a system that just breeds more problems. On one hand, it takes a lot of labor to hire faculty to teach in a program – and when faculty only stay two or three years at a time, the TPC director (or department chair) is always spending so much of their administrative time just trying to hire someone instead of completing other administrative tasks. On the other hand, faculty that stay for long amounts of time at a small institutional will probably (if not definitely) receive more and more administrative duties, moving them farther and farther away from prioritizing the curriculum that they are teaching. Obviously, getting more administrative duties is not necessarily bad as long as there is less of a teaching load; but with no

one else to teach the courses, the TPC director has to both teach the courses and continuously receive more administrative duties beyond just TPC-related activities.

In conclusion, this chapter has shown the innovative and tumultuous ways that TPC exists in the history of small schools. There are several aspects about these TPC programs that are absolutely incredible in the ways that directors create and sustain their programs; and there are several aspects about these TPC programs that go beyond just the program itself and point to larger problems within the institution – and even the system of higher education. And yet, these TPC programs in small institutions still exist despite all of these challenges, somehow navigating these less-than-ideal contexts because they believe that they work that they do is meaningful.

CHAPTER V

IMPLEMENTING

TPC program directors have to decide what to implement in their programs. It seems like a simple task of choosing courses and finding people to teach them, but implementation presents program directors with a wide array of questions that they may or may not be prepared to answer: What is the theoretical foundation of the program? How does the program fit within the institution's mission? What is the program's identity? Who is qualified to teach in the program and who is not? Will the coursework be able to be taught in regular sequence with enough students in the class to make the class meaningful and assessable? How do program directors' approach technological skills needed of technical communicators? How do program directors approach the need for their students to experience industry standards and ways of writing before they graduate?

Answering all of these implementation questions would be impossible in just one chapter. In regard to implementation, my participants talked about what other institutional departments thought of their TPC program and how their programs received (or not) funding for their program. They discussed what they believe to be the defining features of their program and how administration has supported (or not) their TPC program (not just monetarily); they mused about the most significant challenges and successes of their programs; they explained the type of credentials of their TPC faculty and the type of students most interested in the TPC program; and they talked about the TPC program's situation in the general education requirement and cross-listed courses (if applicable). And while I could try to touch on all of these topics briefly – because all of my participants discussed different aspects of these topics – I have decided to narrow down this implementation chapter to just two topics: technology and partnerships

(external and internal). These two facets of implementation seem to be where programs struggle the most and where programs succeed the most. Therefore, this chapter's structure is quite simple: it summarizes the experiences and struggles concerning technology and then summarizes the experiences and struggles of partnerships – both proving that many technology and partnership issues are the same at any institution regardless of size. Finally, this chapter ends with a discussion and conclusion concerning the struggles and successes of these two components.

Technology

Every institution – regardless of size – has to address technology. What technologies do students need? What technologies do instructors need? How much will those technologies cost? Every institution approaches these questions with different philosophies and practices; therefore, it is no surprise that my participants' integration of technologies in their TPC program represented a wide range of philosophies and practices. For example, they talked about different types of software like Adobe and MadCap Flare that are implemented in their design classes and computer labs that support their TPC classes; and partnerships outside of the department that curb using the whole department's budgets on technology only. This section of the chapter addresses these different types of approaches to technology by breaking up the section into different parts. I first start with the definition (or lack thereof) of technology and how programs define technology in radically different ways, evidenced in their answers; then I transition into general struggles that small institutions are having with technology which includes commentary related to problems with administration and IT departments. Next, I discuss where technology exists in small institutions, such as in design courses, UX studies, and computer labs; and then I move on to summarizing the actual software implemented in the programs that I interviewed.

After that section, I move on to ways that schools have found solutions to their technological deficiencies by creating partnerships across campus to bolster technological literacy in their program's curriculum. Lastly, I summarize the few program directors who either do not teach technology in their program or who take a minimalist approach to teaching technology in their program.

In some ways, asking my participants about their program's technology is a stupid question. Who does not use the computer to write and submit a piece of writing? Who does not use something other than themselves to write? Is not a pen technology? Is not writing a technology? If we take the definition that writing is a technology (and most scholars would agree), then my question to participants about technology is stupid. My participant Adam pointed out this idea when he questioned what I meant by technology, citing the book chapter "Writing is a Technology that Restructures Thought" by Walter Ong. This scholar's view of writing pares well with other scholarship like Baron's (1999) "From Pencils to Pixels" where he argues that computers, printing presses, pencils, and even writing itself are technology. Much of his article critiques the "technology is killing writing" ideology by giving a brief history of the history of writing and technology, particularly how there has always been opposition to new forms of technology. When writing was first introduced, Plato opposed it because speaking was far superior since writing would weaken the memories of people. When the eraser on the pencil was first introduced, teachers also opposed this writing technology because they feared that eraser would make students' writing less polished, needing more revision. Writing and erasers are just two examples of the history of writing's relationship with technology, but they both prove how our understanding of technology should not just be limited to computers and Microsoft Word when the history of writing is directly related to the history of technology.

But Adam was the only one to question my definition of technology. Other participants seemed to know what I meant by technology even without me having to define it; and even though my results might have been more uniform if I had defined technology, it was interesting to understand their implied definition of technology by the ways that they implemented it (or not) into their program.

Most of participants struggled with technology, with one of my participants saying that "one of the disadvantages of being at a small school is [that the] technology issues are pretty significant" (Doug). While there were certainly success stories (Wendy, Bert), there were significantly more comments about struggling and needing to improve different aspects of the institution's technology. Anish called it "one area where I personally feel that we need to improve" and stated that his institution either needs to hire a faculty member, train the current English professors, or supplement the technology issues through another department. Jake called technology "pretty limited," and Diane called it "something we've been struggling with for years." Similarly, Sandra commented that technology was "a weakness in our program" where technology is simply allocated to one course (multimedia writing and design) and not dispersed across all of the TPC curriculum; she is not even confident that the English professors at her school would be qualified enough to teach technology in their classes. The most the high-tech project that her English faculty were able to accomplish was creating a newsletter in Adobe. Sean remarked that it is "the biggest concern of the university" because the technology at his institution is so outdated. The only technology available to him is the Microsoft suite (PowerPoint, Word, and Excel) so he tries to use PowerPoint in new and innovative ways for his students, but his approach is "I just kind of use what we got."

As demonstrated in these narratives, technology can be a source of frustration in small institutions. Cook names technology as one of her six TPC literacies, yet effectively implementing technology in a TPC program can become frustrating and cost prohibitive. In their TPC programmatic building book, Johnson et al. provides lean means of navigating these technological challenges which implies that technological challenges are not innate to small institutions – it is a reality of the TPC field.

Accessibility and Insecurities

Moving on from more general complaints to more specific complaints, technology also presented some accessibility problems for some participants (Theresa, Amy, Jane). Theresa's institution is pushing to get rid of all computer labs, and she is worried about accessibility: "We can't assume that our students have technology because of the population we're working with; a lot of them do bring their own, but you can't assume that." Likewise, Jane's institution has implemented a "bring you own device" policy that does not consider students who do not have a laptop, students who do not have a good laptop, and students who do not have the Adobe creative suite downloaded on their computers because it is cost prohibitive. While Jane admits that her institution's computers are "shitty," she does not believe that her students should bare the financial burden of the school's old desktops; the school needs to put money into better computers with better software. Amy has similar challenges with her institution's "bring your own device" policy. It is expected that every student purchases their own laptop, but they are not allowed to take their laptop to the IT department unless they are having issues with the institution's LMS – the IT department will not help students with other computer problems. Though not ideal, this policy became even more frustrating for Amy when the institution took away her computer lab and replaced it with nothing. Subsequently, students were paying and

downloading software on their computers that their computers could not support, creating significant lag times in running the software and in some cases were not able to run the software at all.

The now popular BYOD (bring your own device) philosophy in higher education has its advantages and disadvantages. BYOD has the advantage of students having 24-hour access to their projects that they are working for and less environment waste coming from the institution due to the need to stock computer labs with additional non-environmentally friendly software and hardware that is difficult to dispose of ethically. BYOD has the disadvantage of not being especially friendly to low economic students who either do not have computers or have computers that are too old to add the necessary software for the TPC program, putting an additional burden on the IT department to serve both university and student's technologies. One solution that Johnson et al. present is for "first year composition students to opt in voluntarily and provided for a limited number of loaner laptops during class time" (p. 23). While this might not actually be feasible for small institutions, it does present an option that can cut down on students' financial burden and IT's labor burden. While there might always be universal problems with accessibility with all institutions, the solutions might look widely different dependent on the school's size.

Not only did issues arise in the form of accessibility but also in professor insecurities about technology. Rose reflected:

> Yeah, we're in need. Well, that one's sort of another problem that I felt with me as the director, but it's with anybody. We have no new blood at the University, because we're just not hiring. And so I felt like my own technology skills are not up to par or not up to standards. So I just felt like the students coming in are way better at everything than me.

> And even though I'm not a technology teacher, and I know that, it was like I felt like I was doing less and less with teaching them how to use technology to help them become better writers and creators of documents.

This vulnerable moment during Rose' interview shows how honest Rose is about her own technology skills but also how much she cares about giving her students and what they need. After this comment, Rose goes on to talk about needing professional development in technology but unsure about how to go about accomplishing this goal when her university does not allow for course releases. Jane and Sean also reiterate Rose's comments on being insecure about their technological skills.

IT Departments and Administration

In addition to battling insecurities, TPC professors (Jane, Doug, Melissa) also battled their administrations and IT departments to give them the technology that they need – something that any institution can struggle with regardless of size. In Jane's situation, she has access to a computer lab for her TPC course, but administration will not replace the old desktops that will not run the software that she needs. In Doug's situation, his administration told the IT department to cut their budget, so the IT department cut Doug's TPC computer lab. He already refers to his department's technology problems as "pretty significant," so this would be another blow to his program's deficiencies. Doug even commented that though his administration does not want to give him a technology budget, administration still expects that Doug integrate more technology in the English Department's curriculum, with one administrator suggesting that Doug create a class on how to use social media. In a more positive light, Doug believes that since his institution is a rural school, employers might not necessarily expect graduating students to be up to date on the latest technologies – though Doug is still passionate about trying to get those latest

technologies. While Jane's and Doug's situation seems grim, Melissa's problems with her administration and IT department do not even compare.

Melissa has a laundry list of grievances against her IT department. She started her commentary about the IT department with "The IT building was like a graveyard where computers go to die." Then she proceeded to tell me the history of problems of her IT department. First, the IT department has technology in their department that is seven to ten years outdated that had never been used. Second, back in 2012, Melissa and others from her institution asked the IT department to buy iPads with cameras to bolster online courses and participation. Instead of iPads with cameras, someone clearly inexperienced in the IT department bought all the students in the university Apple iPads with no cameras, so Melissa's has been stuck with bad technology because the department had no more money after buying the wrong iPads. Melissa tries to navigate the IT department's deficiencies, but she can only do so much with free software like WordPress. She said, "It's just pure persistence and just tenacity of just pushing and pushing, and just knowing I had to have the students produce something that was in some way up to date." And Melissa did everything in her power to get useable software on her institution's computers – even going as far as throwing a pizza party for the IT department:

> You know that I would bring pizzas over to the IT department. I had to like cozy up and make friends […] and just hang out in the building in the basement, and just, you know, shooting the shit with them, just kicking it, getting to know them and being friends, just to get like computers in our lab reimaged, because at one point I went up to a previous chair [and asked about getting software] and so she just had them jam more stupid software onto all computers that had never been reimaged.

Melissa' problems with the IT department and her chair continue even to this day. Melissa cannot in good conscience teach her students about MLA and APA formatting when she knows that they do not know how to embed hyperlinks on websites – frustrated with her English Department's overemphasis on scholarly writing and not public writing.

Tensions between the IT department and TPC are not new. Johnson et al. suggest that these tensions could come from the wrong assumption that because TPC is in the humanities department (but not always), therefore they do not need technology; they just need the library (p. 79). In defense of IT departments, Johnson et al. claim, "Centralized IT units now often struggle under the weight of wireless networks burdened by university-owned AND student-owned technologies" (p. 80). There is by no means a universal solution to the IT-TPC divide, but it is somewhat comforting that small institutions are not alone in their struggle since Johnson et al. discuss the issue of technological deficiencies as one of their concerns – in a book meant for all TPC programs.

Design and UX Studies

Thankfully, not every participant's story was Melissa's story. Several professors discussed ways that they use technology in their program – and one of the ways that technology was implemented is through design. While I did not include the word "design" in my technology question to participants, eighteen participants included concepts, courses, principles, and projects related to design as part of their answer (Anish, Diane, Elizabeth, Krista, Ron, Adam, Hannah, Izzy, Jake, John, Mary, Sandra, Sarah, Sean, Stacy, William, Amy, Tracy). Elizabeth talked about how she uses different software in her visual argument courses, having a real interest in graphic design and even dappling in it in her free time as a hobby. John's university actually has a graphic design course in the Communication Department, so he just requires his TPC students

to take it because the Communication's lab already has the software needed for the design projects; and Krista does the same with her TPC students by making them take the graphic design course from the Visual Arts and Graphic Design Department. Diane has a Design Lab that specifically teaches different software and design projects. And Hannah incorporates design technologies like an eye-tracking device in her senior seminar for TPC majors. In Guidebook Writing and Publication Production courses, Jake gives them a crash course in InDesign but mainly just uses the Microsoft suite and Google Drive for the technological component of the class. In her course Document Design, Jane's students are introduced and tested on their knowledge and application of Adobe's creative suite; and Sandra has a Multimedia Writing and Design course in her TPC program, but she struggles to find someone with the adequate technological skills to teach it. Others saw the connections of design to UX studies. Hannah talked about how she uses an eye-tracking software for her senior TPC research course which she believes is a great talking point during job interviews. Tracy mentioned that her UX majors have access to most Adobe products and Cloud-based technologies for their major.

Computer Labs

Another common subject of discussion about technology was that of labs (Bert, Izzy, Jane, John, Krista, Stacy, Theodore, William, Doug, Diane, Manuel, Mary, Rose, Sandra, Sarah, Amy). Now, there were certainly different types of labs run by different faculty for different purposes, but several of my participants embedded labs to approach technology. While his department is fighting to keep the labs on campus, Doug has access to two Mac labs on campus that he uses for all things technology for his classroom. Bert has two lab courses: one for general technical communication and the other for usability. The rooms in which the labs take place are open to students 24/7 so that they can use the software to work on class projects. Likewise,

Diane also has two labs like Bert: one for technical communication and one for design – though keeping the computer lab software up to date has still been a challenge. For Izzy, there are no required labs in his courses, but he has given his students the option to do a project in Illustrator in one of the computer labs on campus that has the software on it. When I was interviewing Jane, she talked about using her position as chair to get her students access to a computer lab for the course Document Design; though no longer chair, she is still waiting to hear back on the status of that request. While John believes that students can make complex documents in Microsoft Word, he still teaches in the computer lab so that students can have access to a computer.

Instead of teaching in computer labs herself, Krista has her TPC students take labs in her university's Visual Arts and Graphic Design program that has access to all the software that her students need. The lab is called a photo lab; and while it only seats ten students, it has some Adobe products downloaded on those computers, and she is currently advocating for Adobe InDesign downloaded on those computers so that she can better teach the class Editing and Publishing. Krista also uses the computer lab in another building of just computer labs to teach her technical communication business writing course. She received some resistance from administration for desiring to put some software on those computers because they believed the English Department really did not need technology. In addition to her editing and business writing courses, Krista teaches Multimedia Writing in a lab that uses Premier Pro for the video editing her students use to complete projects in the class. Unfortunately, this is an expensive software for either the students or university to purchase, but Krista cannot seem to find a good alternative that does not just splice videos together, making it very unprofessional looking.

Like Krista, some other participants also commented on their affordances and challenges of their university's programs labs. Manuel has had a very positive experience with the

technology in his computer labs. All labs on campus have the Adobe suite and students can purchase their own Adobe licenses for their computers for a reduced student rate. Mary has a graphics lab in her program and Rose made a point to update her university's computer labs before she even started her TPC minor, specifically Adobe Creative Suite and Adobe Dreamweaver. Sometimes Rose would have the students download the free trial of a program just to introduce them to the program without having the university of students buy the product. Unlike everyone else, Sandra did not talk about labs in relation to students – but in relation to faculty. Frustrated with her faculty's lack of technology skills, she used a computer lab to teach faculty Adobe so that they could produce a newsletter for the English department.

Still other TPC program directors incorporated labs in other unique ways. For Sarah, students have to pay a lab fee to access MadCap Flare, a software used for topic-based writing and single-source editing which her students use to make a cookbook with tags for ingredient lists, special tags, different formats, etc. For Theodore, though one of his classes meets in a computer lab, he actually does not use any of its technology because "despite all the heavy-duty technology we have available, the thing that I use most often is Google Docs." For Wendy, she used to schedule some of the TPC courses in the computer labs until the technological accessibility of the students changed so that all students owned a laptop and her university started providing the Adobe suite for free to all students who needed it. For William, he is very pleased with the software downloaded on his school's computer labs like the Adobe suite and a qualitative coding software that is accessible to students 24/7.

While most people either had access to another department's lab or had a lab themselves, Amy and Diane both had lab difficulties. When Diane's computers in her lab were updated, they were very useful and a great technology to bolster learning. One year, Hewlett Packard gave her

institution a three hundred-thousand-dollar grant to update all computers at the university in the 1980s. Since then, the computers have slowly become more and more outdated. Diane says, “So we've tried to find different ways throughout the decades of giving them the tools they need, but it's a challenge.” Amy has similar sentiments about her available technologies. Since Amy’s university went to BYOD, students no longer have access to the computer lab – mainly because the building with the computer lab is completely ripped up and is currently being renovated. The university thought that could just use remote VPN for software use, but the lag time is so bad that it disrupts class. One time, Amy was trying to do a big InDesign project and it just did not work. Students are supposed to be able to connect to a workstation at the university remotely, but it does not seem to be working for Amy’s students.

All of these frustrations point to the reality that computer labs can be problematic for small schools. But like many other sections of this dissertation, this is by no means a problem only for small schools, since many institutions regardless of size still struggle with how and if they should have a computer lab. According to Johnson et al., the computer lab might even be in decline (p. 79). With TPC’s allegiance to the environment, it is becoming harder to argue that computer labs produce enough benefits for students to warrant the amount of greenhouse gases, carbon dioxide emissions, and other hazardous byproducts that these computer labs produce. While it is probably impossible to have a TPC program without access to a computer, there are ways to diminish the negative effects of computer lab such as getting rid of software and hardware in exchange for off-site networks that handle these processes (e.g. Cloud storage) – a solution accessible to any size institution.

Software and Partnerships

By far, the most common software mentioned and used was Adobe products (Elizabeth, Bert, John, Krista, Manuel, Rose, Ron, Sarah, Stacy, Wendy, William, Amy, Theodore, Tracy, Izzy). Some participants more specifically mentioned Premier Pro (Krista), InDesign (Jake, Amy, Krista), Dreamweaver (Rose), FrameMaker (Sarah), and Illustrator (Izzy), but most participants just generally talked about using the Adobe creative suite. Other participants that used Adobe products complained about working with their products due to prices and licenses (Bert, Diane, Sarah). Sarah has moved her courses away from being so reliant on Adobe products when they stopped giving students free licenses to download. Since her students now only have access to the free short trial that does not last anywhere near the length of the semester, Sarah has chosen to supplement her course with free software, even if it is less effective than the Adobe creative suite. Bert and Diane had similar comments as Sarah.

Besides Adobe products, other software and technologies were mentioned though not as much as Adobe. Some of these included SnagIt, Canva, Slack, Openshot (video editing), LinkedIn, qualitative coding software, Cascading Style Sheets (CSS), Meyers-Briggs Personality Test, Google Suite, Microsoft Office Suite, Camtasia, Notepad++, MadCap Flare, Statistical Analysis System (SAS), html editors, and WordPress. One of the interesting ones was the Meyers-Briggs Personality Test where Manuel’s colleague got a Meyers-Briggs certification to implement emotional intelligence in her course Professional Writer in a Corporate Culture for her students to understand what it is like to be a writer in bigger context. Another interesting technology was Stacy’s use of coding HTML and CSS in her digital writing course.

While some professors approach learning and teaching different software, other professors partnered with other entities and departments on campus to supplement their skills

(William, Elizabeth, Adam, Krista, Ron, Wendy, Melissa). William, Elizabeth, Adam, Krista, and Ron all let another academic department teach the heavy technology component, especially if those departments already have robust computer labs and equipment that they are willing to share. Doug is also trying to tap into this approach to technology due to his administration's push to not have duplicate courses and technologies in different majors when the students can all take the course in the same department with slight variations. Wendy already successfully has this partnership with the Video Game and Animation majors in her institutions that house equipment and software that they are willing to share with her program. Wendy and Melissa also have a robust media center located in the library that has additional equipment for various disciplines and projects.

This section offers some solutions to the previous sections difficulties with computer labs. It seems that Adobe products are the most common program used in small institutions, so having students work with this technology might be a better use of students' time and money since it is less likely to go out of use compared to the most recent technologies that might go out of use within the year. Others navigate technology deficiencies through partnerships. While this dissertation has a whole section dedicated to students finding partnerships in their community, it is equally important that faculty find partnerships within their academic communities, especially with the challenges of technology: an issue had by many academic departments. These partnerships are incredibly important because they prevent duplicated labor and technology across campus, getting departments to navigate challenges together. Again, like so many sections before, these problems and solutions are not just inherent to small institutions but rather are a reality of the TPC programmatic field.

No Technology Instruction

While the majority of participants talked about technology implementation, three program directors talked about their stance not to teach technology in their TPC classrooms. Hannah commented,

> So I've always taken the approach from the start that teaching technology is all well and good for about five minutes. But teaching how to learn new technology is a much better approach, so that the students walk out of here with a degree in hand with the skills to adapt to the evolution of technology. So they know how to play with Photoshop, how to how to play to learn.

An application of Hannah's philosophy is in her senior's research project where they have to use the computer lab's eye-tracking software that Hannah does not explicitly teach them to use. She gets them started on the software and equipment that they need for the project but does not give them step-by-step instruction on how to use the software and equipment because she wants them to figure it out themselves because the critical thinking skills of navigating technology are critical for the technical writer in the workplace.

John and Sean have similar approaches to technology as Hannah. During his interview, John said that "I don't teach technology because technology becomes obsolete so quickly." It can be very disappointing when faculty members spend time, energy, and possibly institutional or personal resources to learn new technologies that become obsolete before faculty actually implement them in the classroom. Sean navigates this challenge by discussing technology in theoretical terms instead of pragmatic application. While he could spend class time teaching students about technology, Sean finds it a better practice to assign theoretical readings about

technology that give students a framework for technology that they can use the rest of the career and lives.

In conclusion, this section has summarized the different voices and opinions of various TPC program directors concerning the questions of technology, both theoretically and pragmatically. Depending on the background of the TPC professional, teaching technology theoretically might be easier if the TPC faculty member has spent more of their time in academia, and teaching technology pragmatically might be easier if the TPC faculty member has spent more of their time in industry. Given this spectrum, it is important that TPC faculty are aware of their strengths and weaknesses concerning technology, finding conferences and workshops that fill the void in their education. The bottom line is that students need access to technology; but like everything in life, technology is not neutral. The use of technology has the power to prepare students for the workforce and the power to destroy our planet; therefore, all institutions have to navigate these sometimes opposing needs; it is not just a small institution problem.

Partnerships

"I build my pedagogy on [the] premise that my students need to meet people who are not me" (Jake). This comment from Jake points to the reality that TPC programs need more than just great program directors for their programs and curriculum – they need partners both within and outside of the university to enhance student learning, especially in the TPC discipline which puts so much priority on real audiences and real contexts. The definition of partners is quite broad. For the purposes of this section on partnerships, I define partnerships as any kind of alliance (collaboration) between TPC professors and another individual or organization inside or outside of the institution. As might be expected with this super broad definition, this section of my

chapter provides a large spectrum of different methods of incorporating partnerships into TPC programs – all very different and unique. Inviting a guest to come and speak to a TPC course about their technical writing job is a type of partnership; collaborating with a professor in biology for a class project is a type of partnership; incorporating a local nonprofit into a service learning course is a type of partnership; requiring students to find their own client projects in a senior TPC course is a type of partnership; developing an advisory board of alumni who currently serve in TPC workplace roles is a type of partnership; and internships are a type of partnership.

These examples only represent a small sample size of ways that my interviewees integrate partnerships in their TPC programs; therefore, this section of my chapter on implementation focuses on how the TPC program directors implemented or not partnerships in their programs. First, I discuss partnerships as it connects with alliances between different professors, departments, libraries, and administrative initiatives through the institution – focusing on partnerships within the walls of the university. Next, I summarize the different speakers and advisory boards that my participants have implemented into their programs, and then transition into reviewing the different types of corporate and nonprofits organizations that students work with through different types of coursework and internships. While many TPC program directors had plenty of positive experiences with partnerships, my last section addresses some of the challenges that my participants had while implementing their partnerships. Since this section is about implemented (existing) partnerships pertaining to curriculum, information about possible future partnerships and professional development partnerships are located in the "Sustaining" chapter under the "Future Improvements" and "Professional Development" subheadings.

Administration and Institutional Partnerships

Many of the program directors that I interviewed mentioned how their universities provide statements and resources to support all kinds of partnerships. Both Anish and Amy's institutions advocate for experiential learning and Anish even has an Office of Experiential Learning at his institution. At Bert's university, she has access to an administrative program called Institution on Mission where administration pushes for undergraduate research projects to benefit the community in some way and pushes for classes to incorporate service research that also benefits the community in some way.

Beyond a few administrative sectors, most of the partnerships garnered by my participants were developed by seeking people out from various places of the campus. For example, Ron partners with a biology professor to get their students to work together. Ron teaches the science writing class with only eight students and the biology professors teaches a senior biology lab with eight students, so the two professors have each other's students collaborate together to research posters due at the end of the semester. For Jake's on-campus partnerships, he partners with his college's marketing department to have his students do some copywriting for them in his Copywriting and Editing course. For Dorothy, her class partnered with the senate (i.e. student government association) to procure money to provide more well-written services for students like how to use the local bus system or what things are in certain buildings on campus. For Sean's on-campus partner, he collaborated with the creative writing program director who needed a new kind of document that outlined his courses, so Sean had his TPC students help his friend out as a class project where his students created content and conducted usability tests on the developed content. William partners with the library in his classes with non-majors and general education TPC courses because the project is a little more

low stakes than choosing a partner outside of the university. And Tracy partners with her university's radio station to create public service announcements, allowing her TPC students to record if they excel at their work. For Amy, she has found a lot of success by partnering with the athletics and admissions department by having her students create video content (e.g. promotional videos) for their website and their various social media platforms. Manuel's on-campus partnership looks a little different from Sean, Jake, Dorothy, and William's partnerships. Manual's library and IT department regularly hires his TPC students to assist in communications to students at his university.

Collaborating with faculty from other disciplines is not new to TPC programs. Any size institution needs partnerships not only for its students' exposure to working to real audiences and documents, but also to increase visibility of the TPC program. TPC faculty realize that these partnerships bring authority to their programs which creates an ethos for the TPC discipline, proving that TPC is a field of research and practice that affects the institution. Collaborating with other faculty increases this visibility and therefore credibility of the TPC program and field – something that all institutions regardless of size must fight to continually reestablish.

Guest Speakers and Advisory Boards

Another avenue of partnerships is through guest speakers and advisory boards. Guest speakers refer to people not paid by the university who come to campus to speak to students about their experience and work related to TPC. Izzy had a contact from the South Korea Community who came to his class to talk about grant writing, and Izzy even had his students send the representative some of their grants to get some more feedback on their grant writing skills. Theodore brought in an editor of a history journal and she talked about her process for reading, excepting, and publishing articles to the journal that she worked for. Though not exactly in the area of TPC, Theodores believes that his students can learn a lot from her rhetorical

process of decision-making. Jake made an effort to bring in some editors that he knew to provide support for the magazine that he had his TPC students create and edit. He commented, “I felt like the onus of responsibility was on me to make sure that they are hearing from other folks in these industries, creative and professional.” His students benefitted from hearing from his editing contacts.

In additional to outside speakers, some program directors created Advisory Boards and strong relationships with TPC alumni as another way to forge partnerships with TPC folks from industry (Manuel, Diane, Amy). Manuel’s previous TPC program director (who is now retired) started the program’s first Advisory Board with all of her industry contacts. While some of her contacts are still on the Board, Manuel and his TPC colleague have managed to fill the Boards empty seats with some of their own industry contacts that live locally to Manuel’s university to help with curriculum oversight. One of the unique aspects of the Board is its involvement with his TPC students directly. In the fall, the Advisory Board conducts mock interviews with students based on jobs that they are interested in pursuing, and then the Board comes to campus to conduct mock interviews based on those job descriptions. In the spring, the Advisory Board reviews the resumes and reads students’ TPC portfolios, giving them appropriate and industry-conscience feedback. Additionally, Manuel hosts an end-of-the-year dinner in which he invites his Advisory Board to attend. Though Diane and Amy did not go into as much detail as Manuel, they both still commented on the involvement of their program’s Advisory Board. Diane’s Board has five or six members in a given year and Amy’s Board is made up of a people from large corporations, local corporations, and a member from the Society of Technical Communication. Meeting every two years, Amy’s Board helps with curriculum design and content, information about industry practices, and current trends of industry. Lastly, while Wendy does not have an

Advisory Board, she tries to keep up with her alumni in industry by understanding what is going on in industry and to potentially get her students internships at the places that her alumni work at, potentially even inviting them to come and speak in some of Wendy's courses if they are local enough.

Although this section does not necessarily bring new insights to the TPC field, it nevertheless affirms that small institutions and large institutions both have guest speakers and advisory boards that sustain the learning of their students: neither are dependent on the size of the institution.

Organizational Partnerships

By far, the most common partnership discussed by my participants was of students doing a project for an organization outside of the university. Some of the organizations included the Department of Homeland Security (Bert), an elementary school (Diane), food pantry (Diane, Dorothy), suicide hotline (Diane), health council (Diane), tourism bureau (Dorothy), humane society (Dorothy), community learning workshop (Dorothy), Religious organization (Jake), park and forests (John), United Way (Jake, Krista), local housing projects (Krista), local counseling center (Krista), Organic Farming organization (Jake), local and regional nonprofits (John), YMCA (Krista), nonprofits (Sandra), baseball organization (Theodore), a city's economic development office (William), and a pregnancy center (Manuel) – just to name a few.[6]

Bert and Diane were able to forge partnerships in different ways. Every spring semester, Bert partners with the Department of Homeland security to work on projects related to usability. Students receive recognition for their work through the form of being cited on official

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[6] Please note that some organization's names have been changed or left ambiguous to keep the program director's university and name anonymous because the local organization's name would have suggested the university's location.

documentation, and Bert has even had two students get internships with the Department during the COVID summer through contacts created by this partnership. Diane was also able to forge a partnership with her community but in a very different way. Through a grant designated for experiential learning, Diane's class on Social Justice and TPC was able to procure books for a local elementary school from a local indigenous-run bookstore. This learning experience taught Diane's students to meet a local need through ethical means – thinking about the importance of solving ethical problems with ethical methods. For Diane, partnership are "a central hallmark of our curriculum. It's in all of our classes." Other organizational projects completed by Diane's TPC students were related to a homeless shelter and food pantry. From 2014-2018, her TPC students were able to raise seventy thousand dollars for a local homeless shelter; and then her TPC students were also able to raise twenty thousand dollars for their university's food pantry. During the semester that I interviewed Diane, her students were working on three different grants submitted to a health council for a bike repair station, hydroponics for community garden, and a suicide prevention hotline.

Partnerships were also cultivated by Dorothy and Elizabeth, colleagues at the same institution. Dorothy was able to connect her students and class projects to a local tourism bureau "that distributes money to local groups trying to increase tourism and hotel occupancy." Through the work of grant writing, her students were awarded $3,800 from this bureau. At the time of the interview, Dorothy's students had applied for grants with another local outdoors company, local arts council, and AARP. In commenting on her program's emphasis on partnerships, Elizabeth said that,

> I think that at the upper level, what we're really trying to do is get them to understand that this is not just a series of exercises for in class. The whole point of professional writing

> would be that you were going to be writing in your professional life. And so, the more real audiences we can give them, the more real context we can give them, the better that's going to prepare them to do.

This quote from Elizabeth reiterates her program's objective for her students to write and experience real audiences in real time – giving motivation to her upper-level students and line items for their resumes.

Other participants had similar success stories with their partnerships off-campus. Jake has his students complete some copywriting for a local religious group's marketing team and a local environmental organization that promotes organic farming; and Jake as well as Krista (not at the same institution) partner with United Way to give their students prompts where students meet real stakeholders of the company. And Krista has had her students work for a local counseling center in the county of her institution. Additionally, John has his students work with several different local and regional nonprofits such a state forests and parks foundation and a local organization that supports homeless high schoolers. In the case of the homeless organization, John's students redesigned their website, flyers, and cards being distributed to the teenagers in the program. William has had his upper-level students complete work for both his city's economic development office and his city's bar association as part of a required client project. Lastly, Manuel's students helped build a website for a nonprofit that supports people who have suffered a loss through pregnancy.

This part of the dissertation is where small institutions really shine. Despite their small contexts and sometimes limited access to resources, theses TPC faculty are incorporating community stakeholders and projects into their courses in a way to work toward connecting TPC instruction to social responsibility. While it is hard to compare these narratives to larger

institutions' stakeholder projects without writing another dissertation, I want to suggest that small institutions might be in a position to support stakeholder collaborations easier than larger institutions due to their smaller class sizes which in many cases can make it easier on the TPC faculty member to connect with to outside organizations. Compared to on-campus stakeholders who work on academic timelines, off-campus stakeholders can present additionally challenges that small class sizes can more easily navigate – an affordance of many (if not all) of small institutions.

Courses and Internships

Though I did not specifically ask which courses contain partnerships, several people were eager to talk about the specific names of courses in their TPC program with partnerships: Writing and Citizenship (Anish), Writing for the Community (Dorothy), Guidebook Class (Izzy), Editing and Publishing (Krista), One-Credit Professional Portfolio Development (Manuel), Professional and Technical Writing Course (Mary, Jane), Science Writing Course (Ron), Technical Editing (Stacy), Digital Writing (Stacy), Intro to Communication Design (Tracy), Journalism Class (Wendy), Grant Writing Class (Wendy, Amy), Usability Class (Bert), Grant Writing (Dorothy), and Multimedia Writing (Krista).

One class in particular was by far the most popular: the internship course (Jake, Jane, Jean, John, Krista, Mary, Ron, Wendy, William, Adam, Amy, Bert, Hannah, Amy, Diane, Theodore). Many times, Bert's students get internships based on the relationships forged in the partnerships she develops in her classes; for example, the class where she partners with the Department of Homeland Security is a class that many students are able to get a summer internship. For Jean, she believes that the internship component of her program was integral to the success of her program – even though her TPC program was only a minor. Despite COVID,

Jean was still able to sustain internships during the pandemic through remote internships provided by many organizations and companies, putting the main impetus on students to find and apply for these internships. John had similar success with his internship, managing to find internships for his TPC students with the engineering department on campus. For her internships, Krista relies on cultivated relationships over the years with different companies; for example, there is a local computer software company that she has good rapport with, so she tends to send most of her TPC students there for their internships. With only six students need internships per year, Krista believes it is relatively simple to get her students placed in good internships. Occasionally, she will have a student that wants to do their internship back where their primary residency is located (outside of the general vicinity of the institution), but Krista has also been able to accommodate that request even with the lack of contacts in the location of the student's primary residency. Once, Krista got a student an internship by just going onto LinkedIn and reaching out to different companies; she ultimately found the student an internship with the YMCA in the student's town where the student was able to work on a variety of marketing newsletters and materials as part of their internship.

Internships were also talked about by Ron. Ron discussed his required internship of six credits which is generally completed off-campus but Ron has made some exceptions recently with COVID making it difficult to get off-campus internships, so he has allowed on-campus internships as well. While Ron would ideally like for the internship to be paid, he only knows of one student that ever got a paid internship. For the internship, his students meet with him every other week and complete a total of ten hours a week to receive their internship credits. Ron runs it like a portfolio practicum where students collect materials that they are working on in their

internships as well as troubleshoot problems concerning technology (e.g. troubleshooting problems with WordPress).

Theodore and Wendy also have internships. Theodore has an internship that tries to pair students with their interests. For example, in the semester previous to the one that Theodore was interviewed, Theodore's student ended up working with the university's local city to get grant to put in better lighting for the city's baseball diamond. Theodore was pleased with the experience the student received working with a professional writing professor and employees of the city's townhall. Wendy also has an internship that pairs students with industry workers. She has found great success getting her students internships at National Instruments where a lot of her alumni have gained employment immediately after graduating. They have a very competitive technical writing internship where students have to pass a tests including an editing test to become an intern. Housing is provided for all interns. Like other participants of my study, Wendy's students have also found internships through partnerships that Wendy has created for classes like the grant writing class. Wendy makes a point to attempt maintaining relationships with the places her students get internships.

Other participants who talked about their internships were Adam and Amy. While an internship is not required for Adam's TPC minor, it is greatly encouraged. The internship is originally located in the large English degree where students can choose between a traditional 20-page paper or an internship their senior year. Amy's school context has an internship and an externship – but she really is not sure what the difference of the two concepts is. She thinks that the externship based in the Communication Department can be completed during the time outside the university when they have completed coursework. With her university putting so

much emphasis on experiential learning, Amy makes it a priority that her program meets these university goals.

Again, this section might not provide significantly new insights to the TPC field, but rather reiterate the reality that small institutions and large institutions are doing similar things. The problems and successes of internships at a small institution are the problems and successes of internships at a large institution. I am not arguing that all institutions are a monolith, but I am questioning the possible misconceptions that small and large institutions are so different that they cannot learn from each other. It turns out that this dissertation's findings are not just for small institutions but for any institution with a TPC program regardless of size.

Challenges

This section on partnerships would not be complete without mentioning some of the challenges that partnerships brought to different program directors' TPC programs (Diane, Izzy, Ron, Sarah, Stacy). For Diane, high turnover rates at the companies she was partnering with led to high numbers of labor hours trying to build new contacts and relationships. The first time a company employee partners with an educational classroom tends to be more work and therefore more difficult to provide all of the information needed for the instructor and students. When there is high turnover, Diane notices that people in companies just do not have a lot of time to give her students. Izzy commented that "If that's not done really well, it can be dangerous to the community." For this reason, Izzy opted to implement fake partnerships where they choose a real stakeholder but then write a fake grant for $40,000 to benefit the stakeholder in some way. For example, a student might currently be working or volunteering at the local Boys & Girls Club so that student would write the fake grant to a fake audience on behalf of that organization.

Stacy has also opted for the same fake organization assignment for different reasons. After implementing a community writing project for a few years in her Digital Writing course, Stacy decided to get rid of the assignment because there were just other things that seemed more important to cover like HTML. Additionally, the community project was just getting harder and harder to manage. Stacy commented,

> Some of the students did beautiful work, but for other students, it just was really hard. And the other thing is, many students did not have the confidence to go out and actually find a partner. And so I felt like I was putting some students in, like emotionally challenging [and] unnecessarily challenging situations. And so I was finding that I had to come up like I created a dummy food bank like a fictitious food. I wasn't happy with that, either, for sure.

Stacy no longer has any real partnerships as a part of her classes, but she also recognizes this as a loss. While some students were frustrated with community writing, other students did beautiful work and had a fantastic experience.

Sarah, Sean, and Ron also commented on the challenges of partnerships in their curriculum and program. Because of the pandemic, Sarah had to move her class online and the partnership component of the class was just too much with all of the changes. Sean has yet to implement partnerships in his program because he believes that there needs to be more of a stability in course offerings and students in the program to develop and secure solid partnerships, specifically for a 400-level seminar or capstone course where his students could work with real partners and users. In a different situation, Ron has challenges in getting his TPC program partnerships because of the location of his institution. Because there are so many institutions (and most of them larger than his home institution) in his area, he finds it difficult to locate good

partnerships, because many of the businesses and organizations already have partnership with other institutions.

These challenges point to the realities of any TPC program. Johnson et al. mention several of the problems associated with community stakeholders that can prevent the success of the project: community stakeholders not wanting long-term relationships, insufficient technologies to meet community stakeholders needs, and community stakeholder ideologies at odds with TPC research and values. Ideally, there should be at least one core TPC courses that includes a community partner but sometimes TPC faculty have to create fake partnerships due to circumstances outside of their control (e.g. a global pandemic). TPC programs have to negotiate between TPC ideals and realities that sometimes resist cooperation, but it is still important to acknowledge the ideal even if circumstances demand significant modifications.

While this section by no means covers all partnership conducted in TPC programs of small institutions, it does narrate several of the wonderful ways that small programs can make a difference in their communities – and several of them make significant contributions to their communities in meaningful ways. While there are still challenges, partnerships seem to be thriving in these spaces.

Discussion

In many ways, the conversations about technology and partnerships most exemplify unions and divides between academia and industry. While conversations about course assessment, learning outcomes, faculty development, and programmatic history are situated in academic lingo, technology and partnerships force program directors to look to industry in order to bring it into the classroom – or rather, bring the classroom to industry. As this chapter has

revealed, this task comes with its challenges and successes, requiring more than just mere ideals to be implemented effectively.

Technology

The challenges and successes of technology in this chapter are reminiscent of the age-old debate between Johnson (1998) and Moore (1999) concerning the topic of instrumentalism in technical communication curriculum. On one hand, Johnson stated that “these arguments for an instrumental approach to technical communication illuminate vividly the profession’s entrapment within, and comfort with, the role of the technical communicator as mere scribe.” (p. 25). His article advocated for a rhetorical approach to technical communication where the fields of history, sociology, and philosophy provide frameworks for understanding and enacting technology. On the other hand, Moore rejected Johnson’s rhetorical-only approach to technical communication and claimed that both rhetoric and instrumentalism must be employed in technical communication work. He wrote, “Trivializing instrumental discourse and defining technical communication broadly – and exclusively – as rhetoric is part of an academic power game which some faculty use to advance their political agendas within the profession and within their academic departments” (p. 47). To enact his instrumentalist approach to technical communication pedagogy, Moore called for more academic classes in preparing technical communicators to be good at writing, editing, designing, managing, testing, and negotiating – skills that rhetorical classes do not teach (p. 48).

Johnson and Moore’s quibbling relates to conversations about technology because it reveals two separate approaches to technology: a skills-based approach or a theoretical approach. Another scholar that tries to merge these two dichotomies is Cook’s (2002) article “Layered Literacies” that argues that technological literacy (one of six literacies for TPC) should not just

include proficient use of technology but also the awareness and ability to critique technology with significant considerations for the users: skills and theory are both important. While this debate clearly exists in scholarship, my participants also had to navigate the spectrum of these two approaches. Some participants were skills-driven where students were provided the latest software in their design classes; and other participants were strictly theoretical where students were only provided a theoretical approach to technology without actually learning different technologies. And still other participants found themselves somewhere in the middle of these two extremes.

So which one is the better approach to technology? While this question goes outside the scope of this dissertation, there are certainly benefits and drawbacks to either approach. On one hand, technology that only focuses on skills will graduate students with a variety of software knowledge – but that software knowledge could be obsolete the year they graduate. On the other hand, technology that only focuses on theory will graduate students with thinking skills – but they might not be able to get a job because knowing the Adobe suite is part of the requirements for the job description. Throw in exigencies concerning accessibility, IT deficiencies, institutional skepticism, and cost limitations and the result is an even more complex question about technology.

Yet my participants navigate all of these questions in their own academic spaces. Yes, technology can become obsolete, but it seems like the Adobe suite is a standard across the programs that I interviewed. Of course, it does not come without it challenges, but it is least likely to be obsolete as fast as other technologies. And yes, technology should not just be approached from only a theoretical perspective, but it seems like the skill of theoretically analyzing technology is as useful as knowing the technology itself. How are students going to

ethically think about the ramifications of technologies if they are not taught to think about all writing and technology through a theoretical framework? Herndl (1993) addressed the perils of an instrumentalist-only approach to technical communication pedagogy. If instructors only teach workplace skills with no education on the rhetorical and ideological components of those skills, then students will be incapable of self-reflexive and ideological awareness of when dominant cultures exploit their people through the technical communicator’s own work. Herndl specifically called for technical communication instructors to teach a radical pedagogy of resistance that provides a model for understanding ideological conditions of a society and the means to resist them if necessary. In short, students should not be taught technology without the framework to think about and resist the potential ideologies it imposes on its users; therefore, this scholar would agree with Cook’s technological literacy definition that technological skills should be taught within the framework of theory.

While not all of the faculty were confident in their approach to this tension between technological skills and theory, many still found lean means of sustaining and approaching technology in their programs. Ironically, though I have a separate section about partnerships, technology is definitely influenced by the partnerships program directors were able to create. My study suggests that program directors who sought out partnerships with various people and departments on campus were more supported in their challenges about technology. This is evidenced in Melissa’s relationship with the IT department, several professors borrowing of other department’s computer lab spaces, and several professors borrowing of other department’s courses that are already doing the work of teaching students various software.

Doug also mentions this point when one his goals – and initiatives of his university – is to cut down on university overlap. When students from multiple departments need similar

technology skills, it does not make sense for a small school's departments to try and remain solely autonomous. Even Bert who is well-supported is in a TPC program within an Engineering Department, so her entire program is inherently a partnership. And while partnerships do not completely fix all accessibility problems, they can certainly ameliorate hardships put on small institutions' TPC programs.

While partnerships are one important way to address technology issues, it is also important that program directors address professor's insecurities about technology. Anish and Rose both addressed their own insecurities concerning technology with Rose claiming that she is not a technology teacher. Although Rose is correct in her statement, it is hard to separate technology from writing and communication instruction – something so integrally intertwined in the twenty-first century, but there is something to be said about professors needing more technologically training.

There are several possible solutions to this exigency. Maybe graduate schools in TPC need to embrace more technological training in their curriculum and spend less time on solely research creation. Without taking out the theoretical component, graduate professors can incorporate new technologies throughout their courses as a way to introduce future TPC professors to a wide variety of potential technology skills that are used in the workplace instead of the typical seminar paper common in most graduate courses. Maybe institutions need to be more proactive in introducing new technologies to their faculty. If TPC program directors are creating partnerships across campus with other department, then it is assumed that there are various overlapping technologies that are applicable in multiple programs so having on-campus professional development seems like a promising way to support these professors and programs. Maybe TPC professors need to be more proactive in going to conferences that fill the gap in their

education rather than going to only pedagogical conferences. There may be more helpful conferences and/or workshops that fill the gap in their learning in regard to technology education. Or maybe the TPC program needs an Advisory Boards to ensure that the program is keeping up with the newest and most useful technologies, as to not waste TPC professors time learning a new technology that will be obsolete the next year or not buy technologies that are already outdated. Or maybe there needs to be more specialized TPC practitioners that come to class and talk about their technologies that allow students to dabble in the technology without having to spend major parts of the class learning it. Regardless of the answer, each institution needs to be aware of their personal and programmatic needs in the instruction of technology.

Partnerships

While the first half of the chapter discuses technology, the second half discusses partnerships. What is interesting about these two topics in comparison to the other is the contrast of successes and challenges. Overall, technology was mainly a point of complaint for all but two institutions in my study; but partnerships overall was mainly a point of pride in all but five institutions in my study. Partnerships seemed to be the place where small institutions really thrived and found unique ways to connect their students with industry through avenues such as guest speakers, class projects or internships.

The internship was particularly popular in the results of my study – for both major and minor TPC programs. Many scholars have talked about the difficulties of maintaining the complexities of a successful internship (Katz, 2015; Kramer-Simpson, 2018), but several of my participants were able to easily navigate this part of their program by finding their students internships. Kramer-Simpson specifically addresses the need for internships to be specifically tailored to the needs and interests of the students, and it seems that many of the participants of

my study were able to do just that. For example, Theodore's student was way more motivated to get an internship and thrive in his internship because he was interested in baseball and therefore interested in helping out a local baseball team get new lights.

Besides internships, another overall finding from my study is that TPC programs in small institutions can affect social change. Several participants in my study discussed using their classrooms and their students to address local challenges of food insecurities, lack of education resources, and other humanitarian efforts. Whether or not they recognize it or not, these programs are centering social justice work in their programs – not only providing meaningful industry experience for their students but also getting their students to think about how they can use their skills to benefit others. With the current social justice turn in TPC scholarship, it is important to point out that small TPC programs can contribute to this initiative and foundation of TPC. In Walton et al.'s *Technical Communication After the Social Justice Turn: Building Coalitions for Action,* the authors quote Jones and Walton's (2018) definition of social justice as "amplify[ing] the agency of oppressed people – those who are materially, socially, politically, and/or economically under-resources" (p. 50). The authors go on to emphasize how social justice work is collective and active, something that small college are in a unique position to address. As evidenced in the participants' narratives, food, educational resources, and other humanitarian efforts are addressed as a collective class and are acted upon for meaningful social change in their communities. This reality of small institutions reveals that real social change can happen in small institutions; it is not just for elite, ivory-tower schools with larger student populations and endowments. Social justice is for all TPC programs at every level of education, and small institutions can really make a difference.

But of course, meaningful work always comes with its challenges. In Kramer-Simpson's study, she found that location, coordinator workplace experience, student preparation, and internship duties presented particular hurdles in the eight interviews that she conducted with TPC program directors. These were similar to the challenges in the results of my interviews. While overall program directors were able to sustain partnerships in their programs, five of them mentioned one or more of Kramer-Simpson's challenges. Regardless of if an institution's location is rural or not affects the ease at which an institution is able to develop a sustainable partnership over the years to get students paid internships. When there is a high turnover rate, more time is needed for the coordinator to spend time with the partner to address expectations and protect student agency. This aspect can be difficult for program directors who have little to no work experience outside of academia – making contacts harder to get and relating to contacts challenging.

In many ways, this chapter has shown small institutions' TPC programs at their best and worst. At their worst, these programs struggle with deficiencies of funds and people which in turn make their programs struggle to provide substantial technology skills and workplace experience for preparation to transition to the workplace upon graduation. But at their best, these programs can find partnerships within and outside the university to supplement their technology deficiencies that still provides technology skills through a theoretical framework; and the programs can develop partnerships with their local communities that make their communities better – counting themselves part of the social justice turn in TPC at large – even though many of them are not even aware of this turn.

Of course, implementing the right technology and partnerships into a TPC program is not black and white, containing so many variables that influences its success or failure. University

context and positioning can sometimes have just as much influence in a TPC program as the program director themselves; for example, when a university makes it is mission to develop partnerships with community stakeholders and puts substantial money towards this endeavor, then the TPC program director can tap into this initiative without having to survive solely on one's own budget and resources. Additionally, the people available to the TPC program directors – such as IT personnel, institutional marketing team, other faculty across disciplines – and their attitudes and knowledge of the TPC program can either bolster the success of the department, or do the opposite. So many of these variables are outside of the control of the program director, yet program directors have to navigate these variables in order to decide what is the best use of their time and resources for the best interests of their students.

Like all scholarship, this chapter certainly has limitations. The topic of implementing a program goes so far beyond the mere topics of technology and partnership – such as the topics of identity, faculty hiring, curriculum mapping, undergraduate research, etc. But despite these limitations, this chapter has shown the ways that TPC program directors think and integrate two elements of TPC program implementation: technology and partnerships. And it turns out that the challenges and joys in the implementing of technology and partnerships are similar to the challenges and joys experiences at any size school.

CHAPTER VI
SUSTAINING

Just because a program is able to advocate for and implement a TPC program does not make it a sustainable program. Sustainability pertains to not only maintaining a program but also seeing how the program grows and adapts to new philosophies, technologies, and opportunities afforded its program, possibly in reaction to TPC scholarship and TPC workplaces. While programmatic sustainability is definitely larger than the conversations in my data, I have decided to focus my definition of sustainability to pertain to the topics of recruitment, assessment, professional development, and future improvements. The first section of this chapter describes how my participants approach the task of recruitment that reveals the struggle to get students into TPC programs. Many faculty struggle to know where to put their time and energy for the best outcome – many times becoming discouraged about their recruitment efforts. The second section of this chapter is the longest and tackles the topic of assessment. While no assessment procedure was the same throughout any of my participants, there were several people who believed in their assessment practices and showed how their different forms of qualitative and quantitative assessments improved their program. The fourth section describes my participants' professional development. Similar to assessment, all participants had some degree of professional development, though some clearly had way more professional development than others. After professional development, my next section summarizes my participants' responses to a question about future improvements to the program. While this is a broad category, the program directors of my study talked about immediate improvements happening the following semester as well as hopes and dreams for their TPC that seem more far in the future. Lastly, this chapter ends with a broader discussion of the findings of this study and connects it to larger conversations in TPC scholarship, ending with a brief comment on the limitations of this chapter.

Recruitment

To sustain a program, institutions need students to be in that program. It seems like a simple concept, but many small TPC programs really struggle to get students into their programs. Several of my participants felt that their recruitment efforts were largely a waste of time and were a massive time suck to their teaching responsibilities. Two participants did not realize that recruitment was going to be part of their job responsibilities until starting work at their institution (Izzy, Amy). And while a few participants found successful ways of recruiting, the majority were frustrated with themselves and their institution in regard to supporting the TPC program. After finishing three of my interviews, I even had three participants (Doug, Theodore, Ron) specifically inquire about my initial findings on recruitment in other small TPC programs; and when asked what the biggest challenge for her TPC program is, Elizabeth responded, "Probably recruitment, and having the time to do it. So it's hard when you make the program, make the course, flyers, reach out to faculty. Hard to know sometimes how to communicate and how best to get the word out to recruit people from other majors." In response to Doug, Theodore, Ron, and Elizabeth, this chapter answers their concerns about recruitment efforts by examining the ways in which program directors navigate this challenging task.

Who is responsible for recruitment? Like anything in the educational system, the answer to that question is complex. It might be assumed that the Admissions Department at the institution is in charge of recruitment – their full-time job is to get students on campus and into majors. Out of my 26 interviews, eleven of them mentioned the Admissions Department in some way throughout the course of the interview, though none of my predetermined questions mentioned this topic. Elizabeth wished her Admissions Department actually recruited for her program, and Wendy wished her Admissions Department was not so picky about only using admissions-approved presentations. Amy and Jane both felt that all of the focus goes to the

health sciences and engineering that they are not even sure the Admissions Department knows, let alone values, their program. While commenting on her own recruitment initiatives through her admissions department, Jane said,

> So you know we try to recruit […] we take part in open houses and we do things. It's getting students here that seems to be the problem. So you know I have great presentations about the practicality of the degree and the success of our alums because they're gainfully employed. They're happy. I have great materials to show to these students and their parents, but I don't have the students and the parents to show them to, because people aren't coming to the open houses. You know, and that's just a multi-faceted problem.

Jane attributes the failure of her recruitment efforts to a combination of state demographics and her admissions department's high turnover rate of staff.

But there were some success stories in regard to the Admissions Department. In Sarah's situation, she had admissions counselors reaching out to her to set up meetings to ask more questions about her TPC program; she found these meetings productive in helping admissions articulate her program. And in Diane's situation, she has a wonderful relationship with admissions to receive names, numbers, and emails to correspond with prospective students. Others also mentioned attending admissions events throughout the school year. Diane goes to two admission events every year, Amy attends three events per academic year, Manuel goes to an admissions recruiting event once a month on Fridays, and Ron does one Saturday a month. In Diane's institution, local high schools bring in buses of high school students and Diane is able to conduct a forty-minute session with them to explain her program and demo some technical writing practices through fun activities with dominos and Legos. And in Bert's institution, she is

able to have a presence at the robotic state competition for high school students which is hosted by her Engineering Department.

While the Admissions Department might be expected to take on the brunt of recruitment, there are also recruitment efforts that exist outside this sector of campus. For example, a few of my participants go to local high schools and community colleges to recruit students into the major (Jane, Sarah, Sandra, Amy, Wendy). Through the National Writing Project, Sarah puts together each year an event at a local high school where she was able to host a technical communication session where the students played with Legos. Sandra regularly sends flyers to the high schools about her TPC program, and Wendy's institution is going through a recruitment initiative where all faculty reach out to local high school teachers and recruit for the major. Similarly, Amy also reaches out to high schools by sending them what she calls "a major in a box" that includes swag from the institution and information about the professional writing program. She sends the boxes to the high school counselors that she has the best repour with and then goes to the high schools that show the most interest in her program. Jake has reached out to several local high schools to come in be the "Professor Guy" who talks about creative and professional writing; but so far, no teacher has taken him up on his offer. In regard to community college outreach, Wendy has found it to be more productive to talk to the newspaper staff at her local community college rather than attend classes.

Getting students to come in as TPC majors their freshman year is only one form of recruitment. Many programs have had successful initiatives recruiting students into the program who came into the institution as a different major – specifically through speaking in different general education courses about the TPC program. For example, Sandra has a lot of success recruiting out of her institutions' Introduction to Business and Professional Writing course that is

required by several majors across campus; additionally, Sandra and her colleague have attended various courses to give a presentation on their program, but she is not sure how effective those presentations are since she believes only a few people found the program that way. Sean teaches an Introduction to Technical Communication class where he gives his students a survey of the different types of TPC in the workplace, and he tries to get the students who are most interested in the class to take on the minor. But he also realizes that "if you're a good teacher sometimes you'll get students who just like you and want to take more classes with you" – something that can be accomplished in a small schools where professors teach sometimes exclusively undergraduate classes. Diane also recruits through attending courses; but instead of her presenting in different courses, she has her TPC majors present a pitch about the TPC program in different first year English classes in hopes of recruiting more students to her major.

Other participants of my study decided to target exclusively undeclared/undecided majors (Theodore, Hannah, Amy, Izzy). Theodore has academic major events in his institution's gym where freshmen and students who have decided to attend the institution participate in a majors fair where they can talk to different professors about their program. And Amy gets a list of all undeclared/undecided majors who have been accepted to the institution so that she can individually email them about her program. Hannah goes a step further than Amy by getting the list of all undeclared majors (ideally with strong English placement scores) on campus as well as their dorm addresses and then individually writes them letters addressed to their mailboxes on campus. She commented, "they [students] love snail mail in the dorm. So busy getting texts and getting email. And I'm like, let's just see how this goes, so I did a handwritten note to each one personalized." As the chair of the English Department, Hannah also helps students who come in as English majors but have not picked their emphasis within the program.

While some of the professors I interviewed focused on talking and reaching out to students individually, other professors decided to recruit more indirectly by putting more time and effort into their institution's website that provided information about the program and into different social media platforms that also promoted the program (Melissa, Wendy, Amy, Hannah, Izzy, Manuel, Jane). After asking and being denied a recruiting budget for three years in a row, Amy was finally able to get a $9700 grant from her institution to employ her TPC students to rewrite their TPC website including videos. She finds that she is able to get more financial support through her institution if she can frame the request as student learning. Melissa was also about to create videos for her TPC program only to be told by administration that they would have rather her started an undergraduate journal than work on recruitment for the major. Jane posted videos of interviews she conducted with the successful alums of her program and posted them to her TPC program's website page at her institution. When Manuel arrived at his institution, there were only two sentences on the institution's website about his TPC major, and one of those sentences was just about how many credits were in the major. Manuel blames the lack of information on the website as the cause behind having no incoming freshman who wanted to major in TPC. Over the last ten years of Manuel's employment, he has gradually added something to the website every year and now he consistently has incoming freshman every year who declare the major from the start of their academic career. Lastly, Wendy has made several videos in conjunction with the Admissions Department for them to show at different admissions events. Both Izzy and Manuel mentioned social media as part of the recruitment efforts but did not go into detail about how they used it.

Besides indirectly recruiting through the internet, some participants found additional indirect recruiting methods through other academic departments, career services, and the

registrar's office. To get more people in her minor, Sarah regularly attends departmental meetings other than her own to promote her minor and answer any questions they may have about her program. Sarah claims the biggest obstacle of her minor is that faculty just do not know about it. Likewise, other departments at Tracy's school advocate for the applicability of her program which brings students to her minor. Krista found a lot of success by sending her career services department flyers about her program; they promoted the program to the students they worked with because they see her program as a strong line to put on one's resume. Sadly, Doug has not found as much success with his institution's registrar's office who continually forgets that he has a program.

Though this point is not surprising, it is worth mentioning that a few people talked about recruiting students into their program through switching tracks in the English major (Jean, Ron, John). Jean specifically targets English Education majors that realize that they do not like teaching but still love the English field. And even if they do not want to switch tracks, Jean's friend who is the advisor for the education major still tries to convince them to take a TPC minor. Similarly, Ron addresses English majors' concerns when they are interested in English but do not want to become teachers; he has a pitch to all English majors about what they can do with their English majors that is not teaching related.

Other recruitment topics that participants discussed during the interview was word-of-mouth and public readings. Five participants (Bert, Mary, Rose, Stacy, Tracy) mentioned that many of their students find their program through word-of-mouth. Bert and Mary both discussed how they believe that most of their students find their department from current students talking to their peers about the program. Stacy would also agree with Bert and Mary's statement but would also add that some students hear about the program through word-of-mouth from alumni

of the program or even some high school teachers that think highly of Stacy's program. In a very different approach to recruitment, Theodore has found a lot of success getting the word out about his program through public readings of creative writing. He says that many students find out about his program through students inviting their peers to this event, and then they become interested in the English majors on campus and the literary journal that the professional writing students edit.

Most participants just answered my question about current recruitment practices, but other participants wanted to spend more time during the interview reflecting on the challenges of recruitment specific to their contexts. Wendy spent quite a bit of time during her interview reflecting on how much the first-year writing program affects TPC recruitment. For example, when a program has TPC professors teaching in the FYC program, they are more likely to talk about their major and benefits of the TPC career. Unfortunately, at Wendy's institution, most FYC courses are now taught by adjuncts who do not have as much investment in the program or institution, so she correlates this reality with declining numbers in her program. Wendy also laments how common it is now to come into college with AP and dual enrollment classes that bypass any chance of interacting with TPC professors in FYC, losing the opportunity to engage with the best writers at the institution. Besides Wendy, Sarah discussed the challenges of having the TPC program buried within the English Department where seemingly no one can find it, and William addressed the challenges of a 17-year old audience who gets their understanding of the world through their parents, siblings, movies, TV, and the internet – where a professional writing degree does not exist in the cultural imagination.

Whereas all of the previous information in this recruitment section came from the prefigured code of "recruitment," there was an emergent code from my data that I had not

expected: flyers. Out of the 26 participants that I interviewed, 10 of them brought up the use of flyers in their recruitment strategies (Elizabeth, Hannah, Jean, John, Krista, Ron, Rose, Sandra, Sean, Amy). While many of the participants did not give extensive details about their use of flyers, it is interesting that these small schools saw the use of flyers for the advertisement of their programs and classes to be a successful way of reaching future and current students. These flyers consisted of physical flyers that professors stapled to buildings around campus, digital flyers that professors sent out to current students through the weekly student email blast about things happening around campus, and admissions flyers that professors handed out during admissions events that included statistics like job placement percentages. Krista even made the point to make sure that all advisors on campus had a flyer so that they would be aware of her program while advising for different majors.

In conclusion, this section has demonstrated the ways that TPC programs in small undergraduate universities sustain their program through recruitment efforts, revealing the ways that many program directors still struggle to get students to their program because they are not sure how they should recruit students and if their recruitment efforts are even working – a similar sentiment of any institution. As these narratives reveal, it is hard to assess which recruitment efforts are working and which ones are not. Based on this small sample size, it seems that creating flyers and updating the university's website for TPC is the best way of recruiting students into the program according to a labor-to-results ratio, and going into high schools for recruitment seems like the least effective method of recruitment according to a labor to results ratio. Given the continual decline in people going to college and/or people in the 18-25 range, the problems of recruitment are not going away regardless of institutional size. I hope that all size institutions can read this section and reflect on the affordances of their Admissions Departments,

Administrative attitudes, English Departments, TPC classes, TPC faculty, etc. to see what would optimize the best recruitment strategies for their program's situation.

Assessment

"What do we want these students to graduate with? And how do we know that they're getting them?" (Rose). "Don't you want to know that your students are actually able to do the things that you promise they can do?" (Stacy). These quotes from two of my interviews uncover some of the ways that program directors are thinking about assessment. Assessment is a complex, rhetorical situation of an array of audiences with potentially opposing objectives. In an ideal world, there would be no disagreements between accrediting bodies, administration, departments, professors, and students yet this is not the academic reality that most professors work in. My study shows that program directors generally grapple with two main questions about assessment: (1) Why should we assess? and (2) What should we assess? The first question is complex because it reveals the motivations behind assessment. If the motivation to assess is only to receive accreditation status, a program's assessment might only assess the program's major because some accrediting bodies do not care about assessing minors and certificates ("SACSCOC: Substantive Change Policy and Procedures," 2019, p. 41). If the motivation to assess is to argue to the administration that the program should exist, a program's assessment might focus more on quantitative data from student, alumni, and employer surveys rather than instructor graded portfolios (Rose). And if the motivation to assess is to track student progress in meeting Student Learning Outcomes (SLO) over the course of their college, then a program's assessment might focus more on capstone classes and portfolios (Izzy, Krista, Rose, Sarah, Doug). The second question, which is informed by the first question, is the question of what to exactly use to measure whatever it is the program is measuring, like surveys, students' work,

instructors' grades, nationwide statistics, internships, job placement, learning outcomes, etc. In short, assessment is contextually situated, evidenced by the fact that none of my participants have the same exact assessment procedures.

This section of the chapter explicitly examines what assessment looks like in each program, revealing how all of the program directors are in some way grappling with the why and what of assessment. I first delve into a discussion of the problems and challenges of assessment experienced in the small institutions of my study, including coursework, programmatic, and administrative frustrations. The next section focuses on frequency of assessment by looking how often and how program directors approach this task, showing how there is by no means a monolith of how often these schools assess their curriculum. Lastly, I present the success stories of some program directors that have found a lot of meaning and purpose in assessment practices for their TPC program.

Problems and Challenges

People had a lot of negative comments regarding assessment, calling it "not useful" (Sean), "redundant" (Melissa), "myriad of chaos" (Hannah), "going through the motions" (Ron, Adam), and "Oh god, that's a mess" (Amy). The gambit of these negative comments included complaints about not enough assessment, too much assessment, not enough administration involvement, too much administrative involvement, too much qualitative assessment, not enough qualitative assessment, not enough program assessment, not enough course assessment, not enough instructor assessment, not enough time to do assessment, etc.

Some people of my study feel that they do not do enough meaningful assessment that benefits their program (Doug, Sean, Ron). During Doug's interview, he said, "To be like frank, this is one of my least favorite aspects of our program. While we are certainly doing an

appropriate amount of assessment for our accreditor and for everyone else, it's difficult to get a beat on what students are learning." Doug went on to discuss his desire for "a more robust assessment regime" that does not rely so much on informal conversations with his colleagues and more on quantitative data. He sees the real problem of his TPC major in that there is not one class that all TPC students take, which is wonderful for students' flexible schedules but harder for assessment rubrics.

Likewise, Sean also feels frustrated with assessment and has taken steps to get out of assessment for his program because he argued to his administration that the program is too new with not enough students for actual assessment. He says,

> Yeah, I have problems with assessment. Anyways, it always seems weird to me; I've yet to be convinced or see a real use. Not that I've been everywhere, you know, but what are we really assessing: the students, the lectures, the program? How does this work? How are changes made? I mean, certainly there's readings out there to say this is the way you do assessment things like that. Yeah, in practice again. I've only taught it in a couple of places, but it's very hard. It's very hard to and properly in a useful way [and] I want to get it right.

With the newness of his program and small sample size, it is hard for Sean to see any meaning in putting labor into assessment. He believes that a program needs to have a regularity of classes to implement sustainable and useful assessment and his program just does not have that component.

Ron also struggles with the meaning of doing assessment when he only has six students to assess. He said, "I feel bad saying it, but I kind of just go through the motions because I'm asked to. I'll read the eight reflection papers and check a box here. Sure, but I'll be honest about it, but it's just such a small sample size." Another factor that adds to the meaninglessness of his

assessment is administrations' ability to lose data. Supposedly, the university had all of the assessment data in cloud storage but somehow a third of the data went missing. While Ron always keeps a backup on his computer, he finds it frustrating that the university who demands assessments also loses assessments.

Other participants are on the other side of the spectrum of assessment. While Doug, Sean, and Ron lack assessment, Hannah, Melissa, and Jake criticized their institution's over-assessment. For Hannah, she has two major assessments due every third and fifth year in which she collects data on the individual, course, and programmatic levels. Every year, Hannah collects data from courses, peer observations, student reviews, graduating senior survey, and conversations with her colleagues during department meetings as data for her assessment that is given to the Governance Committee for evaluation. Unfortunately, the pandemic postponed assessment deadlines so she now has three five-year assessments due for her current school year. Hannah calls this assessment procedure "cumbersome," "arduous," and "awful" that gives up a healthy work-life balance for "ultra-assessment." She comments, "There's a general consensus among the faculty that we're over-assessing ourselves, that we made it too hard and convoluted and difficult, that we should be simplifying our assessment process substantially." Yet even with her distain for the current assessment procedures, Hannah still spends significant time and effort filling them out because she knows that it means the success or failure of the program – despite the reality that she spends more time assessing than actually making changes to the program.

Similar to Hannah, Melissa and Jake also finds their institutions' assessment procedures a waste of time. Melissa talked about the redundancy of her assessment where she has to upload her assessment documents to multiple systems for her to get credit for doing the assessment. She attributes this "replication of energy" to her chancellor's lack of classroom knowledge: he has

neither classroom experience nor an advanced degree. For Jake, he states, “I feel more assessed than anything else.” Every year, he chooses new assessment tools in the fall semester to be implemented in the spring semester; then, at the end of five years, he compiles all of his data to indicate the health of the program. It is this assessment that indicated to Jake and the institution that the TPC program needed to be eliminated.

Others take a less hostile approach to institutional assessment and just approach assessment with a “just got to do it” philosophy (Wendy, Theodore). Wendy concludes that if she is forced to do assessment for accreditation purposes, then some of it should at least do something for her program. Theodore takes a similar approach with his institution’s assessment tool of reflection. Every year, he has to reflect on the program’s goals, accomplishment of those goals, and improvement of the program. Though most faculty do not like filling these assessments out including himself, Theodore greatly appreciates that the institution actually reads them but does not overly critique his program by telling him exactly what to do which allows him to keep his autonomy and authority concerning his expertise and program.

Amy has an interesting story in regard to assessment, because her story is one of declining assessment procedures despite her desire for robust assessment. When she first came to her institution, there were robust assessment guidelines from the university. Both university and programmatic outcomes were clearly defined, where university outcomes were general objectives (e.g. ethics, communication) that needed to be imbedded in all programs and programmatic outcomes were objectives created by individual departments. What altered all of this was the change of administration. The institution got rid of the assessment coordinator and the office of assessment and replaced it with a Vice President of Faculty Relations and a Vice President of Faculty Affairs who is now supposed to be in charge of assessment but there is still

no talk of any student learning outcomes like there was before or any student learning outcomes at all. To this situation, Amy commented, "Nobody knows what's going on […] I'm serious like nobody knows." Amy explained that she is supposed to assess her students according to her program's programmatic outcomes at the end of the year; but when I asked Amy what the assessment form looked like and what percentages were involved like "70% of students score a B or better in the outcome of collaboration," Amy replied, "That's a good question. We don't know." At one time, one component of assessment was supposed to be a student portfolio that they turn in at the end of their college career. But in the five years of Amy teaching at her institution, she has only seen two portfolios. There still is a course in the catalog for the portfolio class that is supposed to include a committee to review the portfolios, and Amy has no idea what happened to any of that.

In short, this section has demonstrated the obstacles and frustrations of assessment in TPC school – with many of these obstacles and frustrations the same at any institution. What is sad about these narratives is that there is scholarship that specifically addresses this need (Henschel & Melonçon, 2014; Thomas & McShane, 2007). For example, Henschel and Melonçon (2014) approach the academic-industry divide by offering assessment handouts for both TPC course and TPC program mapping. They provide a matrix table that assesses courses for rhetorical proficiency, abstraction, social proficiency, experimentation, and system thinking and a matrix table that assesses TPC curriculum mapping for the same elements – aligning course objectives with curriculum objectives. If a small institution did not want to create their own assessment matrixes, they could easily adapt assessment guidelines from journals like *Programmatic Perspectives* that basically do the hard work of synthesizing scholarship and industry standards for them. Assessment does not have to be as stressful and unproductive at

small institutions. I cannot confidently assert the reasons why for these continued frustrations, but maybe one of the reason is the lack of administrative support in keeping up with scholarship? While outside of the scope of this dissertation, I wonder if the labor of courses and the deemphasis on scholarship in small schools adds to assessment practices lacking?

Frequency

While I was coding this assessment portion of the data, one unexpected code that perpetually kept coming up with the vast range of frequency in which participants assess their program. Some programs assess every semester, every other semester, once a year, once every other year, every two years, every three years, every five years, or every seven years. The amount of outcomes being assessed was also a wide range from assessing all outcomes every semester to assessing all outcomes every five years.

It is important to note that some programs do not assess or are not required to assess their program because it is either a minor or certificate (Jean, Tracy, Elizabeth, Izzy). For Jean, there is absolutely no programmatic assessment for her minor. The courses in her minor do not overlap with any current courses in any other major, so none of her courses are a part of another major's assessment like some other programs; for example, Tracy does not assess her minor but several of her classes appear in her institution's UX major so she has to provide data concerning collaboration and communication outcomes in her minor's classes. For Izzy, he does not specifically assess the TPC track or minor but the whole English major where all tracks are assessed and his TPC program is a part of that but not exclusively TPC. For the major, all instructors have to submit pieces from their students so that the department can track students' writing progression for the major but TPC tracks and minors are not assessed separately.

For those participants who did assess their programs, the general consensus for assessment was to choose 1-6 programmatic outcomes/objectives and then decide how frequently to assess those outcomes. The highest frequency was to assess outcomes per semester which was implemented by two program directors (Bert, Diane). Each semester, Bert chooses two outcomes out of her six programmatic outcomes and then chooses two courses in which to assesses the two outcomes. Diane also has six outcomes for her program and assesses something each semester; but unlike Bert who choses just two outcomes, Diane collects data concerning all six outcomes (writing, design, public speaking, group work, original research, and multimedia skills) every semester.

The most common frequency of assessment was yearly – though there is still great variety of how these programs are assessed yearly. For instance, John assesses his program yearly by choosing one programmatic learning objective to assess each year in a certain number-level course, so last year he looked at one objective in all of his two-hundred level courses and this year he is looking at a different objective in his four-hundred level courses. Ron has a similar process where he looks at one objective a year by attaching it to assignments in his classes where students need to score 70% or more in the objective that he is assessing that year. Manuel also assesses his program every year but just a little different from John and Ron. He assesses all four of his program's objectives such as the objective of clarity, conciseness, and cohesion of thought by examining students' work at the beginning and end of an academic year, then he and his colleagues assess students' data and write up a report that is due in September for the previous year where they analyze on their data and set new goals and benchmarks for the following year. This process is required by Manuel's administration and it taken very seriously. Jane does yearly

institutional (not programmatic) assessment but did not go into detail about the details about the assessment.

Additionally, Sandra, Wendy, and Theodore also conduct assessments each year. In Sandra's department, the linguist is head of the assessment committee that assesses all of the different types of majors in the department. There are subcommittees within this committee that decide on the specific six objectives for the TPC major, assessing two objective per academic year. Ideally, TPC faculty are put into focus groups to assess students' learning of the two chosen objectives, but Sandra admits that last year she hardly read any writing samples because the writing courses in the health sciences and business writing needed assessment for those departments Writing in the Discipline's assessment tools. Sandra also mentioned wanting to create the same objectives for all the majors in her department so that her department could assess all three majors at once, instead of having so many subcommittees per major. Wendy has this assessment structure. Her department of writing and rhetoric has four learning outcomes and each year the department assesses one of them in all of the different majors in the program, including the TPC program. Each year, the department chooses the outcomes and the classes in which the outcome will be assessed; for example, her department might choose to assess the learning outcome of student's ability to assess their own and other's work in a core class of the department and classes in each of the department's concentrations. As mentioned earlier in this chapter, Theodore completes a yearly reflection assessment of his program and himself. He specifically assesses last year's goals for his program, what was accomplished, and what his goals for next year will be.

Other participants of my study mentioned that they assess their programs every two to three years (Stacy, Hannah, Mary). Every two years, Stacy assesses the fall and spring TPC

courses through the use of the LMS Canvas which as the capability to embed student learning outcomes. One unique aspect of Stacy's assessment is that her faculty never assess their own courses and outcomes; instead, faculty go into other faculty's TPC courses and rate the final assignment in the course with the embedded assessment tool in Canvas. Ideally, the final assignment will contain all aspects of the programs learning outcomes, but some professors choose to divide the learning outcomes between two assignment in which case the faculty member doing assessment would have to assess two documents. Hannah and Mary assess their programs every three years. Though Hannah collects data every year of her program, she does not fill out the formal report and assess the data until three years of data have been collected. This assessment piece specifically analyzes the program and its courses, specifically examining program objectives, course objectives, changes, and improvements. For Mary, her department assesses all of the courses in the program every three years. A three-person assessment team is put together that is made up of English Department professors who assess whether students are meeting the learning outcomes of the department. Each faculty member teaching a TPC course designates the assignment in which the three-person team assesses whether each student met the learning objective with the product that they produced. Some of the learning objectives include (1) ability to write for multiple audiences, and (2) ability to include both images and texts.

Only a few participants mentioned conducting assessments in the fourth, fifth, and seventh year (Izzy, Hannah, Jake, Jane). Though his minor is not required to be assessed, Izzy assesses his minor every four years by collecting students' work over their four years at college. He collects student work at the end of year semester, but does not analyze it until four years have gone by so that he can track students' progress. Additionally, Hannah, who already fills out an assessment every three years, also fills an assessment report out every five years. While the

three-year report includes information about the program and its courses, the fifth year assessment report adds to this information by assessing how the program fits within the larger institutional context and strategic plan (i.e. how is the program serving the student body). On commenting on this two-part assessment, Hannah said, "So the lenses that we look through are different, and I think we've covered pretty much every lens you could possibly think of to look through with multiple methods." Similar to other programs, Jake also collects data every year of his program; but unlike other programs, he does not actually write up the assessment report until year five. Jane assesses her minor every seven years which is different from assessment of majors at her institution that are assessed more regularly.

In short, this section has demonstrated variety of assessment frequency in TPC school. I personally could not find specific TPC programmatic assessment scholarship on TPC assessment frequency which leads me to believe that there is not a discipline standard of practice, but I am not sure there needs to be a set standard. Every institution has its own unique administrative and accrediting regulations that heavily determine these frequencies. A program could be completing the same assessment over four semesters and another program could be completing the same assessment over one semester with the same amount of labor and the same amount of results. It seems based on the narratives of my study that frequency are just dependent on institutional context than any other component.

Solutions and Successes

The previous two sections have focused on the problems, challenges, and frequencies of assessment – sections that did not include many positive aspects of assessment. This section takes a turn in the discourse of assessment by summarizing the ways that program directors are positively approaching assessment in ways that they find successful.

One way that Rose was able to positively use assessment was in the actual creation of her TPC minor. When Rose initially put in the paperwork for her new interdisciplinary minor in TPC, administration rejected it because it needed clearer outcomes and assessments. They specifically wanted more details on how Rose was going to assess the program to ensure this program was actually going to work at her institution. This rejection from administration was an opportunity for Rose to rethink the structure of her program to include a portfolio requirement that met the needs of administration but also did not require her to assess every single one of her new TPC courses which was too much for her as the only TPC professor at the time of the program's creation in 2001. With this change, Rose's program was approved because her assessments were perceived as strong by administration. While reflecting on her program during my interview with her, Rose made a point to tell me that programs need to use assessment to "fight the fight about why this program should be saved if it's so small." In other words, see assessment as more than just a menial task required by administration.

Another way that program directors in small undergraduate programs find success in assessment is through indirect and direct methods of data collection. In my study most people defined indirect methods as referring to alumni surveys, employer surveys, and student exit surveys and direct methods as TPC professors directly assessing students, like capstone classes or portfolios. For indirect methods, Jane was given by administration alumni surveys pertinent to her program that she was able to include in her assessment report. In Krista's assessment, she collects employer surveys of experts evaluating the work of her TPC students. And Krista, Rose, Stacy, and Hannah all stated that they use student exit surveys as part of their assessment report. Krista, Hannah and Rose use the survey as a form to have graduating senior TPC students reflect on their time in the program. Stacy takes this a step further in her exit survey and asks students to

describe what the program is missing; for example, Stacy began to see a pattern of students wanting more practice and instruction on html so she added more of this component to her digital writing course in the program.

As for direct methods of assessment, some participants specifically mentioned using capstone courses and portfolios as writing artifacts to assess and measure (Izzy, William, Krista, Rose, Sarah). Sarah uses the seniors' portfolios to both evaluate students' performance and her program's outcomes; likewise, Krista also makes her students do a portfolio in her capstone class where she only assesses the portfolio and not the course. She believes that courses should not be assessed because instructors are already doing that with their grades.

Something unique happened in Doug, Annish, and Theresa's interview (all colleagues in the same program and institution). They do not have a capstone or portfolio component as part of their program, but they used the space of the interview to brainstorm ways to change this element. Doug mentioned that "at present there is no PW exclusive course that all PW students would take, and Theresa commented, "and it would be cool if we could assess just the professional writing concentration in a more structured way." All three agreed that having a class that all TPC majors took would make assessment easier; Doug ended the assessment conversation with "I don't know how much capacity we have to add something to the curriculum per se without taking something out, but that's something we should certainly consider looking at. And I'm certainly open to the idea; I love the idea. I hope we're able to do it." Here, Doug who is the chair of the department is using the space of the interview to brainstorm his department's assessment practices.

Similar to how Doug, Theresa, and Anish solved problems through conversations and reflections, other participants also found these informal chats with colleagues that reflect upon

teaching and the curriculum to be highly effective forms of assessment (Elizabeth, Hannah, Tracy, Wendy, Sandra). In Elizabeth and Dorothy's institution (colleagues from the same institution), they are not required to assess their minor; and with all of their duties, there is no time or energy to assess a minor other than talking informally with colleagues about the minor's outcomes and if students successfully met them. Dorothy identifies her colleagues and herself as "highly reflective teachers" whose reflective practices inform future iterations of courses and programs. In Sandra's English Department, these reflective talks happen both with her colleagues in intentionally faculty focus groups and in conversations with the assessment committee. Both Tracy and Hannah talk about their programs anecdotally with colleagues, chatting about what is working and what is not in their curriculum. And Wendy talked about improvements that her and her colleagues made to their catalog's course descriptions to better help advisors understand and articulate the curriculum – these changes coming from informal department discussions.

Other successful conversations did not just happen in the department but also with administration. While there were plenty of program directors' complaining about their administration as mentioned earlier in this section, there were also other program directors had positive interaction with their administration through their Assessment Coordinator (also named, Assessment Committee, Office of Assessment, Office of Academic Affairs, Office of Institutional Effectiveness) (Diane, Hannah, Jane, Krista, Sandra, Bert, Stacy). Jane's Office of Academic Affairs sends her a scorecard of different data from different for her to cumulatively assess, data such as student evaluations, alumni surveys, cost of the program, average class size, etc. Administration requires Jane and her colleagues to evaluate the report, talk about it, and then report a follow-up report about ways to improve the program. Diane also works with her

assessment coordinator but in a different way. Her assessment coordinator collects all of the data from faculty individually rating their students' work based on the programs chosen outcomes, and then the assessment coordinator produces course averages for all of the TPC courses. Unlike Jane and Diane who work with their university administration, Bert works her engineering department's administration. Though she is not required to fill out assessments for the engineering department, Bert chooses to submit her assessment as part of the ABET accreditation, and her program is repetitively marked as one of the exemplar programs in ABET's accredited engineering programs.

The participant who raved the most about her program's successful assessment was Stacy. Notably, Stacy was the most excited participant to talk about assessment and the program with the most students compared to all of the other programs I collected data from. Stacy's assessment plan evaluates her programmatic learning outcomes (PLO) on the course level by requiring faculty to PLOs in the final assignment of TPC courses. Then, with a Canvas (LMS) tool, faculty assess other faculty members implementation of the PLOs and how students score according to the PLOs; Stacy was adamant that faculty never assess their own courses. Stacy is looking to see if students are making the benchmark goals set by the department and to see if her instructors have implicit bias. What was particularly unique about Stacy's assessment is that she collected information about the students such as gender, transfer, native, ethnicity, etc. which allowed her to see if her instructors where harboring implicit bias against a certain student population. She is not as concerned with one semester's data as she is with examining patterns overtime. So far, she is not any alarming biases that she has needed to address – but she continues to add to her Excel spreadsheet of data every year.

In conclusion, this section has shown what many scholars already know: that assessment can work effectively. Assessment can certainly have it challenges, but this section presents hope of effectively using direct and indirect methods of assessment that can bring visibility and improvement to a TPC program. I believe this section on the successes of assessment presents a different narrative to the first section on the challenges of assessment. Sometimes TPC program directors just need to see how other programs are approaching assessment to give them new ideas to implement in their own context – moving their programs from mere survival to actually sustaining. My hope is that readers of this section will not read this section as a list of things to implement but as a database of assessment examples that they will then have to adapt their own unique context.

Professional Development

Another aspect of sustainability is faculty professional development. While so much focus is on student achievement, that component is also tied to whether or not faculty continue to grow as individuals in their academic disciplines. This section of the chapter focuses on sustainability as it relates to TPC faculty's professional development, ranging from internal development to outside conferences and publications.

All of my participants had varying levels of professional development: none of them claimed to have no professional development. The question I asked during the interview was "Do you have faculty development for your program?" and their answers consisted of a wide variety of answers, including exact dollar amounts, institutional development, conferences, publications, personal readings, certifications, and workshops. The only people to provide an exact dollar amount of their professional development funds were Manuel ($900), Stacy ($2000), Amy ($850), and Jake ($750), though I did not explicitly ask for this information. Additionally, I

did not ask about institutional requirements, whether or not professional development was a requirement for the college, tenure, sabbatical, continuous employment, etc., though again some people mentioned it in their response like Amy who said that professional development was "soft requirement, not explicitly stated" in her university's policies.

One recurrent theme of my professional development discussions was institutionally-run professional development (i.e. internal development). Several participants discussed how they either attended internal professional development activities or even ran professional development activities for their college or university (Doug, Dorothy, Elizabeth, Jean, Theodore, Jane, Amy, Tracy, Hannah, Adam). Amy's institution has a department called the Commission for College Teaching that puts on a Teaching and Excellent conference every year that Amy attends. Jane's institution has a Faculty Development Day that occurs the Friday before classes begin and addresses topics like universal design, teaching with technology, instructional tools, etc. Jean has a similar program at her university through the Center for Teaching and Learning that puts on regular presentations and workshops throughout the year; Jean even was able to get her project funded by this Center. Additionally, Jean contributes to this program by giving lectures over Zoom on how to more effectively incorporate writing into different disciplines.

Several other of my participants also contributed to faculty development on campus. Doug, Anish, and Theresa (all from the same university) talked about how for a long time they were the only people on campus holding any type of faculty development workshops: basically, the English Department served as the university's professional development. Similarly, Elizabeth used to be the TPC program director and the director of faculty development for first year students, teaching inquiry, and assessment of all kinds. When directing faculty development, she focused on workshops and setting up one-on-one mentoring to support her initiative. Theodore

takes professional development to a whole new level because he puts on a professional development conference for teachers in his university's local area that covers kindergarten to post-secondary writing education. Since he is already tenured, putting on this conference is what Theodore wants to do with his time and finds so much meaning in this conference that supports teachers in his area.

Faculty are not only participating in their institutions' professional development opportunities, but they are also attending conferences that address more specific needs of their programs and curriculum (Diane, John, Krista, Rose, Sarah, Amy, John, Stacy, Izzy, Krista, Wendy, William, Sandra, Hannah). Not surprising, the most popular conference attended by my participants was the Council for Programs in Technical and Scientific Communication (CPTSC). Diane, John, Krista, Rose, Sarah, Amy, Manuel, and Ron all talked about his conference in their answer and found it to support their academic work specifically for the administration of the program. Krista commented on the CPTSC: "In some ways, that's the only conference I really like anymore. And I get a lot out of it." And Sarah was even able to give a plenary talk on her programs challenges and failures at the CPTSC.

Other conferences mentioned during the interview were Institute of Electrical and Electronics Engineers (IEEE), College English Association Conference (NCTE), Creative Writing conferences, Special Interest Group on Design of Communication Conferences (SIGDOC), Rhetoric Society of America Conference (RSA), Computers and Writing Conferences, Association of Teachers of Technical Writing Conferences (ATTW), Society of Technical Communication Conference (STC), and the Conference on College Composition and Communication (CCCC). RSA's conference has been a wonderful conference for Izzy and William; while it might not directly pertain to his TPC courses, the conference "feeds the soul

for me" says Izzy, "It's a place to do the kind of intellectual work that I that I really love. I don't know if it's the best support of like giving me kind of pedagogical stuff but it feeds the intellectual soul." Sarah has found that she loves the College English Association's conference that tends to be compiled of smaller universities and colleges that has the same teacher-scholar mindset that she has. For Sandra, her conference participation is divided between the different areas of her work; so she has to choose between writing center conferences, writing across the curriculum conferences, and TPC-related conferences. And for William, he believes conference money is so important that he was able to secure funds for his part-time faculty.

Four participants specifically mentioned that they do not find CCCC helpful (John, Krista, Sarah, Wendy). Sarah specifically stated, "I used to go to four c's all the time. It just got to the point where it just was stuff I'd heard before. I just wasn't hearing anything new. It was stuff that just wasn't really helping me." Wendy also commented on CCCC by saying that she used to attend the conference, but she finds it less applicable to her work because it tends to focus more on first year writing and graduates programs. She says that though there are some resources for writing majors, there isn't enough for specific TPC majors to justify her attending the conference anymore.

Whereas conferencing was by far the most popular form of professional development, several people also mentioned publications that they were either working on currently or had published in the last five years (Jake, Izzy, Bert, Krista, Stacy, Adam). Izzy talked about how he has three publications out right now with editors and that he is eager see them to the finishing line; one of the publications is co-written with one of his colleagues who is an instructional designer on the topic of hybrid course design, and another publication is on the topic teaching critical practices like critical feeling, critical imagination, critical engagement, and critical being,

which he is co-written with a neuroscientist. Jake has similar success in publishing in memoir in 2016, and Krista has published a few things with her colleague at another major R1 university. Since Bert is later her in career, she prefers to be the second or third author of her colleagues' articles so she can support their work; she also enjoys being a mentor to some of her younger colleagues in supporting their pedagogy and professionalization.

Other types of professional development included personal reading, online certification course, and workshops. Krista, Diane, Bert, and Ron talked about personal reading that they enjoy which affects their TPC curriculum material. Dorothy was able to complete her professional development component of her assessment by getting an online certification in technical writing from University of California at Santa Cruz Silicon Valley extension, and Sean is looking to attend a Nielsen Norman training event with his colleagues to get a UX certification. His university approved travel expenses for the training but then COVID happened and now training is all online, so he is waiting to sign up for the next in-person training.

Overall, this section on professional development shows how professional development is not a monolith for TPC faculty because all participants found meaningful professional development in different places and through different mediums. Professional development is always a critical component of any TPC program, especially in small institutions where lone ranger program directors do not have TPC colleagues to collaborate with; therefore, networks of intra- and inter-institutional connections are crucial for program success. And even with small budgets, TPC program directors can still use avenues like Twitter and TPC listservs to keep up with academic trends (Chen, 2021). It seems from my small sample size of small institutions, TPC faculty want TPC specific content – moving themselves farther away from not only literature but writing conferences that do not seem to address TPC exigencies. For professional

development to continue as a reality for TPC pedagogy, TPC faculty must balance the demands of the day-to-day labor of classes with the institutional demands and scholarly standards of their field.

Future Improvements

The last sustainability aspect addressed during the interview was future improvements. Part of good assessment practices are not just deciding on the quality of a program but also future improvements of that program, which could encompass a broader vision for the program or just responding to data collected through assessment. This section comprises of a wide range of future hopes and dreams that TPC directors have for their programs.

Not surprisingly, several TPC program directors want more students in their program (Anish, Jane, Manuel, Mary, Ron, Theodore, Diane). Because student numbers and a faculty hire is so contingent on each other, Manuel wants a minimum of 40-50 students in his program so he can hire someone with more specialty in TPC. Theodore has similar thoughts: “We have two problems, not enough faculty and not enough students. It sounds contradictory, but it’s true.” He goes on to discuss how for his repertoire of courses to run regularly, he needs more students to sustain his program; and for Theodore to run his repertoire of courses more regularly, he needs more TPC faculty. Ron repeats this same sentiment when he talked about needing more students so that he could hire specialized TPC faculty, not relying so much on his own generalist knowledge. And while Manuel, Theodore, and Ron refer to traditional students, Rose wants more non-degree seeking students to take classes in her minor, helping employees in the workplace get additional certifications paid by their employers.

By far, the most desired improvement to the TPC program was more faculty (Diane, Melissa, Ron, Rose, Sandra, Stacy, Theodore, Wendy, Adam, Manuel). My participants desired

to have more faculty because they knew of the knowledge gaps in their program that could be filled by trained TPC faculty. Diane commented, "I like incorporating other faculty in other departments from different areas of expertise […] They get to have other teachers, because I can only teach them so much." Sandra also wants more faculty, specifically faculty who are committed to her TPC program and not spread thin across so many academic programs across campus that they would not be able to contribute to her TPC program. For Theodore, he wants the stability of faculty. His institution approved the hire of two faculty members; Theodore hired two faculty member who left within a year; and then, Theodore couldn't get approval to hire anyone for five years. For Stacy, she specifically wants to hire a faculty member from a traditionally underrepresented group with program development experience because she believes her program needs to address current social justice movements more adequately and to create a stronger vision for her TPC program that updates the program – and she hopes to address both of these needs in one faculty hire. For Wendy, she also wants to hire a new faculty member, but someone from industry who has had a career in technical writing. Due to layoffs in 2020, Wendy lost the only non-tenure track professor who taught her grant writing and magazine writing so she desires to hire someone from industry that can bring more workplace experience into the classroom. Additionally, Adam also wants a new faculty member. Since he is the only rhetoric and composition faculty in the department, he wants to hire another faculty member in rhetoric and composition. In Manuel's program, he has three areas of assessment so he would like an expert for each area of the program; he currently only has two TPC faculty (including himself). In regards to faculty, Bert did not mentioned anything about hiring a new faculty member because she thinks it is a better use of her time to sustain the work of her "wonderful colleagues" by focusing on making her program's environment collegial. She believes so much time is

wasted in non-collegial workplaces that detracts from the program's mission and implementation.

Another aspect that participants mentioned as a point of improvement is technology. Anish talked about how technology was the largest problem in his program, and Rose discussed how she believed her technological skills were "not up to standards" even though she knows that she does not need to be a technology teacher. Others mentioned the need to improve technology in their computer labs or just even having a computer lab. Krista wants a computer lab where she can download various software like the Adobe suite where students can use the software for free. Adam wants to tap into more technology available to him on campus, including ARVR and makerspace technologies available in other programs. Sean wants a usability lab to support his institution's writing initiatives; his vision for this lab would be to have a place where students could create and test various documents across the campus, developing a place where faculty and staff could submit projects to the students where the students get credit for creating and testing university documents. In an even larger vision, Amy wants a Center for UX studies that reflets the latest developments in technology and usability research.

In addition to the topic of technology, participants also discussed the revision of course content, dissemination, and frequency (Dorothy, Izzy, Krista, Rose, Sarah, Sean, William,). Dorothy vocalized a desire to create more classes with a focus on completing tasks for organizations and nonprofits outside of the university. Izzy also is looking to change his courses but in a different way. He wants to take several of his courses and break them up into separate courses; for example, he currently has a course titled "Professional, Technical, and Grant Writing" which he wants to separate into at least two separate courses with grant writing being

its own course. When discussing his coursework, Izzy admits that he feels his strength is in course development and not programmatic development. He says,

> I would say that I don't know if I was the greatest person to talk to about this just because I'm still trying to figure out how to view things at a programmatic level. This is my fifth year [and] I'm gonna be going up for tenure. I'm still trying to figure out how to look at things programmatically and not as a course. I get really excited about courses, and how I teach them, and what this approach is going to be in the active learning, and so much, you know, coming from a composition pedagogy background like so much of what I think about is pedagogy. And I'm still trying to zoom out and think on a programmatic level. And it's not something. I think, that I've really accomplished yet.

In short, Izzy has a hard time thinking programmatically because so much of his mental compacity goes towards developing individual courses. In an ideal curriculum, Izzy would like a technical writing course, business writing course, digital writing course, and science writing course. And since Izzy loves rhetoric so much, he would like to spend more time studying rhetoric in his classes and not just briefly mention it at the beginning of his Professional, Technical, and Grant Writing course where he talks about how writing is rhetorical but does not go into great depth on the topic; he would even love to bring in more ancient rhetoricians into the class conversation and content.

Additionally, Krista, Rose, Sarah, Sean, Jean, and William all mentioned the creation of new courses and labs. Krista talked about her desire to have a course in UX and content design; a course that she could see developing into a UX certificate or minor for her department and not the business department. Other courses mentioned were technical editing (Rose), instructional design (Sarah), international and intercultural communication (Sarah), usability lab (Sean),

technical writing in the sciences (Jean), and graphic design (William). Some of the program directors had definite plans to implement these courses soon while others had not planned to implement these courses soon due to budgets and personnel.

Another important category that my participants discussed was creating partnerships outside of their own departments (Doug, Sarah, Izzy, Jean, John, Tracy, Adam). Both Doug and Sarah talked about their desire to partner more with the Communication Department at their institution. Doug believes the way that his program can expand is through the Communication Department where students are already taking some of his TPC courses, and Sarah has similar sentiments about her partnership with the Communication Department where she already works in, believing that bringing back her TPC major would need a more significant reliance on Communication classes. Izzy discussed his goal of co-teaching with science faculty for classes like science writing; he admits he would like strong partnerships with his local community, but he believes his students aren't quite ready for that. Likewise, Jean, Tracy, and John had similar comments about wanting to create stronger connections to their College of Medicine and nursing program to bring technical writing into those classes. John has a course called Technical Writing for Health in the academic catalog, but he has a hard time running the course because in his opinion "people aren't seeing college as a place of exploration anymore. They're seeing it much more as a means to employment" – and taking an extra class in technical writing does not guarantee job placement after graduation.

Other participants desired a stronger partnership with people and organizations outside of the institution (Dorothy, Elizabeth, Krista). For example, Krista would like to put together an Advisory Board based off of her well-established contacts in the community with whom she already has long conversations with, particularly a supervisor of technical writers for a local

software company. And Krista wants a local chapter of the Society of Technical Communication (STC). Dorothy and Elizabeth also want more community partnerships, not through an Advisory Board, but through their courses like grant writing which could partner with a local food pantry out of a church that is three blocks away from their institution. Elizabeth commented, “And, but I think, philosophically though, that’s sort of about seeing these programs not just as like a list of courses. […] What’s the university’s role in the community? And working backward from here’s a community need; here’s how we can build a program to help address that need.” Throughout their interview, Dorothy and Elizabeth emphasized their desire to think about their classes in terms of community involvement.

Besides discussions about courses and partnerships, other participants mentioned that they wanted to expand their programs to the graduate level (Hannah, Jake, Ron, Amy, Theodore). Right now, Hannah is developing a graduate certificate based on the expertise of a new hire in her department that she hopes will one day turn into a master’s degree. Similarly, Ron wants to create a strong graduate program in technical writing due to the fact that the other institutions in his area does not have this option, but his institution has just laughed at his idea because of the lack of funds to start the program. Since Jake’s TPC program is already going away, he expressed a desire for an online MFA with a low residency component where he could hire “super rock star faculty” from different genres to teach in his online program.

The last topic that was generated from discussions about future improvements was the topic of social justice from three of my participants (Melissa, William, Stacy). Stacy talked about centering social justice conversations by hiring a faculty member from an underrepresented minority population; William wants more social justice integration in all of his coursework as a defining thread throughout his curriculum because he thinks his students need to understand the

connections inherent between social justice work and technical writing; and Melissa wants to learn more about social justice as it relates to technical communication so she asked me for books and materials recommendations during the interview.

Overall, this section on future improvements reveals how program directors are responding to what they perceive as challenges and shortcomings of their TPC programs. Since this question about future improvements came at the end of the interview, I hypothesize that many of these improvements come from the questions that I had previously asked participants (i.e. recruitment, faculty, technology, partnerships, etc.), but I did not ask any questions directly about graduate schools or social justice practices. I was honestly surprised that more people did not talk about social justice in my interviews at large since it is a critical component of graduate education and TPC scholarship. In my interview with Melissa, I offhandedly mentioned the current social justice turn in TPC which Melissa was not aware of, asking for resources and readings that she could use for her students. With TPC and writing conferences centering social justice as the main theme of their conferences, it is hard to imagine missing this important conversation of the field, yet I guess that this the result of when institutional labor is not properly balanced with continued professional development – faculty and students suffer. With social justice centered (arguable it has always been centered) at the core of TPC, it is important now more than ever that TPC future developments always include move social justice theories and practices.

Discussion

Sustainability has two components: maintenance and growth. Maintenance refers to the steady upkeep of strong procedures and growth refers to the steady improvement of those procedures. One without the other detracts from a sustainable TPC program. For example, if a program merely maintains without growth, it runs the risk of becoming stagnant and therefore

irrelevant or even dysfunctional; on the other hand, growth without maintenance in an academic program can result in ever-changing policies that prevent the program from seeing trends (e.g. assessment practices that so radically change every year that it is hard to actually evaluate the program effectively over the years). Just because maintenance is happening does not mean that the aspect being maintained is good; and just because growth is happening does not mean that the aspect being changed is good. These drawbacks to growth and maintenance are the reasons why they can never be separated – because they are both an integral part of sustainability.

To be able to do the work of maintaining and growing, TPC programs must be highly reflective of their work and processes. Johnson (2004) says it best:

> To sustain means to think *and* to act, to contemplate *and* to practice. This implies that we are charged with the responsibility of constantly looking behind, to the sides, and ahead as we develop our disciplinary and professional identities. Such multi-directional, active reflection is part of a profession like technical communication. The charge to be continually conscious of the past, critically active in the present moment, and measured about our future actions is in the blood of technical communication professionals. (p. 102).

In short, action and practice cannot be the only goals of TPC. Johnson is calling TPC professionals to do more than act and practice because he believes actions and practices come from reflective thoughts and contemplation. TPC professionals – particularly TPC program directors – need to be aware of their pasts, presents, and futures in order to effectively maintain and grow their programs. Academia and industry are all too aware of boom/bust narratives of tremendous growth followed by tremendous decay – but this does not have to be the story of TPC programs if they tread thoughtfully and actively through their programmatic decisions.

It is not only a narrative of TPC programs but a narrative of the TPC field. TPC has grown as a field since its conception by moving away from programmatic constraints of English literature dominant departments (Klein, 2021) while still maintaining its allegiance to social justice since its conception (Walton et al., 2019), showing how the TPC field always has to interrogate what how it grows and what it maintains.

This chapter showcases the wide variety of sustainable TPC programmatic successes and failures. Some experienced tremendous growth and decay in their programs; others maintain their programs effectively yet have little to no vision for the future of their program; several have so many changes in policies every year that it is difficult to track the success or failure of their program; and yet others maintain and grow their programs in unique and effective ways, finding the balance between thinking, contemplating, acting, and practicing. To this effect, the remainder of this chapter discusses and analyzes the sustainable components of recruitment, assessment, professional development, and future improvements of my participants.

Recruitment Discussion

My participants discussed recruiting students to their programs and the difficulties of just getting students into their programs. The reasons for these difficulties were varied. Many of my participants had a tenuous relationship with their Admissions Departments, making it very difficult to know their expected relationship with the Admissions Department or even recruitment efforts in general. Several participants said that their recruitment efforts to high schools were a large waste of time with little return on the exorbitant amounts of time spent attending high schools. While Manuel was able to recruit some students to come in as a TPC major, Manuel admitted that the few students who came in as majors were definitely fought for with a lot of time and resources. My small study implies that TPC program directors going into

the high schools is a waste of time and resources that could be spent on other more productive means.

Thankfully, there were several success stories in my data. According to my participants, updating the institution's website and handing out physical flyers on campus were the most successful ways of recruiting students to the program. Instead of wasting time on small audiences in high schools, program directors who spent time and resources into creating, maintaining, and growing the information about the TPC program on the institution's website saw rewards for these efforts, and some program directors even had current TPC students help with the project. Turns out that actively thinking, contemplating, maintaining, and growing a TPC online presence was highly successful. The other success was through placing physical flyers around campus. Most participants found more success in getting students into the program after a student had been admitted to the university because students found the program through FYC courses, TPC courses, creative writing readings, and word-of-mouth. This might suggest that recruitment into the TPC program is fundamentally different from other academic programs or it might suggest that TPC is still so nascent of an academic program that people have not heard of it until college – or possibly a mixture of both. Regardless, flyers were a successful recruitment effort that was exclusively targeted at students who were already attending the university. While there is no scholarship on physical flyers, Chong and Roundtree (2021) discovered that students most desire the presentation of practical and research skills in TPC advertisements that use strong visual and document designs. I did not ask my participants exactly what they included on their websites or flyers, but these elements should be considered by TPC programs that want to increase their recruitment efforts that get students into their programs without having to give up exorbitant amounts of time.

The other successful recruitment effort discussed in my data was having a strong relationship with the registrar department and advisors. While this topic by no means was talked about as much as websites and flyers, a few people discussed positive relationships with the registrar and advisors that actually garnered more students. Though a follow-up study would need to be conducted for me to actually make a definite conclusion about this topic, it is interesting that faculty taking the time to explain their program to select individuals on campus – especially people who help students choose their majors and minors – has a great effective on the numbers in TPC programs. This small finding also pairs well with the reality that many current TPC majors found the program once they arrived at the university, and not before.

Assessment Discussion

My assessment section largely reiterates similar points from Cargile Cook's (2003) article "How much is enough? The assessment of student work in technical communication courses." While her study surveys assessment practices of ATTW members at both the undergraduate and graduate levels, there are several overlapping findings between my study and hers: (1) diversity of curriculum assessment, (2) diversity of assessment practices and activities, (3) burden of assessment, and (4) frustrations pertaining to class sizes and course loads. It seems that the problems that TPC program directors faced in 2003 are still the same problems that TPC program directors face in small institutions today.

One of the biggest drawbacks to a TPC program in a small institution is class size. It frankly is not motivating to complete a mere assessment check list on the few students that tell the program director little to nothing about the success or effectiveness of the curriculum and teaching. Several participants talked about going through the motions on assessment because of this reason – filling out the assessment paperwork for eight students in the program does not seem like meaningful data. Unfortunately, further exacerbating the problem, small class sizes

could potentially disrupt the course rotations because administration only allows classes to run if they have a minimum number of students, possibly canceling the class due to low enrollment. This reality makes the assessment issue worse because not only do programs not have enough students, but they also do not run classes on a regular basis – making assessment tools frustrating and meaningless. In a field where TPC professionals care about quantitative assessment, it feels meaningless to even get mere qualitative assessments complete. While Stacy by far was the most excited participant to talk about assessment, she has over 100 students in her program, so she has a lot of trends and data to analyze while other TPC program directors do not.

For my participants, assessment metrics worked if they could find meaning in their assessment practices. Even if there are only eight students in the program, assessing their skills against academic and industry standards was meaningful assessment for Theodore. If the assessment requirements from administration are being met but TPC professors find them lacking like in the case of Doug's department, then the TPC professors need to figure out better assessment metrics that actually help them know what their students are learning like creating a capstone course. Finding meaning in assessment – believing that the assessment was worth conducting and produced valuable results – seemed to be the first step in successful assessment methods.

But of course, just because a faculty member finds meaning in assessment, does not equal good assessment practices. Some participants talked about never reading or experiencing good assessment practices which could obviously affect the effectiveness of their own assessments. I wonder if this reality is because directors are not reading great scholarship on assessment, graduate schools are failing to address assessment in their curriculum, or just the reality of small schools that do not have access to a lot of recourses or time to spend on bettering assessment. I

am not sure that some of my participants had considered the vast array of assessment practices available to them or the types of assessment that could be used in a TPC program like indirect assessment such as alumni surveys, employer surveys, and student exit surveys. While most programs had some sort of programmatic outcomes, many participants were unenthused with the process. Since many times programmatic outcomes are required by the administration, maybe the administration could put more time and effort into explaining assessment practices and strategies that benefit the program and not just check the box for different accrediting bodies.

And while several participants mentioned how much they enjoyed reflecting on their practices rather than filling out paperwork, I think we need to be careful as TPC scholars to solely rely on anecdotal information from classes. Yes, the stories from classrooms are important but they only show a small picture of the program. For example, how would Stacy be able to assess instructor bias from just hearing stories from her instructors? By no means should TPC program directors throw out the wonderful qualitative work of assessment, but directors should also acknowledge that they can also use their reflective skills to reflect on quantitative data in addition to personal anecdotes. If TPC professionals have the skills to user-test and research the quality of their work, then so do TPC professors.

While a few of my participants had wonderful success with their assessments like Bert who goes above and beyond in her assessments for ABET, many still felt that assessments were a massive time suck and largely unproductive. And I believe this issue is particularly acerbated in small institutions with small TPC programs.

Professional Development Discussion

In their article titled “Work/Life balance as key driver for program development in times of crisis,” Nagelhout and Tillery (2021) argue that “the more important goals for faculty development in technical and scientific communication programs is creating a collaborative and

caring environment and community that promotes continuous learning" (p. 95). These authors use an ethic of care as a lens to understand and support faculty workload, learning, and time. These components will always be challenging at any size institution, but they are most certainly found in the small school setting where administrators might care more about saving money than professional development funds, giving faculty higher workloads with no regard for their learning or time.

Yet all my participants engaged in faculty development in some way – even if it was just reading scholarship. No one stated that professional development was a requirement at their school, yet everyone participated in some way in professional development. Not surprisingly, conferences were the most common form of TPC faculty learning. And while it is also not surprising that CPTSC is the most common conference praised by my participants, it is comforting to know that small institutions can find their community in CPTSC and learn from their colleagues at different sized institutions. For them, CPTSC was not an elitist, R1-only conference that only serves large institutions with large TPC programs. My participants felt welcomed and valued at this conference – affirming the organizational goals of the CPTSC.

Of course, CPTSC was not the only conference mentioned because faculty development covers a wide variety learning paths: intellectual, programmatic, pedagogical, technology, industry, creative writing, etc. Some faculty are more motivated to attend conferences that are more intellectually stimulating with no clear pedagogical connections; some faculty are drawn to creative writing conferences that bring life to them; some faculty are passionate about administration and get excited for new and innovative ways to run their programs; others would much rather attend an industry-focused conference with little to no pedagogy conversations; others recognize their lacking technological skills and want a conference that teaches them

current technology skills; and still others cannot get enough of curriculum development and assessment practices. This range of reasons for conference attendance showcases how diverse the interests are in TPC and how they all cover different facets of TPC's discipline.

This makes me wonder how these conferences could support small institutions even more than they currently do. Though not a lot of the TPC program directors that I interviewed attended workshops, the ones that did found it incredibly useful. While listening to conference papers is always interesting, it might be beneficial for conferences to put more how-to workshops for members. Similar to how the MLA Summer Institutes teaches new faculty about different writing topics like deep reading, conferences like CPTSC could put on workshops about how to advocate for a TPC program, how to implement a TPC program, and how to sustain a TPC program. I believe the TPC field is now old enough with enough scholarship to support itself that senior TPC scholars can now speak with authority on these types of TPC exigencies that could support TPC program directors who are not as interested in putting another line on their CV as they are learning about things they love to learn about. How can CPTSC engage in an ethic of care by creating communities of practice for TPC program directors?

Future Improvements Discussion

My section on faculty's vision for the program was predictable as well as surprising. Since my question about future improvements came towards the end of my interview (sometimes the last question of the interview), many faculty reiterated what they had already stated previously or just acknowledged that they had shortcomings based on the interview questions that I asked. For example, I asked about institutional and outside partnerships so they would bring up partnerships again if they felt like they had answered this question insufficiently.

Though the data might be skewed because of its placement in the interview, I believe there are still some insightful takeaways from this topic.

Faculty want more students and faculty. They are not contented with their sweet little group of students with one or two faculty members because they see how the growth of numbers equals the growth of learning. TPC faculty realize that their students miss out on valuable experiences when they do not have TPC peers and TPC professors, detracting from their education and development as technical communicators. These program directors are not just advocating more of everything just to argue for more of everything; they see the value that more resources (including technology) have for their students to be successful program.

One interesting find during my interviews was Izzy's comment on the balance between course development and programmatic vision. At a small school, it is easy to get caught up in the survival of each day: What am I going to teach tomorrow? How am I going to grade all of these papers? What assignments are even due in my classes? It is hard to be a visionary when the day-to-day grind takes all of a person's being to accomplish – with no time for programmatic vision. Personally, I believe that the programmatic level is the evaluation of course sequencing, assessment practices, future goals, etc. It is looking at what kind of person that the program is developing. Programmatic assessment is equally as important as course assessment because it affirms (or not) if the course is still needed to fulfill the goals of the program. I understand that many program directors inherit wonky programs with wonky classes, but these problems do not have to continue if program directors commit to programmatic vision. So many of professor's contracts right now are tied to courses taught that it is easy to assume that teaching courses is the only job to complete. Since many faculty are open to internal development, maybe

administrations can teach faculty how to approach their curriculum through a programmatic lens instead of a mere survival lens.

The last intriguing concept that came out of future improvement discussions was many faculty members' awareness of current trends in TPC scholarship. Three faculty members mentioned wanting to implement more UX studies and/or usability labs in their curriculum, and three other faculty members mentioned the desire to implement more social justice ideologies throughout their curriculum. While not all participants mentioned these ideas, I still believe this is an interesting finding because some small schools are keeping up with trends in the field. The size of the school does not have to mean that the TPC program is unaware of what scholars are talking about in their fields. Obviously, small institutions' faculty might not produce as much scholarship as larger institutions, but they can certainly read and attend conferences that keep themselves, curriculum, and program up to date with current trends in the TPC field.

Conclusion

This chapter clearly has limitations. The topic of sustainability is much larger than the contents of this chapter because sustainability covers more topics than just recruitment, assessment, professional development, and future improvements. However, what I want readers to take away from this chapter is that program directors care about the sustainability of their programs. Yes, some programs sustain themselves much better than other programs, yet all of them desire to see their programs grow and succeed even if some of them are struggling to find how to actually grow and succeed – but the struggle and determination is there.

CHAPTER VII

DISCUSSION AND CONCLUSION

In the beginning of this dissertation, I used Schreiber and Melonçon (2022) as a framework for approaching TPC identity work. These scholars believe that the approach to studying TPC is best accomplished through naming who we are, what we value, and what we do – not by writing another book or article on yet another definition of TPC for some other critic to deconstruct and critique in way that does not advance the field in a meaningful way. This dissertation has answered the call of Schreiber and Melonçon (2022) not by defining the quintessential TPC program in a small US school but rather by naming several histories and practices of small institutions in the US that have a TPC program.

When I first started this dissertation, I wanted to know if TPC programs even existed in small institutions since I could not find much scholarship on the topic. Given my own small institutional context, I doubted that small institutions could have TPC programs due to limited funds and lack of institutional support. This dissertation has effectively challenged my doubts. My research reveals that these small institutions do in fact value TPC programs and are willing to do the work of advocating, implementing, and sustaining their programs for a TPC future in their local contexts.

As stated in my literature review and methods chapters, about 37% of all TPC programs in the US are in institutions with undergraduate populations of less than six thousand which means that these small spaces make up a significant part of TPC identity – even though no comprehensive research has been conducted in these spaces. By capturing the voices of 26 institutions out of 121 small institutions in America, my dissertation fills this gap in scholarship by providing identity narratives from 21.5% of current small institutions with a TPC program.

However, naming identities is not enough to create a sustainable future. In addition to identity, Schreiber and Melonçon (2022) also argue that the reason for doing this identity work is to build a sustainable future – made possible through reflection and maintenance. Merely naming identities only provides yet another database of information that means nothing if it is not narrated and interpreted. As a field deeply committed to rhetorical practices, we must do more than gather data and call it research; we must make meaning from this data by deeply reflecting what these identities mean for their local context and the field at larger in order to maintain TPC programs through continuous improvement methods. It is through this process of reflecting and maintaining that TPC programs and scholars benefit from TPC research that creates meaningful change in ideologies and practices.

My dissertation has done this work. In conducting this study, I was not interested in collecting the identities of TPC programs in small institutions just because it has not been done before – though I could have easily just stopped my research there since it fills the gap in scholarship in a minimal way. In many ways, my study not only provides insights for program directors at small institutions but also ways that any institution, regardless of size, can still learn from affordances and exigencies of TPC programs in small institutions. The most significant finding from these TPC narratives is that many of the same challenges at small institutions are the same challenges of any size institution. This finding is not an argument for the field's homogeneity, for there were clearly differing narratives just within my collected TPC voices. Rather, this finding gives confidence to faculty at all levels of TPC education that anyone can learn from any type of size program because these TPC programs according to my study are more similar than they are different. Therefore, anyone from any size institution can reflect on

the narratives presented in this dissertation and apply them to their own local contexts in the work of maintaining their program.

Building on this finding, the purpose of this chapter is to continue Schreiber and Melonçon's call to reflect and maintain. While I started this reflective work in the discussion sections of the fourth, fifth, and sixth chapter, it is imperative that I spend a whole chapter reflecting on the identities that I named in this dissertation to work towards sustainability. To do this work, I have segmented this chapter in the following ways: summarizing the identities of TPC programs in my study, returning to the literature review of this dissertation to compare my study to the larger conversations of the field, providing reflective questions generated from my research to help TPC program directors better reflect and maintain their own TPC programs, thinking about the implications of my study in my own local context, and finally reflecting on how my study is limited but also provides rich conversations for the TPC field that can continue with future research.

Research Questions

As stated in my introduction, my dissertation has set out to answer two questions: Do TPC programs exist in small four-year US institutions? If so, how do TPC program directors and faculty at small US institutions advocate, implement, and sustain their TPC programs? The first research question is answered in just one sentence while the other research question is answered in the course of three chapters. Since 37% of all TPC programs are in small institutions, I can confidently say that TPC programs exist in small four-year US institutions. With the second research question, this question is really three questions condensed into one question: How do TPC program directors and faculty at small US institutions advocate for their TPC programs? How do TPC program directors and faculty at small US institutions implement their TPC

programs? How do TPC program directors and faculty at small US institutions sustain their TPC programs? Therefore, this section of the chapter summarizes how my dissertation has answered each of these questions.

Advocating

The first question that my dissertation answered in its fifth chapter was concerning advocating. Specifically, how do TPC program directors and faculty at small US institutions advocate for their TPC programs? As discussed in the fourth chapter, I defined the category of advocating as the history of the program up until but excluding its present moment, so current practices and programs were left out of the coding because I was interested in the beginnings and evolution of the TPC program rather than its present state. While my whole dissertation is about the identity of small US institutions' TPC programs, my advocating chapter specifically looks at the history of that identity and how they are started and evolving.

In some ways, TPC will always struggle with creating its own unique identity within universities because it has to balance the delicate ecology of (1) being autonomous with its own identity separate from other departments and (2) being dependent on other department's faculty, resources, and students to stay a viable program. When a program becomes too autonomous without adequate support, it fails as evidenced by the three programs in my study that are no longer programs because they lacked students to support their classes. And when a program is too dependent on other department's faculty, resources, and students, it tends to lose authority as a discipline and becomes a pseudo-discipline that is under subjugation to other departments' goals and philosophies that might be different than the TPC field, and therefore, more likely to fail. Both of these unhealthy sides of the spectrum reveal the landscape in which the TPC

program directors and faculty of my study had to navigate. So how do they advocate for their programs?

According to the voices of my study, TPC program directors and faculty members advocate for their programs through collaborating with other departments that support TPC identity, aligning the TPC program with administrative initiatives, and evolving coursework to keep up with market trends and scholarship. The first component is collaboration. Many of the participants of my study advocate for their TPC programs by collaborating with the faculty in literature, composition, business, engineering, medicine, criminal justice, etc. As evidenced in my study, some TPC faculty still struggle with getting the support of fellow literature and composition faculty – people who are in the same department. Advocating for the discipline of TPC within one's own department might be the first step in advocating for a TPC program.

But the TPC discipline needs more than just English department faculty to thrive in a small school – it needs to advocate for additional collaborations across campus to tap into other's resources but also to bring additional expertise to those fields. Of course, every collaboration has the possibility to dissolve into exploitation where a department is more interested in a TPC faculty member teaching more classes and students just to relieve the grading load instead of actually valuing what the TPC faculty and program bring to their program. When a business department was trying to nickel and dime one of my participants, she just decided that collaboration was no longer healthy for her or her program, so she ended it. Thankfully, others did not have this same experience, finding wonderful partnerships with Engineering departments, English departments, Business departments, Education departments, and Communication departments. Because these TPC programs were in small spaces, they did not have luxury of

creating their own autonomous department, so collaborations became critical for their existence and sustainability.

The second component that my participants advocated for was their program's alignment with administrative initiatives. Several participants found so much success in aligning their TPC program with administrative initiatives such as desiring more majors that sound like workplace jobs, being a "hands-on" university, wanting more micro-credentialling, requiring a minor for every major, giving more money to programs that support undergraduate research, celebrating programs that require paid internships, etc. When TPC faculty align their programs to address administrative initiatives, their programs tend to get more recognition and money – elements that sometimes TPC programs struggle to attain. Of course, sometimes TPC faculty's administration does not align with the values of the TPC field (like not centering social justice in assessment practices), so TPC faculty should not just blindly submit to every new initiative from administration. And there are clearly a harmful ways of getting so involved in administration that the TPC program suffers. Not mentioned in my chapters was Melissa's comments on the ease at which it is easy to move up in administration at a small school, potentially leaving the TPC program behind with no one to direct it. So it can be dangerous advocate for your TPC program without succumbing to more administrative duties. But even with these caveats, it can be beneficial for TPC faculty to advocate for some administrative values in order to benefit the program.

The third way that TPC program directors and faculty advocated for their program was through the evolution of its program names and coursework. Strong TPC programs in my study were not stagnant (with the exception of Stacy who was strategically stagnant). TPC faculty advocated for updated program titles and courses because they were aware of market trends and

scholarship. My participants were acutely aware of needing program names that parents, students, and employers could identify as legitimate, so programs were aware of the need to constantly reevaluate the names of their programs and courses – making sure that their identities aligned with the workplace, academia, and students. Since many TPC programs in my study originate from the English Department, this type of advocating can be very different from other English faculty who have rarely (if ever) changed the name of their major or courses, still teaching American Literature I and American Literature II in the English major for the last century. This reality is not the identity of TPC. It constantly has to update to keep itself current and relevant. For some of my participants, creating course electives that address current topics like social justice and coding software point to ways that TPC faculty advocate for the evolution of their programs and courses. Other program directors like Bert worked against the "hodgepodge" approach to TPC courses to instead create a clear trajectory for the program's courses, working against having just a random assortment of courses that do not build logically on each other.

Of course, sometimes advocating fails as mentioned by three of my participants. Just simply the act of advocating does not unfortunately mean success. Like any academic program across disciplines, failure is also a part of the TPC identity in small institutions. When does a TPC become a program not worth advocating for? When does a program become a program that fails in all of its advocating efforts? While these questions go outside the scope of this paper, it is important to learn from failed programs and realize that it can be a reality of any TPC program.

Overall, my dissertation has shown how TPC programs are committed to their local contexts, determined to keep up with marketplace trends, university initiatives, and names of program and coursework titles in order to advocate for their programs.

Implementing

The next question that my dissertation answer was – How do TPC program directors and faculty at small US institutions implement their TPC programs? As mentioned in my fifth chapter, I narrowed down this research question to only examine technology and partnership, so the actual research question that my dissertation ended up answering was – How do TPC program directors and faculty at small US institutions implement technology and partnerships in their TPC programs? My chapter revealed that small institutions overall struggle in the implementation of technology and succeed in the implementation of its partnerships.

The implementation of technology was complicated for my interviewees. Many of them struggled with their own technological insecurities concerning updated software and the newest technologies, pondering the fear that their students might know more about technology then they do. Many of the TPC faculty felt that they did not know exactly who was qualified to teach tech-heavy classes, how to get qualified to teach tech-heavy classes, and how to determine if the institution's technology was sufficient to support the TPC program. Technology became even more complicated when TPC professors try to implement technology in their curriculum when students do not have the lab or personal computers to support the software required by the curriculum. Additional complications with administration and IT departments clearly just added to the frustration of implementing technology.

But many of my participants still implemented technology in their curriculum despite these concerns that are still unsolved. According to my study, design courses were the most common talked about course where technology was implemented, and many of these courses took place in computer labs designated by the university. The most common software products used by the TPC program directors and faculty in my study were Adobe products like Creative

Cloud, Acrobat Pro, Illustrator, Premiere Pro, etc. Yet others implemented technology through a framework of theory rather than practice, focusing more on the understanding the history and philosophy of technology rather than actually using different types of technology.

While technology was a point of frustration for my participants, partnerships presented a topic in which many of the faculty were eager to boast about. As documented in chapter five, small institutions make a big difference in their communities. Whether it is through guest speakers, academic departments, or local and national organizations, the small institutions in my study were able to really make a difference in their universities and local communities. The implementation of client projects, Advisory Boards, and internships showcased the meaningful work that small institutions are doing and have been doing for some while. With the affordance of small class sizes, small institutions can potentially give students access to members outside of the TPC program that can lead to potential internships and sometimes even jobs. These partnerships also demonstrate how small institutions are addressing the current social justice turn in the TPC scholarship and industry – proving that small institutions can implement socially just collaborations within their departments and showing how small institutions can contribute to the current social justice movement.

Overall, my dissertation has shown that TPC programs, despite challenges, are committed to implementing technology and partnerships in their design courses, internships, Advisory Boards, and overall curriculum.

Sustaining

The last question that my dissertation answered was – How do TPC program directors and faculty at small US institutions sustain their TPC programs? Sustainability is a much broader topic than what was covered in chapter six, so I narrowed down the definition of sustainability to

the topics of recruitment, assessment, professional development, and future improvements. Just like all of the other questions in this dissertation, every program approaches the task of sustainability but in very different ways.

TPC programs in small institutions sustain their programs through different ways of getting students into their programs – recruitment. My study specifically showed that the participants in my study recruited students in a variety of ways: courses, fairs, advising, websites, high schools, admissions department, videos, social media, public readings, alumni, and flyers. Sometimes just making course content engaging and exciting was enough for students to take on the major or minor in the institution; sometimes attending a majors fair put on by the university's Admissions Department on the campus gym was a good way of identifying students who still had not chosen a major; sometimes giving program information to campus advisors helped get the word out of the TPC program; sometimes spending time revising the TPC information content on the university's website helped improve the visibility of the program; sometimes meeting with the university's Admissions Department to talk about the TPC program helped them better articulate the program to prospective students; sometimes having current TPC students create department videos attached to coursework produced engaging information to put on the university's website; sometimes other various avenues likes social media, public readings, and alumni connections also supported recruitment numbers in the program; and lastly, sometimes creating physical flyers to put around campus was a highly successful practice for getting people to notice the TPC program. All of these examples showcase how TPC programs sustain their programs through recruitment.

Another way that programs sustain their program is through assessment. As the largest section of chapter six, assessment can be a difficult aspect to navigate in small institutions. With

small students numbers and confusing institutional requirements, assessment was a massive point of frustration in regard to sustainability. This aspect of sustainability suffered because there were so many different expectations between accreditors, administration, departments, and TPC associations in the best methods of assessment practices that it became a very difficult to navigate and sometimes even monotonous and redundant. Many participants discussed filling out high volumes of assessment materials but feeling like the labor did not provide substantive support and change to the program.

Moving beyond the high volumes of assessment frustrations from my interviewees, TPC program directors and faculty did discuss how they approach assessment which exemplified differing approaches to frequency, indirect methods, and direct methods of assessment. There was no consistency as to how often assessment happened, ranging from every semester to every seven years. Indirect methods included the use of alumni surveys, employer surveys, and student exit surveys; and direct method included TPC professors directly assessing students, like capstone classes or portfolios.

Additionally, many professors found value in other ways of assessment that work towards their program's sustainability. Several participants valued the informal, reflective conversations with other professors in the TPC program and related departments. Though by no means the only means of assessment, these informal conversations were ways of building community around topics related to students' success through the communication of anecdotal stories and assignments from TPC courses. Another mode of assessment from some participants was through the Office of Assessment (or an office of a similar title and purpose). Some (not all) participants received institutional score cards that gave them assessments regarding several different aspects of the program. Other participants found of a lot of value in using their

university's LMS system as a database for gathering and storing data in regard to assessment to work towards sustainability.

The next aspect of sustainability is professional development. As noted in chapter six, all of the people that I interviewed had some level of professional development, but the amount varied greatly among participants. One major avenue of receiving professional development was through institutional professional development on topics like universal design, teaching with technology, instructional tools, etc. Many TPC program directors and faculty not only attended these institutional sessions but also contributed to them and ran specific sessions related to writing topics – providing for the sustainability of the institution and not just their own department. Other avenues included professional conferences and doing research. No surprisingly, CPTSC was the most common conference that participants attended and felt contributed to their professional development; notably, CCCC was not popular with my participants with four program directors specifically mentioning that it does help sustain their programs. While only six people mentioned doing some kind of publishable research projects, it is still notable to mention this aspect because doing research does support professor's professional development because they have to know their fields well enough to contribute to their fields.

The last category of sustainability was future improvements. For a sustainable program, program directors need to be aware of the shortcomings of their program as well as identify a future vision for the program. Not surprisingly, many participants groaned about the lack of students and faculty in their programs. Many of these people did not talk about growth for the sake of growth but for the sake of health of their program because they recognized that more students meant substantial data for meaningful assessment and more faculty meant filling the

gaps of their curriculum knowing that the program directors cannot specialize in every aspect of the TPC discipline. Other future improvements involved updated course and diversified partnerships. Several participants dreamed about adding new courses to their curriculum like technical editing, international communication, usability lab, technical writing in the sciences, graphic design, and graduate classes. And other participants dreamed about creating more partnerships across campus and within the university's local community to improve the program and possibly even a local chapter of STC, preventing the TPC program from becoming too autonomous. Lastly, three participants feel strongly about future improvements concerning the centering of social justice ideologies in their curriculum objectives and faculty hiring processes.

Overall, my dissertation has shown how 26 small US institutions have advocated, implemented, and sustained their TPC programs. And while the quality of the advocating, implementing, and sustaining of these programs is out of the scope of this dissertation, nevertheless, my dissertation proves that these programs are doing the work of supporting the programs that they are a part of despite the deficiencies they are forced to navigate.

Connections to the Literature Review

This next section of the chapter returns to the literature review of this dissertation to compare some of the larger discussions of the field to my dissertation's findings. While I did not directly align every point of scholarship to each individual institution, the institutions as a whole align largely with several values and practices of current scholarship. Therefore, this section goes through the four sections of my literature review to examine how the content compares to my findings.

The first section of my literature summarized voices concerning program design and curriculum. Johnson et al. (2018)'s book of seven tenants aligns well with several of the TPC

people that I interviewed. Their point about needing to align TPC programs with institutional values and practices is reiterated by several of my participants. Another tenant of Johnson et al. is that TPC should be "rooted in local needs and aims at social responsibility" – something that small institutions do particularly well since they are able to easily engage different people and social circles of their communities, many working towards social justice goals. These authors also discuss the importance of TPC programmatic visibility; from my research, small institutions still overall struggle with this visibility, becoming frustrated when the Admissions Department and campus advisors do not know about the TPC program or when attending college fairs and high schools that still do not seem to bring that many students to their programs. Similar to several other points in Johnson et al. (2018)'s book, many institutions in my study struggled with many of the same challenges of any institutions, regardless of size. For example, Johnson et al. mention the challenges of "building and maintaining change, funding, technology deficits, [and] expanding/reimagining the role of technical communication programs" (p. xvi), which were all part of the same challenges of my participants. While it is never a good practice to generalize all TPC programs, my study points to the reality that there are many overlapping challenges of all TPC programs.

In addition to Johnson et al.'s tenants of starting a TPC program, the literature review also summarized Melonçon's ideal undergraduate degree program which included a portfolio, capstone course, and several competencies addressed in its TPC curriculum: rhetoric, writing, technology, design, ethics, research, and collaboration. All of these elements appeared in some way throughout my data, but some schools included more while others did not. For example, not all of the schools that I interviewed had portfolios or capstone courses, though some mentioned that they wanted to eventually include it to support better assessment practices. The most

common competency across the majority of my participants was collaboration. These elements make sense as small schools have to rely on collaborations for the existence and sustainability of their programs, possibly making it a more urgent need in smaller institutions compared to larger institutions. The least developed of Melonçon's competency in my study was probably technology. As summarized in chapter five, the institutions in my study really struggled to keep up with industry standards in regard to technology and to get those technologies into their classrooms.

The second section of my literature summarized voices concerning TPC empirical programmatic research. The majority of this dissertation spends significantly more time analyzing the interviews of TPC participants rather than spending even a single chapter on its empirical data; but it is important to note that without the empirical data, it would have been difficult to argue why this study should even needed to exist. Because the empirical data from Melonçon's database proved that 37% of all TPC programs were in small institutions, this number gave my dissertation a reason to exist and an exigency to address. As stated in my literature review, the TPC field mainly uses qualitative methods for its research, yet my study proves that quantitative methods can serve as a meaningful foundation for qualitative work – making the qualitative work even more meaningful; therefore, my study addresses Charney's (1996) call for more quantitatively driven research that pushes back against the field's overreliance on a few subjective case studies. The literature review summarized previous studies on capturing the state of the field as a whole – very important work – but I think that TPC scholars can do more with empirical work by examining different facets of this data like small institutions. Looking at the data through the lens of small institutions was able to give me a robust research topic, so what other facets of TPC empirical could scholars to work with to also

identity and sustainability in our TPC field? This empirical work has a lot of promise for the current state of TPC.

The third section of my literature summarized the voices of small school's TPC programs that have appeared in a few case studies, starting with a summary of Sapp's metaphor of the lone ranger. Two of the institutions that I interviewed only had one TPC faculty member at the institution (Ron, Jake), feeling the overwhelming weight of the amount of time and effort it takes to support a TPC program. While others had more faculty in their department, others felt academic loneliness in other ways like having to constantly argue for the TPC program to their English faculty. Though this point was not the aim of this dissertation, my study does hint at the reality that being a TPC faculty member has the potential of being a very lonely job if collaborations and administrative support are not involved.

After a summary of Sapp's article, the literature review summarizes several case studies from book chapters and program showcases from *Programmatic Perspectives*. As it turns out, several of the affordances and challenges of the people in those studies are the same affordances and challenges of the people in my study. Some of the topics covered were the placement of TPC institutions and navigation of institutional identity. There was not a homogenous consensus on the placement of the TPC program, varying between English Departments, Communication Departments, Humanities Departments, Engineering Departments, and its own department. And many of these placements directly corresponded to the position of the institution as a liberal arts, comprehensive, or technical institution.

One study from the literature review discussed the importance of knowing one's own power dynamics within the institution, potentially needing to work on gaining a higher status within the institutional context. One point that Henning and Bemer made was that Johnson et

al.'s tenant of disruption did not work in their institutional context because their TPC program did not have enough power. Not a lot of my participants work directly against the power dynamics of the institutions because they were spending way more time creating and sustaining collaborations. Stacy does push back against administrative assessment practices and even implements her own contradictory assessment practices, but she is also the largest program (in student numbers) that I interviewed with therefore probably the most institutional power. This reality implies that the amount of students in ones' program directly correlates to how much power the TPC program has – a major problem for small institutions with small numbers. According to my small study, the tenant of disruption might be more applicable for larger TPC programs with more power.

One study in my literature review that was able to tap into more power – programmatic ethos – was Ford and Lanier. They earned themselves a higher status at their institutions by positioning themselves as active and meaningful researchers to their colleagues, proving that their TPC field produces academic scholarship. Though none of my participants specifically mentioned this particular avenue, they certainly obtained institutional power other ways, such as collaborating with other disciplines, managing professional development workshops, holding higher administrative positions, etc. Several people mentioned that they hold multiple duties such as chair, director of the writing center, director of writing across the curriculum, director institutional assessment, etc. which shows the ways that TPC faculty tap into different power structures to earn their program more ethos which is a key component of Lattrell's scholarship from the literature review.

In addition to navigating institutional power dynamics, the literature review also discussed the complexities of how programs start, the kind of program, and the support of TPC

faculty. Kungl and Hathaway argued that a TPC program can come from several different means; and for them, there program started from a service course. In my study, some programs started from a service, but definitely not all programs. Again, there was no homogenous way of program creation, with some institutions turning a minor in a major, a minor into a track, a major with no previous TPC courses, a track with no minor or major, just a minor with no major, etc. My study did not see a trend in the same program type across small institutions, implying that every institutional context is different even it is of similar size. And of course, all programs regardless of size need faculty support. Sandi Harner was well supported in the creation of her program when her institution sent her to get a certification at Rensselaer Polytechnic Institute; while this was not as popular of a process for my participants, a few of them did enjoy receiving online certifications in TPC and/or attending workshops on specific TPC topics.

Other points of the literature review scholarship from single institutions included shortcomings of small institutions. Several case studies and program showcases from *Programmatic Perspectives* discussed the lack of TPC faculty, declining student numbers, cost of technology, and assessment frustrations. Not surprisingly, all of these appeared in the interviews. The most desired improvement from my participants was more TPC faculty – a total of ten institutions specifically talked about this point. Of course, this need also connects to the amount of students in one's program, so naturally TPC program directors and faculty also wanted more students, not just to hire another faculty member just to have more people – but also for courses to run more regularly, for courses to be more specialized, and for better assessment numbers to actually determine trends. Many of my participants found that assessment had the potential to be effective; but just like Brady et al., several of my participants found that

current assessment practices were just busywork that did not present any real meaningful change for the benefit of the TPC program; it just checked the box for administration and accreditation.

In refence to technology, my study repeats many of the voices of my literature review. Like the scholars in my literature review, my participants continue to grapple with the ways to approach the cost and implementation of technology when there are not adequate resources or faculty to teach technology. Yonker and Zerbe pose the following question that seems to be continually on the minds of my participants: "Should the program be responsible for teaching its professional writing majors how to use specific software?" (p. 75). As noted in the fifth chapter of this dissertation, small institutions do not approach technology problems the same, showing a wide range of different practices and philosophies.

The last section of the literature review mapped the presence of small institutions at CPTSC, finding that they have a strong presence at this important TPC conference. This section summarized several of the topics that TPC faculty from small institutions brought to the CPTSC conference: history and development of his technical writing program at this institution, internship programs, the role and definition of technical writing, TPC programs' relationship with university administration, TPC course identity in humanities departments, engineering courses in TPC curriculum, technical writing certificates, TPC evaluative measures for programs, computer integration into TPC curriculum, TPC service learning courses and social action, time management and goal setting skills, TPC program assessment through advisory boards, and interdisciplinarity and grant writing.

Not surprisingly, all of these topics were covered collectively by my participants. Several people discussed the history and development of their programs; the nature and evolution of their internship programs to keep with up academic and marketplace trends; the role of TPC especially

in the naming of the program; the rocky or supportive relationship with their administration; their identity in reference to other humanities disciplines; assessment measures; technological integration of software; TPC courses' relationship with current social justice movements; TPC programs located in the Engineering Department; different types of TPC programs and not just majors; inclusion of advisory boards to keep current with industry standards; and collaboration with a variety of different people, departments, administrators, national organizations, and local organizations to bring industry experiences to the classroom.

Overall, my study reiterates the little scholarship there is in the field of small institution's TPC programs, so the main contribution of this dissertation is the content that it provides in addition to ideas from the literature review.

Implications for TPC Programs in Small Institutions

My dissertation proves that TPC programs at small institutions are part of the identity of the larger TPC field. As stated earlier, the total amount of TPC programs in small institutions makes up over a third of the total TPC programs in the US – proving that they are a part of the identity of the TPC field. Yet TPC publications and journals do not seem to capture this identity in a way that helps these small institutions to sustain. My whole dissertation is predicated on the reality that identity leads to sustainability; therefore, this section of this chapter discusses how my dissertation study of identity can help the field's sustainability.

While the discussion of how to sustain TPC programs in small institutions goes outside the scope of this dissertation, I want to provide some reflective questions to help TPC program directors and faculty think about their local contexts and how they can work towards sustainability. One aspect of conducting interviews that was particularly interesting to me was the amount of reflection done during the interview itself. I was only asking questions about what

was going on in these individual programs, and yet many of my interview sessions turned into reflective sessions where participants were cognitively thinking about their programs. In education settings regardless of size, it is easy to get into a mindset of survive-or-die where there is no room for reflective thinking about one's courses or program. The interview space ended up being a place where participants were not just thinking about how much grading they had to do or what class time was going to look like tomorrow; rather, the interview space was a time to put on a programmatic lens to understand purposes and actions of their programs. In some of my interviews as mentioned in earlier chapters, some participants even wrote down things that they wanted to change about their programs based on my questions. For example, my question about assessment (What does assessment look like in your local context?) is not particularly implying the need for improvement; yet some participants left the interview with new ideas for their program – and I did not give them any new ideas.

This practice of reflection is the key to bridging the gap between identity and sustainability. How does someone move from naming identity to sustainability? My study indirectly shows that reflective questions can move a program towards sustainability which is why I have decided to present a list of questions that any TPC program can ask themselves in order to work towards sustainability. The questions that I pose are based on my participants' answers, so I am directly pulling from the voices of my study. While the following questions come from voices at small institutions, there is nothing stopping medium or larger TPC programs from also reading these questions and metacognitively thinking about how reflecting on one's identity can lead to sustainability:

Table 6

List of Reflective Questions for TPC Faculty

Category	Questions
Advocating	What is the history of your TPC program? How might the history of the program explain and/or affect its current state? What does your university and administration value and how might you connect those values to your TPC program? (e.g. undergraduate research, micro-credentialling, career majors, etc.) If thinking about starting a TPC program, what type of program (micro-credentialling, certificate, minor, and/or major) might best be supported with the resources available to you? If thinking about starting a TPC program, what departments and colleagues on campus could be good partnerships in support of your TPC program? Remember these partnerships do not have to be common partnerships; for example, if the Business Department does not work with you but the Criminal Justice Department is willingly to work with you, partner with the Criminal Justice Department. If unsure about starting any program, what TPC course could be advocated for to gage interest in TPC? How might your TPC program evolve its program's name, course names, course content, and electives to keep up with academic and industry trends? Does your curriculum need to move from a more generalist approach to TPC curriculum with a "a smorgasbord of classes" to a more focused approach with specialized TPC courses that build on each other? Do TPC internship qualifications need to be updated? What takes most of your time in supporting your TPC program (hiring faculty, assessment, recruitment, arguments with literature faculty, administrative politics, etc.)? Do you think the use of your time best supports your TPC program? How are you working against the "lone ranger" mantra of small TPC programs?

Table 6

Continued

Category	Questions
Advocating	Are any of the following elements present in your TPC program that might indicate that the program is heading toward failure? • Constant overload of classes • Significant administrative duties not accompanied with course releases • Constant rejection from administration concerning new TPC initiatives or ideas • Continually cancelling classes due to low enrollment • Continually filling out substitution paperwork for cancelled classes to be fulfilled another way • Lack of TPC faculty who could take over the TPC program director's position when they want to move on to other avenues • Mismanagement of institution's finances
Implementing	How are you balancing autonomy and collaboration within your university contexts? Are you too autonomous that results in less resources and students for a sustainable program? Are you too collaborative that results in the loss of program ethos in relation to other departments and administration? Do students generally own a laptop? How does this affect technology needed for TPC? What ways can TPC program directors speak to TPC faculty insecurities about technology? What ways can TPC program directors look to outside workshops and certifications to support TPC faculty deficiencies? Where in your curriculum could you include use of the Adobe Suite? Could a stronger relationship with the IT department benefit the TPC program? Is it a good use of the TPC program director's time to argue for better technologies? Or are the current technologies available meeting market trends? Are there other technologies and/or labs across campus that the TPC program can tap into to support its technology requirements? What is the balance between teaching technology and teaching how to learn about technology?

Table 6

Continued

Category	Questions
Implementing	What kinds of partnerships on campus could benefit the TPC program? What kinds of partnerships in the local community could benefit the TPC program? What internship model best fits the needs of your TPC program? (hours, oversight, paid/unpaid, credits, etc.) How are all collaborations founded on social justice principles?
Sustaining	How do you sustain programmatic ethos? What choices of the TPC programmatic director work towards a higher institutional status? Does the TPC program director spend more time sustaining institutional initiatives that take away from putting needed time in sustaining their TPC program? (e.g. a TPC director who is running professional development workshops for the university but cannot find time for their own TPC program) How are your recruitment efforts navigating the different audiences of administrators, parents, and students? Would flyers be a good medium for getting the word out about TPC courses and programs? Is the institutional website updated with the latest TPC programmatic information? Is the information robust and inviting? How do you sustain programmatic ethos? What choices of the TPC programmatic director work towards a higher institutional status? Does the TPC program director spend more time sustaining institutional initiatives that take away from putting needed time in sustaining their TPC program? (e.g. a TPC director who is running professional development workshops for the university but cannot find time for their own TPC program) How are your recruitment efforts navigating the different audiences of administrators, parents, and students?

Table 6

Continued

Category	Questions
Sustaining	Would flyers be a good medium for getting the word out about TPC courses and programs? Is the institutional website updated with the latest TPC programmatic information? Is the information robust and inviting? What are the different goals and audiences of assessment and how can assessment practices navigate those expectations? What are the different direct and indirect assessment metrics that can be used to assess the program effectively? (alumni surveys, employer surveys, student exit surveys, TPC professors directly assessing students' assignments, capstone classes, portfolios, etc.) How is the TPC program developing its TPC faculty through a variety of professional development opportunities? (internal, conferences, certifications, research, etc.) How can TPC program directors and faculty resist stagnation by constantly thinking about future improvements?

Clearly, all of these questions will not be pertinent to every programmatic context, but my hope is that several of these questions help TPC program directors and faculty transition between naming the identities of their programs to working towards sustainability of their programs.

Positionality

I began this dissertation by explaining my positionality as a student and professor – contemplating whether or not I should embark on the noble task of starting a TPC program in my

local institution where I teach. On one hand, I have institutional power as a WPA who runs the Writing Center and Writing Across the Curriculum program in addition to teaching two courses per semester. I already have a service course titled Introduction to Professional & Technical Writing in the institutional catalog where the Biology Department requires the course for the completion of their degree. Because of this institutional power, I have strong relations with my dean and IT department.

On the other hand, I am the only TPC and rhetoric/composition faculty member at my current institution, so I am the only qualified person on campus to teach the service course. The Communication Department just restructured its whole department by hiring a new chair and rewriting their curriculum, so they are not at this time looking to partner with me. The chair of my English Department – while he is an excellent administrator, pedagogue, and friend – does not exactly appreciate my love of rhetoric or belief that rhetoric is the foundation of writing: something that I would feel strongly about as the foundation for a TPC program. My institution is also going through its decennial accreditation cycle at the moment, so this is the year of record where nothing else matters except all of the documentation and writing narratives for our accreditors, not exactly an ideal time to start a TPC program when the president has explicitly told faculty "No new programs." I also feel the burden of my own technological deficiencies. My current amount for professional development funds would not even come close to supporting the kind of technological support I would need to start a program. And frankly, I do not have time to recruit and assess a program at this moment to support a TPC program.

In short, based on my own dissertation study, I am not going to start a TPC program at this time in my local context. This choice is not because I believe TPC programs do not belong in small institutions; on the contrary, I believe that this dissertation has proven that many TPC

program thrive in small institutions and make meaningful impacts to their institutions and local communities. My choice is based on the reality that many of the schools in my study have many more resources and affordances in their local contexts than I do, and I would rather put efforts into teaching the course Introduction to Professional & Technical Writing well instead of a creating a whole TPC program that cannot run well.

This is not to say that I will always be opposed to creating a TPC program. Rather, this dissertation's findings have also taught me the signs to look for in a healthy program: institutional support, department collegiality, inter-departmental collaborations, superb IT department, access to Adobe products on school computers, motivated organizational partnerships, robust professional development, student interest, more rhetoric and composition faculty, etc. While not all of these factors need to be in place for a perfect TPC program (I still agree with Johnson et al. that there is never a perfect time to start a TPC program), but I would like to see more of these aspects appear in my local contexts before endeavoring to start a TPC program – when the affordances of my local context are greater than its challenges.

The framework of this dissertation is linking identity to sustainable, and I believe this framework still applies even if a TPC program is never created. For me, studying the identities of small institutions allowed me to conclude that I could not sustain a TPC program by myself. Thus, while I have no program to sustain, the studying of identity for me led to the sustainable of myself – as an educator, researcher, and human being – who is not interested in burnout for the sake of creating a TPC program that will ultimately fail, potentially myself along with it.

Conclusion

As this dissertation comes to an end, it is important to recognize where this dissertation is limited and where scholars can build upon the concepts of this work in the future. First, this

dissertation is limited in many ways. The original plan of this dissertation was to include more content concerning rhetoric, identity creation, ranking of faculty expertise, diversity in TPC faculty in small institutions, undergraduate students' TPC research, overlapping coursework with creative writing curriculum, work/life balance among TPC faculty, TPC ethics, etc. All of these components were in the data that I collected but they just did not fit within the parameters of the project and/or would make this dissertation a trilogy instead of a dissertation. But I want to recognize that I clearly did not cover every idea pertaining to advocating, implementing, and sustaining – not only in the data that I collected but, in the field, at large. Even during the interviews with participants, it was hard to stay within the bounds of the predetermined questions because I would think of other relevant topics that I had not included in the questionnaire.

Another limitation of this study was my intentional choice to sidestep the quality of small institutions' TPC programs. Noticeably, I never took a strong position on how these specific programs were really good and these other specific programs were really bad. Part of this choice is due to my lack of experience of ever running a TPC program myself; and part of this choice is due to the reality that the framework of identity and sustainability is a more productive framework than merely a good-bad dichotomy. I know that my readers at times might be aghast at some of the TPC faculty's practices in this study, yet I believe in honoring the time and work of the TPC faculty in this study – poking fun or mocking TPC faculty practices is not how I treat people in research or in life. But I realize it could be beneficial for a more senior TPC scholar to assess TPC programs in small institutions to work towards improvement and against stagnation. As a graduate student with no experience running a TPC program, I believe that my positionality was best served in gathering narratives for my readers to evaluate themselves and apply different aspects to their local contexts.

As demonstrated by this dissertation, small institution's TPC programs are part of TPC's identity; therefore, this space is a rich place for scholars to find their home – knowing that there is a gap in scholarship for small institutions. In response to my study, how can scholars find better ways to support TPC faculty deficiencies in technology for small programs? How can scholars find better recruitment methods that work toward sustainability for small programs? How can scholars support better assessment practices for small programs? How can scholars advocate, implement, and sustain TPC programs in small institutions? With a relatively understudied field, scholars have a lot of choices for their scholarship – and hopefully, some of these scholars will be from the schools of the small TPC programs that I interviewed. As demonstrated by this dissertation, the study of small institution's TPC programs not only supports other small institution's TPC programs but also critiques and supports TPC programs from any size institution – bettering us all.

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APPENDIX

Email Invitation to Participants

Hello NAME OF TPC DIRECTOR,

I am a doctoral candidate at Old Dominion University working on my dissertation where I am interviewing technical and professional communication (TPC) faculty to learn more about what TPC looks like in small four-year institutions. My dissertation is being supervised by Dr. Daniel Richards (Old Dominion University) and Dr. Lisa Melonçon (University of South Florida). To gather data, I am interviewing different faculty at these small institutions about the history, support, and challenges of their TPC programs, and I was wondering if you would consider an online interview with me through Zoom about NAME OF INSTITUTION AND NAME OF THEIR PROGRAM?

The interview will last no more than one hour, and I will provide the IRB information and interview questions beforehand if you would like to see this information. I know that faculty's lives are busy, so there is no pressure to look over the questions or prepare anything before the interview. I want the interview to be a comfortable space of reflection, so please let me know of any accommodations that would make the interview process more comfortable. Participants will not be required to use their cameras and a live transcript will be present.

If you are open to participating, please feel free to email with a list of dates and times that would work best for you!

Thank you for considering,

VITA

Martha Lynn Russell
Old Dominion University
5000 Batten Arts & Letters
Norfolk, VA 23529

Education

Old Dominion University. Norfolk, VA. PhD Rhetoric and Composition, December 2023.
University of South Florida. Tampa, FL. Master of Arts, English Literature, May 2018.
Master's thesis "'The King's Highway:' Reading England's Road in *The Pilgrim's Progress*, Part I" and "Living in Liminal Spaces: The Destabilization of Norman Mailer's *The Deer Park*." May 2018.
Bryan College. Dayton**,** TN**.** Bachelor of Arts, English Literature, May 2016.
Bryan College. Dayton, TN. Bachelor of Science, Music: Piano Pedagogy, May 2016.

Professional Experience

Bryan College, Dayton, TN
Assistant Professor of English (August 2018 - Present)
Teach 100-400 level classes and advise English degree-seeking students

Writing Program Administrator (August 2019 - Present)
Directs the Writing Center, Writing Across the Curriculum Program, and assess online first year composition curriculum and instructors

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Publications, Research, & Editing

Russell, Martha Lynn. "'The King's Highway:' Reading England's Road in *The Pilgrim's Progress, Part I." Reading the Road in Shakespeare's Britain*, edited by Lisa Hopkins and Bill Angus, Edinburgh Press, December 2019.

Conference & Workshop Presentations

Russell, Martha Lynn. "TPC & Social Justice: Complicated Allegiances (in the University)." Association of Teachers of Technical Writing, 7-9 June 2023. Virtual.

Russell, Martha Lynn. "TPC in Small US Colleges: A Survey of Undergraduate Programs and Curriculum." Conference on Programs in Technical and Scientific Communication, 27-29 October 2022, SpringHill Suites, Colorado Springs, CO.

Russell, Martha Lynn. "Writing Tutor Education: Approaches to Equitable Theories and Practices." Conference on College Composition and Communication, 9-12 March 2022. Virtual.

Russell, Martha Lynn. "Writing Tutor Education: Plans for Equitable Theories and Practices." Tennessee Writing Center Director's Day, 5 June 2021. Virtual.