On Developing a Technical and Professional Communication Program Graduate Orientation

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Abstract: While graduate student orientation is an important form of technical and professional communication (TPC) for students entering graduate school, providing specialized information to help them succeed in academia and industry, many are not program specific. The main research focus of this study is to determine what currently enrolled graduate students and alums in a TPC program believe is necessary for an orientation program to be successful. This article reports on a survey of current students and alumni of East Carolina University's (ECU) Ph.D. in Rhetoric, Writing, and Professional Communication (RWPC) program. Students wanted orientation to excite, motivate, and guide them. Findings suggest improving graduate student onboarding, including peer-to-peer and faculty-student support for socialization. Key points that graduate students need in an orientation include academic professionalization, faculty and student networking, department or program standards, social and peer connections, and transition and lifestyle changes, amongst others. This study emphasizes the importance of contextspecific TPC program orientation; thus, departmental and program orientation needs to be designed to meet the needs of specific programs' TPC graduate students. The project advances TPC professionalization scholarship and informs effective orientation programs for TPC graduate students. This research is intended for TPC program faculty and administrators to consider its implications for their program's emphasis.

Keywords: Programmatic research; Graduate orientation; Professionalization

raduate student orientation programs get specialized information to graduate students during onboarding (defined as a process of integration into an organization, which can begin before an official admittance or start date) and orientation (defined as an introductory one-time event or series of events that help the official newly welcomed get started). Graduate student onboarding and orientation events give students expectations of the program, offer necessary trainings andmeet and greets with other students and professors, and get students prepared to enter their roles as students/student teachers, amongst other

purposes. The goal is that students will use the information provided through onboarding and in orientation to complete their degree and thus successfully join the ranks of academia and industry leadership. Graduate orientation can thus be informed by the theory and practice of technical and professional communication (TPC). Standard definitions of technical communication usually include transmitting data and information to a particular target audience for a particular purpose. Orientation is, therefore, a form of technical communication. In graduate school orientations, the audience is the diverse body of graduate students. Most programs leave orientation to the graduate school. However, these orientations are not program-specific.

This study aims to determine the graduate orientation needs of graduate student users in a specific TPC program, namely East Carolina University's (ECU) PhD in Rhetoric, Writing, and Professional Communication (RWPC). This addresses the gap in research because it focuses on the specific needs of the program rather than looking at graduate needs on a larger university scale. Current research suggests a correlation between campus-wide graduate orientation and student success (Benavides & Keyes, 2016; Hardré & Pan, 2017). Less scholarly attention has been given to department or program orientation. This study addresses this gap in research on graduate orientation by focusing on a specific university graduate program in technical communication. The main research focus of this study is to determine what currently enrolled graduate students and alumni in the program believe is necessary for an orientation program for them to succeed in their graduate programs. It is important to note that what students and alumni believe is necessary and what constitutes success. Many scholars would argue that students do not always know what is best for them—it is best, they say, if those trained in pedagogy design curricula, including things like orientations. However, scholarship on user experience testing shows that users know what they want sometimes better than designers do (Krug, 2000). It is therefore crucial to provide students with the opportunity to voice their opinions on what they want in an orientation program, as they are the users in that context. I value graduate students' experiential knowledge, as these students are trained pedagogues in their own right. These students feeling supported by being provided what they want is indeed an indicator of a successful orientation.

To capture a more nuanced and local understanding, graduate students and alumni in the RWPC program at ECU were surveyed about what they would like or would have liked to be included in an orientation in order to be successful. The findings of this study add to the body of knowledge on graduate orientation more generally and TPC student success by examining departmental orientation programs and activities, which are thought to increase motivation and graduate student engagement.

The current study addresses the importance of tailored orientation to meet the needs of graduate students entering TPC programs. As a form of technical communication, orientation must address the needs of specific university populations. Thus, departmental and program orientation needs to be designed to meet the needs of specific programs' TPC graduate students. Orientation programs have the potential to alleviate student difficulties by providing information and

resources that help students successfully adjust to the university's culture and expectations.

As a Ph.D. student in ECU's Rhetoric, Writing, and Professional Communication program, I conducted research under the mentorship of Michelle Eble. Eble's work has focused on the social justice turn in technical communication work. This project contributes to the social justice approach to research graduate orientation needs. I recruited current students and alums to complete a survey on their orientation program upon entering their graduate studies. Acknowledging student and alumni narratives and moving into action to address those needs through formal and informal methods is an act of social justice, ensuring that those who come through TPC programs are heard, and their needs are seen as valid and important.

Positionality

I am a Black woman in a female presenting body who uses she/her pronouns. I am a member of multiple marginalized groups, including those with hidden disabilities. I am also a nontraditional graduate student, who began my graduate studies 9 years after completing my bachelor's degree, and while with two children. Graduate school was hard to navigate as a lot of things were not readily apparent, hard to find, difficult to understand, or just not culturally relevant or tailored to my unique needs. I do this research to help future graduate students' needs be heard and met in a way that mine were not/are not.

Background

Below is listed a variety of the onboarding activities and Graduate School campus events offered to help new graduate students acclimate to East Carolina University and their graduate education:

Orientation Program Name	Sponsor	Required or Optional
Canvas Orientation Course	Graduate School	Optional
Graduate School Orientation	Graduate School	Optional
Virtual/Online Events	Graduate School	Optional
Graduate Teaching Assistant Orientation	Graduate School	Optional
New GTA Orientation	Director of Writing Foundation	Required

Studies suggest to "acclimate" into a university and graduate school means adjusting to new academic and social environments, which includes developing professional preparedness, managing various responsibilities, overcoming personal and institutional challenges, acquiring new learning strategies, and transitioning from previous educational settings (Fernandez et al., 2019; King et al., 2015; Ryan et al., 2008). Acclimating into a university and graduate school involves adapting to a new academic environment, which includes understanding the expectations, culture, and responsibilities associated with higher education. This transition is crucial for students to become successful in their academic pursuits and professional development.

Orientation Program Name	Sponsor	Required or Optional
English Department Graduate Student Orientation ²	English Department	Optional
Professional Development Seminar	Ph.D. Program Coordinator	Required Course

Table 1. East Carolina University Graduate Student Onboarding and Orientation Programs

As shown in Table 1, only a select few of these trainings are required. While the Canvas Orientation Course orients students to the learning management system, the Graduate School Orientation and Virtual/Online Events are geared toward attending the university at large as a graduate student. The Graduate Teaching Assistant Orientation is aimed at new graduate teaching assistants in the first-year writing program at East Carolina University. The Department Graduate Student Orientation and Professional Development Seminar are both for graduate students in the department, however they vary in purposes. The English Department Graduate Student Orientation is a program for all graduate students (master's and doctoral levels) in the department, while the Professional Development Seminar is a course designed for new PhD students in the RWPC program. I argue that departmental and program orientation needs to be designed to meet the needs of specific TPC programs' graduate student users. First, I examine the literature. Then I discuss research methods and outline the rationale for the coding categories I used to analyze the survey results. Next, I discuss the results. Last, I conclude with the importance of socialization and professionalization in TPC orientation programming.

Literature Review

Scholars have examined how graduate orientation programs and activities have the potential to increase motivation and graduate student engagement. Carl Stiles (2012) shows a significant difference between the level of satisfaction with institutional choice of those students who participated fully in all the graduate orientations and those who did not. Shannon Patiño (2022) asks, in higher education, how do faculty and administration improve new student onboarding programming to increase the sense of belonging during the early stages of graduate students' onboarding experience?

Patiño proposed the following: frequent check-ins and refreshers, the incorporation of restorative circles³ into the onboarding process, requiring one class to be taken

As a result of the pandemic, the RWPC doctoral program had no formal orientation for doctoral students entering the program from the beginning of quarantine to Fall of 2022. In the Fall of 2022, the faculty hosted both a graduate student orientation and a Ph.D. orientation, which were not required, but which were informed by preliminary results and recommendations from this study.

According to Patiño, p. 31: "Restorative circles are a 'carefully constructed, intentional dialogue space' that allow everyone the opportunity to share, be heard, and be supported (Boyes-Watson & Pranis, 2015, p.60). This means that dedicated and thoughtful preparation is needed to

as a whole cohort, and providing resources and opportunities to build a foundation and academic confidence. These resources to help ease the graduate student transition into graduate school could look like programs giving incoming graduate students a list of books, articles, etc., to read to get familiar with the program's language and terminology before the semester starts, and departments could also offer incoming graduate students a sample course with sample assignments (Patiño, 2022). This article addresses another proposed solution by focusing on orientation, one of the first resources graduate students receive. This study explores the orientation needs of doctoral students and how departments can best meet those needs.

Recent trends in technical and professional communication can inform the importance of developing graduate orientation at the department and doctoral program levels. Scholars in technical communication and TPC graduate program directors are interested in this research because of the need for professionalization of graduate students and faculty in TPC programs (Bloch, 2012; Pennell, Frost & Getto, 2018). By professionalization, I mean the process of becoming a part of the academic field, such as transitioning from a PhD student to that of an emerging scholar in TPC. The implication is that graduate students need specialized knowledge in order to become active agents in the field. Interesting to note is that presenting specialized knowledge is in itself the use of technical communication. Thus, as a field and a practice, technical communication can be found working in many areas and disciplines.

Miriam Williams & Octavio Pimentel (2016) support transdisciplinary work, hence the use of sources in the fields of education, social work, and others to inform this study. Scipio Colin & Talmadge Guy (1998) address programmatic development from a decidedly Afrocentric and anti-racist paradigm. Although not in the TPC field of study, Colin and Guy's work yields useful information for approaching and addressing issues and problems essential to the Black identity, resulting in culturally grounded programs (McKoy et al., 2020).

This study employs the literature's emergent themes, which outline the primary areas where graduate students face difficulties, to inform and categorize student needs and effective interventions, including those from within and outside university programs. The remaining literature review is structured as follows: Diversity and Social Justice, Modes of Graduate Orientation, and Onboarding, Socialization, and Transition.

Diversity and Social Justice

Julie Watts (2019) states that face-to-face college orientations are currently provided for many groups, including "freshman, transfer students, graduate students, first-generation college students, minority students, honor's students,

tailor a circle to the needs of the group. Circles focus on balancing developing action plans, getting acquainted, addressing issues, and building relationships. In a circle, participants sit in a circle and there is a keeper of the circle who acts as the main facilitator helping all participants move through the circle process, makes sure the circle is upholding the values and guidelines established, guides the circle through reflection, and ensuring that quality of the circle is one of respect and safety."

athletes, commuter students, white students, and others" (p. 255). The similar primary objective of these programs is to familiarize students with the "intellectual, cultural, and social" aspects of the institution (Boykin et al., 2015, n.p). Studies point to the benefits and challenges of designing and implementing university programming that meets diverse student needs (Twale, Weidman, & Bethea, 2016; Hardré and Pan, 2017, Watts, 2019). According to Michael Poock's (2002) study, "social and academic needs are best met through departmental activities, whereas information on campus services is best provided through campus-wide efforts. These results vary, however, when examining specific populations, such as women and students of color" (Poock, 2002, p. 231). Similarly, there is also the recognized need in the TPC field for more research on the unique requirements and perspectives of underrepresented TPC students and the current lack of racial and ethnic diversity in TPC programs (Dayley & Walton, 2018; Savage & Matveeva, 2011).

Per previous research cited in Poock (2002), the experiences of students of color in graduate education are unique and often face social isolation, so studies advocate for campus-wide orientation programs to reduce social isolation among non-White graduate students and find that non-White graduate students may experience social isolation and alienation in predominantly White institutions (PWIs). It is established in the field that traditional technical communication practices may neglect already vulnerable populations (Savage & Matveeva, 2011; Jones & Walton, 2018; and Zamparutti, 2022) because these so-called objective and neutral practices are Western European and white male dominant. Scholars in the field of technical and professional communication now largely acknowledge that TPC is not neutral or objective and is often employed to uphold and reinforce systems of oppression. Overall, orientation programs can help address the unique needs of students of color. Multiple studies address the social needs of underrepresented student populations and highlight the significance of race/ethnicity in graduate student socialization (Barrera, 2020; Colin & Guy, 1998; Montgomery et al., 2014). Thus, studying orientation programs becomes especially pertinent considering the social justice turn in TPC as a field (Walton, Moore, & Jones, 2019).

Nieto & Bode (2017) describe social justice as an equitable philosophy, approach, and actions that embody treating all people with fairness, respect, dignity, and generosity, and affording each person real opportunity to achieve their potential, to the point where each person has access to goods, services, and social and cultural capital. Note that the PhD is social and cultural capital in many US contexts, including education.

A social justice approach to designing orientation amplifies the agency of oppressed and under-resourced people and takes action to redress inequities. Williams & Pimentel (2016) propose the use of new approaches which will build the institution and program's cultural competence. Per previous research, as noted in Barrera (2020), another critical element of graduate student preparation for persons of color is mentoring since it offers emotional, social, and career-focused assistance (Davidson & Foster-Johnson, 2001). Our field of technical and professional communication uses terms like "inclusive" interchangeably with social justice at times, recognizing that social justice is doing the hard work. Ethical technical

communication should deliberately support, create, maintain, and sustain diversity and, therefore, equitable graduate orientation programming by addressing the needs of all graduate students. A social justice-oriented orientation will address the conditions that produce and sustain unequal academic outcomes.

Modes of Graduate Orientation

One way to support diverse student needs is through a variety of graduate orientations. As noted, scholars such as Poock (2002) and Stiles (2012) study and evaluate the needs and methods of delivering a graduate student orientation. Researchers recognize that both departmental and campus-wide orientations can be pivotal and assist students in the transition into graduate school (Poock, 2002). This could be because the different orientations may cover different facets of integrating into the institutions. For example, campus-wide orientation could cover institutional services available to students, while departmental orientation may cover academic information (Poock, p.242). Poock's (2002) study also shows graduate students in general valuing department efforts as more important than the campus-wide orientation, seeing as they view the "academic department...as having the primary responsibility for addressing adjustment issues such as meeting new and current students and creating an atmosphere where new graduate students feel welcomed" (p. 240). However, campuswide orientation was preferred by students of color, as academic departments can be racially underrepresented. as Poock notes. Benavides and Keyes further the notion that interaction with instructors and chances for social networking foster stronger links among students and provide students with a sense of community (Benavides & Keyes, 2016).

Online options

As noted, a range of student needs can be effectively supported by offering an array of graduate orientations. In-person options can range from a full-day workshop to recreational team-building activities, but there are alternatives to this format. Scholars such as Joyce Carter (2013), Julie Watts (2019), Patiño (2022), and Amelia Pavlik (2020) have investigated online vs. in-person programming. There are many issues that incoming graduate students may consider when choosing different modes of orientation. These include the ability to attend in person (Pavlik, 2020), distance education students (Jones, 2013), desire to make connections with classmates or socialization (Weidman, Twale, & Stein, 2001; Watts, 2019), time management (Jones, 2013), and practice using technology (Dixon et al., 2012; Jones, 2013). However, Patiño (2022) found that both the in-person and virtual orientations were satisfactory at providing resources for navigating the transition into graduate school. Jones (2013) aimed to address the lower retention rates for online courses by implementing a mandatory online orientation for an online course, developing self-paced modules on computer requirements, being a successful online student, online student services, and navigating and communicating with the learning management system (LMS). In this case, the orientation is updated twice a year through summative and formative evaluations using qualitative and quantitative student feedback, helpdesk tickets, and faculty/staff feedback.

In keeping with the theme of variety in orientation options, Fan Yu et al. (2020)

and Katie Richards-Schuster et al. (2019) discuss alternative graduate school orientation. Yu et al. (2020) examine virtual reality while Richards-Schuster et al. (2019) explore the massive open online course (MOOC) as another way to orient graduate students. While traditional online graduate student orientation programs typically have admission requirements, fees, and an application process (Richards-Schuster et al., 2019, p. 314), MOOCs are open to all and don't require any qualifications or applications, and they are free to take. Any form of orientation to online graduate study, whether fully online or face-to-face, is beneficial (Watts, 2019). This allows students to better prepare for graduate-level learning experiences.

Lisa Meloncon & Heidi Harris (2015), Moon-Heum Cho (2012), and Jean Taylor, Margie Dunn, & Sandra Winn (2015) suggest preparing students for online instruction. The RWPC doctoral program hosts several online courses, which students need to be oriented into. Canvas, East Carolina University's main learning management system, has orientation options for all graduate students, including online and in-person options at ECU, to familiarize students with the learning management system and provide student support with technical issues. All this suggests that orientation options vary widely and there is no one-size fits all approach, which points to the need to study specific population's student needs in order to develop the best approach.

Mandatory Orientation

Orientations have been shown to increase student retention and warrant compulsory attendance (Braxton et al., 2014; Watts, 2019). Surprisingly, Watts (2019) found that some students would want components of their onboarding to be mandatory for accountability purposes. Scholars have recommendations for required orientations (Braxton et al., 2014). Jones (2013) presents a mandatory online graduate orientation developed within the college's LMS to improve retention.

Onboarding, Socialization, and Transition

Scholarly literature addresses the purpose of onboarding programs in general and graduate orientation more specifically. The overarching goal of orientation remains the same in the literature: to expose students to the "intellectual, cultural, and social facets of the institution" (Boykin et al., 2015, n.p. As cited in Watts, 2019, p. 255).

Onboarding

As noted, onboarding and orientation are similar yet distinct. Whereas onboarding involves a process of integration into an organization, which can begin before an official admittance or start date, orientation is an introduction, one-time event, or series of events that help the officially newly welcomed get started. Onboarding programs and orientation sessions are essential in promoting engagement, academic success, and a sense of belonging in graduate programs. They provide interaction with peers, facilitate socialization, and equip students with tools for navigating new challenges (Benavides & Keyes, 2016; Fakunmoju et al., 2016, as cited in Patiño, 2022, p. 10). Orientation also helps students connect with professors, make friends, and learn about campus resources (Patiño, 2022; Jones,

2013). Onboarding programs with socialization activities and faculty advising have been shown to increase engagement levels and promote academic success (Benavides & Keyes, 2016). However, creating programming that meets diverse student needs can be challenging (Watts, 2017; Benavides & Keyes, 2016).

Orientation programs that utilize academic achievement resources and program chair presentations can result in fewer students receiving grades below expectations and promote academic and social integration (Benavides & Keyes, 2016). Including extra materials such as graduate program success advice, individualized meetings with academic advisors, and review sessions can increase the success of orientation programs (Benavides & Keyes, 2016, p. 120). Graduate onboarding programs can also promote a sense of belonging and shape commitment to the field through activities that foster openness, trust, and deeper relationships with peers (Perez, 2016). While belonging has been studied among undergraduate students, limited research has been done among graduate students (Pascale, 2018; Patiño, 2022).

Socialization

Graduate students transition into graduate school and learn how to interact in a way that is acceptable to graduate school and society as a whole, a process known as socialization. Perez (2016) examined graduate students' transition experiences, contributing to understanding students' initial graduate experiences. Colin and Guy (1998) identify "three paradigmatic curricular" (p. 43) orientations, advocating that programs opt for the self-ethnic liberatory and empowerment approach to curriculum and course development, which seeks to establish a liberated and empowered community.

Graduate students encounter unique challenges during their transition and socialization to graduate school, such as time constraints and financial issues (Patiño, 2022; Fakunmoju et al., 2016). Building social networks and engaging in activities can assist students in succeeding academically and post-graduation (Haggerty & Doyle, 2015). To improve retention, it is beneficial to assess student needs at various stages and provide intentional check-ins during onboarding (Hardré & Pan, 2017). Non-traditional students may face particular challenges, and utilizing campus resources can help with successful study habits and social support (Hill & McGregor, 2012). Students of color may drop out due to a lack of social integration support, and employing cultural competencies can assist (Barerra, 2020; Davidson & Foster-Johnson, 2001). Orientation programs with a clear mission and high student participation may aid in decreasing dropout rates (Benavides & Keyes, 2016).

Transition

Graduate students need to socialize not only in graduate study, but also in their respective academic disciplines or professional fields. Orientation design should therefore include information networks connecting students to their advisors, faculty mentors, the graduate community, the institution, and their academic disciplines. TPC scholarship has explored the professionalization of the field, including the difference between explicit and implicit professionalization and how it contributes to student success. Studies such as Pennell, Frost, and Ghetto (2018)

and Haggerty & Doyle (2015) have highlighted the importance of graduate student professionalization for success after graduation. Additionally, Montserrat Castelló et al. (2017) have addressed how student experiences affect attrition and the motives behind why students drop or consider dropping out of doctoral programs.

Graduate students experience distinct challenges during their transition and socialization to graduate school, including balancing school with life demands, financial difficulties, and challenging relationships (Fakunmoju et al., 2016; Patiño, 2022). A sense of belonging contributes to students' academic integrity, self-esteem, persistence, and program satisfaction (Patiño, 2022). Establishing relationships with faculty, investing in a graduate degree, building friendships, and balancing graduate school with life demands are all factors that influence a graduate student's sense of belonging (Pascale, 2018).

Orientation programs play a crucial role in graduate students' transition and can help combat high attrition rates in graduate education (Haggerty & Doyle, 2015; Benavides & Keyes, 2016). The study aims to contribute to the scholarship on TPC professionalization while tailoring graduate student orientation programs to meet students' diverse needs. This research study amplifies those diverse student perspectives, gleaned from RWPC doctoral students and alumni, to inform program orientation.

Research Questions

Poock (2002) encourages involving current students in planning both departmental orientation programs and campus-wide orientation programs. According to Poock, "[g]athering input from those for whom the orientation programs are designed is the only way to ensure the desired ends of the program are being achieved." Gathering user input from those for whom the content is designed is one of the technical communication standards that this project implemented. This article reports on just such a survey of current students and alumni of a specific doctoral program. As part of this study, I sought to answer the following two main questions:

- What are doctoral students' particular graduate orientation needs?
- What do graduate students in the RWPC program at ECU want in terms of orientation?

There are also two sub-research questions:

- What would current students and alumni have liked to be included in an orientation to be successful?
- How can the English department best meet those needs?

Research Methods

User-Centered Approach

Steve Krug (2000) states the best way to find out what users want is to ask them. Michael Poock (2007), Patiño (2022), and Chris Dayley (2020) all got feedback from graduate student participants either through surveys, interviews, or both.

Several studies have been conducted on the needs of graduate students and how universities can adapt their programs to meet those needs. These studies focus on the socialization experiences of different populations of graduate students, including those from diverse racial, ethnic, or educational backgrounds (Hardré & Pan, 2017; Mears et al., 2015). Research has shown that the diverse experiences of students significantly affect attrition and retention. Recent scholarship in TPC has addressed the field's internal needs for diversity, inclusion, mentoring, and social justice (Dayley, 2021; Dayley & Walton, 2018, Jones, 2016). Scholars suggest student-developed and student-led orientations as a way to provide feedback that helps new students avoid common pitfalls during the degree program, answer common questions, and ensure students graduate on time (Patiño, 2022; Dixon et al., 2012).

The survey question design, which is informed by the literature review, is enhanced by incorporating open-ended questions and allowing respondents to provide their own answers. Open-ended survey questions, along with quantitative data ranking, amplifies the narratives and needs of the participants in the survey results. Jones (2016) highlights that TPC research on social justice aims to empower oppressed individuals and address issues such as inequality, access, privilege, individual rights, and the collective good. Acknowledging the narratives of students and alumni is a form of social justice as it ensures that program participants' voices are accepted and their needs are recognized.

Methodology/Design

The survey project aims to foster diversity and social justice as fairness for all and balancing unequal power dynamics. East Carolina University is classified as a PWI. Therefore, it is imperative to provide students of color with a platform to articulate their distinct requirements. Nontraditional students constitute an additional marginalized demographic. The data scope and study design are optimized to align with the principles of social justice in TPC programs and the design of student support systems by incorporating the self-identified needs of all graduate students and alums. Catering to the specific requirements of students' need for program-level graduate orientation is user/student advocacy.

This IRB-approved study employs a mixed methods approach. Following Alexander Thayer et al. (2017), I first empirically examined the characteristics of literature on orientation programs generally, and graduate orientation programs more specifically, leading to "emergent coding" (p. 8). I arranged the scholars' work into themes that can be made into coding categories. An example is presented below, where themes emerged from the scholarship regarding the needs of graduate students:

Twale, Weidman, & Bethea (2016) focus on the socialization needs of African-American doctoral students, while Hill & McGregor (2012) address similar challenges faced by older, non-traditional, and international graduate students during their first year of graduate school. These challenges include *balancing family, funding, work, and school schedules and adapting to the culture of the program* (emphasis mine).

Aligning with Colin & Guy (1998) and others writing on diversity, anti-racism, and social justice, Barrera (2020) supports an "orientation model that eases new Latinx graduate students' anxieties, through *concerted community-building* and *discussion of the hidden curriculum (i.e., unspoken rules and norms)* of higher education, both of which are critical to establishing a strong foundation for graduate school" (p. 48, emphasis mine)

Table 2. Emergent coding from excerpts of examination of the literature on graduate student orientation

For the research methodology, I employed a grounded theory approach as informed by Thayer et al. (2007). As Thayer et al. (p. 268) described, I sensed a number of common themes, first from the research literature to develop the survey (see Table 2), and next from data from the survey. I then developed a systematic, empirical way to code those themes. I adapted content analysis to research purposes, providing explicit instructions to define each coding category (see Appendix B).

As stated, I identified a preliminary set of coding categories used for this data analysis. Using grounded theory methodology, I surveyed the primary research articles on graduate student orientation to see what is being done in orientations. Keywords search were "graduate," "student," and "orientation." Sources were first chosen on their relevance to the project, which yielded out-of-field journals; however, they were pivotal to the subject at hand. Then, updated literature was searched for within the last 10 years from 2022, the time period of the study. Some in-field journals searched included *Technical Communication*, *Technical Communication Quarterly*, *Journal of Technical Writing and Communication*, and *Programmatic Perspectives*. From these resources, I came up with a list of the most important topics for graduate orientation according to the literature. I did this through a process of emergent coding to empirically examine the data.

Diversity in TPC	Programmatic Social Justice	Race	Recruitment & Retention of Under- represented	Modes of Orientation
Dayley & Walton (2018)	Colin & Guy (1998)	David & Foster- Johnson (2001)	Poock (2007)	Poock (2007)
Montgomery et al. (2014)	Haas & Eble (2018)	Montgomery et al. (2014)	Benavides & Keyes (2016)	Stiles (2012)
Williams & Pimentel (2016)		Barrera (2020)		Watts (2019)
Twale, et al. (2016)		Twale et al. (2016)		Patiño (2022)
Hardré and Pan (2017)				Pavlik (2020)

Diversity in TPC	Programmatic Social Justice		Modes of Orientation
Barrera (2020)			

Table 3. Preliminary emerging themes for the literature review

As shown in Table 3, preliminary emerging themes in this study encompass various aspects of Table orientation, including programmatic social justice, diversity within Technical and Professional Communication (TPC) programs, as well as a focus on issues related to race. Additionally, the study considers recruitment and retention of underrepresented students, while examining various modes of orientation.

Funding	Relationships	Time management	Transitions	Socialization
Hill & McGregor (2012)	Hill & McGregor (2012)	Hill & McGregor (2012)	Hill & McGregor (2012)	Benavides & Keyes (2016)
Fakunmoju et al. (2016)	Fakunmoju et al. (2016)	Dixon et al. (2012)	Twale et al. (2016)	Watts (2019)
Mears et al. (2015)	Mears et al. (2015)	Jones (2013)	Patiño (2022)	Patiño (2022)
	Smith (2014)	Fakunmoju et al. (2016)	Dixon et al., (2012)	Pascale (2018)
		Patiño (2022)	Perez (2016)	Mears et al. (2015)
		Pascale (2018)	Haggerty (2015)	Castelló (2017)
		Smith (2014)	Mears et al., (2015)	
		Castelló (2017)		

Table 4. Preliminary coding categories for data

As shown in Table 4, the preliminary categories were funding, relationships with peers and family, time management and work/life balance, transition and adapting to program culture, and socialization.

I formulated survey questions and research protocol based on the literature on orientation programs, including questions that asked participants to rank the importance of these orientation topics. I then used inductive coding of the data collected from survey respondents. In the first round of coding, I employed an emergent coding process by highlighting keywords and phrases in each participant's short answers to the survey questions. An example is provided below in Table 5:

Q2: What do you believe are the most important things to know when beginning a graduate program generally and a PhD program specifically?

I think the PhD seminar classes are fundamental in orienting students to the world of PhD school. The most important thing to know is who your advocates are, and when and how to reach for support if needed.

I think knowing the **support systems** that are available on campus is important, and I also really think it's important **to know all the faculty in the department**, even if a student won't be working directly with that **faculty member** right away. The **networking experience** can lead to **possible collaborations** later. I personally was really grateful I knew a **faculty member** in literature late in my PhD because I had to replace a member of my diss committee at the last minute and her **expertise outside of my focus** really brought an excellent new perspective to my work.

Table 5. Emergent coding process

While using an inductive strategy to code while reading participant responses, I sensed many of the same orientation topics were present in the literature as themes emerging from the data. In the second round of coding, I color-coded the coding categories and used that to code the keyword and short phrase data from round 1 into the preliminary categories that had emerged from the literature, adding categories as necessary. Important themes emerged through various questions asked about what students responded important to them in a graduate orientation. An example is provided below in Table 6:

Q5: What changes would you like to see efforts?	in our PhD in RWPC program orientation
	Color Code
I think a lot of orientations focus heavily on policies, which quickly becomes overwhelming. Those first few days you're in a haze, and (at least in my experience) you get a pile of information about resources that are available for different situations, none of which you remember months or years later when those situations actually arise. I'd put links to all that on a readily-accessible website or Canvas page, and then devote orientation time to 1) helping new students build relationships so they have experienced people to go to when questions come up, and 2) practical, "what happens on Monday" advice and guidelines	Purple (Department or program standards & culture)

Q5: What changes would you like to see efforts?	in our PhD in RWPC program orientation
Non trad students need their own orientation. This student population is very different from the MA student that's gone straight through from BA to MA to PhD.	Yellow (Transition and lifestyle changes)
We NEED to meet all phd faculty . It's wild that the department only "knows of" people rather than actually knowing them. Then how do you choose committee members if you don't know them!?	Green (Faculty and student networking)

Figure 6. Data Analysis of graduate student and alumni survey responses

I also performed quantitative analysis by averaging the respondents' rankings of the importance of the orientation topics and what percentage of respondents answered in certain ways to survey questions. The survey questions collected quantitative data ranking the top program orientation topics gleaned from the literature, along with qualitative data from short answer questions asking about the students' recollection of orientation efforts at the department, college, and campus level.

Participant Recruitment

I recruited participants to respond to a semi-structured survey (see Appendix A). To recruit, I shared the call-for-participation via listserv/direct individual email invitation to Ph.D. students or recent graduates via the help of Michelle Eble and our department administrator. Participants were recruited from 18 current students and 35 alumni. Participants completed the anonymous survey between March 31, 2022, and April 15, 2022. Due to the relative newness of the program and small potential participant size, I purposely didn't include demographics as it could inadvertently identify someone.

Gathering user input from those for whom the content is designed is one of the technical communication standards that this project aims to implement. Results from this project will allow tailoring of graduate student orientation programs and activities to meet unique graduate student populations' diverse needs while contributing to the growing body of scholarship on TPC professionalization.

Coding Scheme

After completing data collection, I used emergent coding (Thayer et al., 2007) to analyze the responses I collected, and I developed a coding scheme based on keywords emanating from the main concerns in participants' responses (see Appendix B). These are the emergent categories (in addition to the five previously identified through the literature).

Coding Categories and Content Analysis

The coding categories can be found in Appendix B.

I also performed content analysis by tallying the number of a specific type of response given by respondents to certain questions (such as the number of respondents who didn't remember an orientation to the number who did recall orientation).

Results

I sought the information current students and alumni wanted to know when they started the specific TPC program and how to meet these diverse student needs in their graduate studies in the program.

Summary of Results

Comprised of current doctoral students and alumni of the last 10 years of the RWPC program, 25 participants responded to the survey. 44% recall a specific department or Ph.D. orientation.

What are doctoral students' particular graduate orientation needs?

Doctoral students have diverse orientation needs when entering graduate school. The students themselves are diverse, as one described "a student new to the environment, new to ECU academic culture and perhaps new to the social customs."

Their responses suggest that department or program-specific orientation is crucial in addition to the Graduate School orientation, as campus-wide orientations often fall short in addressing certain aspects of graduate education, such as navigating administrative systems. Students emphasized the importance of receiving information about graduate school culture, unwritten rules, department and program standards, and administrative processes during department or college orientations.

One student provided a comprehensive list of essential topics for orientation, including research interests, financial aid, library services, research and teaching resources, professional organizations, and wellness support. While other students didn't create such detailed lists, these needs were consistent across responses. Overall, students expressed a desire for an orientation program that provides excitement, motivation, and clear direction. Their key orientation needs include academic preparation, curriculum details, cost and expenses, library resources, time management, writing skills, dissertation guidance, location information, faculty expertise, research interests, and financial aid options. They also seek information on teaching, research, campus resources, and professional organizations.

Key points that graduate students need in an orientation include hearing from current students and graduates, academic preparation, curriculum, requirements, cost and expenses, library services, required time and effort, adjusting to writing

different genres, dissertation process, location, key people in the department, research interests, and financial aid. Students wanted excitement, motivation, and direction from their orientation program. Pulling from the entire field of responses from Q1, Q6, and Q9, the following items were deduced. In a graduate orientation, graduate students need:

- **Academic Preparation:** Discussing the importance of academic preparation for a Ph.D. program, including the need for strong research skills, critical thinking abilities, and a solid foundation in the subject matter.
- Curriculum and Requirements: providing an overview of the typical curriculum and requirements for a Ph. D. program, including coursework, exams, research requirements, and dissertation expectations.
- **Cost and Expenses:** explaining the costs associated with a Ph.D. program including tuition, fees, and living expenses, and discuss options for financial aid and funding.
- **Library Services and Resources:** detailing the library services and resources available to Ph.D. students, including access to databases, journals, and special collections.
- **Time and Effort Requirements:** discussing the time and effort required to successfully complete a Ph.D. program, including the need for discipline, focus, and time management.
- Writing and Dissertation Process: describing the writing process and dissertation expectations, including the importance of organization, research skills, and feedback from advisors
- **Location and Housing:** giving information on the city, surrounding areas, and the options for places to stay
- **Faculty and Administration:** highlighting the key people and faculty expertise within the department, including mentors, advisors, and professors with specialized knowledge in the student's area of interest.
- **Research Interests and Career Choices:** discussing the different career choices available to Ph.D. students.
- **Resources and Organization:** detailing the teaching, research, campus resources, and professional organizations available to Ph.D. students, including opportunities for networking and career development.

Orientation Topic	Rank
Navigating doctoral program (Course scheduling, career-related coursework, degree path, assistantship opportunities, etc.)	4.84
Academic professionalization (doctoral study preparation, study skills, tenure-track academic jobs & long-term career goals)	4.52
Time Management	4.24
Faculty and student networking	4.04
Graduate school culture, the "unspoken" rules	4.04
Technology support and resources	3.96
Department or program standards & culture	3.96
Navigating administrative systems	3.76
Social and peer connections	3.71

Orientation Topic	Rank
Stress and personal crisis management	3.68
Transition and lifestyle changes	3.48
Information about University Services and Campus Programs	2.96

Table 7: The respondents' rankings of importance were averaged (out of 5 being very important)

Table 7 shows the respondents' rankings of importance were averaged (out of 5 being very important). Based on the literature regarding doctoral attrition, time management was one of the reasons students dropped out that were separate from academic performance. These reasons could be outside of their academic life, including personal and family time constraints. So, while orientation cannot solve those issues, it can provide resources and support to support graduate student retention.

What would current students and alumni have liked to be included in an orientation to be successful?

Current students and alumni expressed their preferences for an orientation program that focuses on department-specific needs rather than general administrative information. They highlighted the importance of community building and the need for better connections and relationships within the academic community as "[y]ou can't replace an on-campus experience for orientation." One suggested "stories from previous graduates' success" and "experiences/ tips from current students."

Participants suggested additional orientations for graduate teaching and non-traditional students. One participant states they remember a college/department orientation as a "day long/half day long event where we could hear from different professors and meet with current students to talk about grad school. As a non-trad student, a lot of it didn't apply for me." Participants also emphasized the value of addressing typical Ph.D. academic activities such as conference participation, paper presentations, and professional development, including publishing.

The respondents emphasized the importance of clearly defining program goals, objectives, and purposes. They suggested including presentations by successful Ph.D. alumni to inspire and guide new students. Additionally, participants highlighted the need for preparation in navigating the complexities of "real" academia, including faculty-administration dynamics, budget constraints, grant management, and assessment processes. One participant says it is important to know "an understanding of grad life! timelines, what to expect, tips, etc. cognitively prepared for a PhD program, the reality of PhD school, the visible and invisible labor of obtaining a PhD; potential reality that even with a PhD degree, one may not be able to obtain a tenure-track position." Another also referenced "the realities of entering the program," which points to the "unspoken" or "unwritten" rules of academic life coded in the data categories.

To enhance the orientation experience, students and alumni proposed a more structured four-to-five-year plan, additional funding opportunities beyond

assistantships, and less formal socializing events. They also recommended adding leadership skills, networking with other programs, publication guidance, conference financing, and parking information to the campus-wide orientation, while removing department-specific graduate student testimonials.

What do graduate students in the program want in terms of orientation?

Graduate students in the RWPC program at ECU expressed a wide range of concerns and preferences regarding their orientation. These concerns span various topics, including "living on restricted budget, expenses, finding your niche early on and sticking to it, living in the city--reputable auto mechanics, child and pet sitters, electricians, repairpersons, internet providers; good study locations; doctor's offices that are in-network with university insurance-- anything you can avoid researching on Yelp to give more time for class work." They requested "Campus Resources to support Work-Life Balance / Wellness / Mental Health."

Students noted that campus-wide graduate orientation fostered valuable social and peer connections, as well as faculty interactions. They didn't recommend removing any content from the Graduate School's orientation. They recommend "orienting students to the world of PhD school" and "[p]rep[ping] students for 'real' academia."

They also offer insights in to how they want a TPC graduate orientation to make them feel: "Knowing that I am not alone in my struggles is the most helpful," stated one participant. Another also said "empathy was another practice that helped me be successful in the program... I could sense it and feel it in a very real (tangible) way."

Information regarding department or program standards and culture from the Graduate School orientation was particularly helpful for students as they transitioned to graduate school. Some students recalled specific orientation efforts by the ECU English department, including the year-long Professional Seminar course, GTA orientation, and virtual meetings with Ph.D. students and faculty professors. As one participant offers, "the PhD program also created a course related to professionalism. Although not an orientation, the course was also extremely informative."

There seems to have been a more formal orientation provided by the department in the past, as one respondent mentioned one such orientation in 2010. Students expressed a desire for easily accessible links to all policies, a focus on relationship-building, practical advice for immediate needs, meetings with all Ph.D. faculty (as "networking experience can lead to possible collaborations"), and online resources that can be accessed at convenient times.

They emphasized the importance of in-person networking events to form stronger connections compared to online experiences, as one participant notes "several informal get-togethers for grad students or grad students and faculty—that really helped us get to know people and build a support network quickly." Another had "direct contacts I could ask for information or answers to questions." These connections span outside the program and across the department level as well: "I remember the faculty introductions most of all—that really stuck with me. I just

wished to have met more folks across the department." Another stressed "office admin staff" who can be "a major asset."

Other participants offer insights on the most memorable part of their orientation into the program: "Orientation began with formal presentations and sessions on campus, but what I remember the most (what stands out as the most valuable part of orientation for me) was the off-campus meet-and-greet with other graduate students and professors hosted by Dr. Eble after the official orientation." Key faculty members proved to be valuable resources in orientation.

There are several cautions as well. For example, things graduate students may NOT want in orientation. These include: "the first year teaching orientation that was way too long and overwhelming" and "meeting one day with a bunch of people talking." Timing was another issue. A student stated that "a lot of orientations focus heavily on policies, which quickly becomes overwhelming. Those first few days you're in a haze, and (at least in my experience) you get a pile of information about resources that are available for different situations, none of which you remember months or years later when those situations actually arise." Again, regarding timing of orientation, a respondent suggested "[a]n event each semester (or each year) tailored to where someone is in a doctoral program would be much more useful. At that first orientation, I was two full years of coursework away from all of the other parts of my program, so having more info about exams/prospectus/etc. closer to the time I needed them would be much more useful. Same for the dissertation research and writing stages."

A respondent suggested "making the program shorter and providing links to information that is already online instead of stretching out a presentation." One participant is noted "recommending grad students come way before their first responsibilities may have helped me a little. I was juggling life and GTA orientation at the same time. If I had moved ... earlier, it would have been better for me." Another caution is learning through experience even though one has had orientation. As one participant put it: "No amount of orientations can emulate the experience of being a participant of complex rhetorical situations within the environment of PhD program. PhD school can be liberating and oppressive at the same time, and PhD school is an educational environment, which means that learning often comes in the form of failing."

Discussion

This research has several important implications, especially its findings compared to other research in this area. These results can be used by TPC graduate students at the departmental level, filling in gaps in TPC research.

How can the department best meet those needs?

To best meet the needs of graduate students in the RWPC doctoral program at ECU, several key strategies can be implemented:

• Incorporate Department Standards and Culture: Ensure that the

orientation includes information about department or program standards and culture.

"While the graduate school now has tons of resources on their site, there wasn't much to look at when I started the PhD program in the English Department. To be honest, it didn't matter to me whether ECU's Graduate School had information on their site or not. From my way of thinking, what I needed to know was going to be explored in my departmental orientations."

One student stated, "the orientation should reflect the goals/purposes/ objectives of the program." This department orientation will help students acclimate to the specific academic environment and expectations within the department.

- **Help Students Navigate Administrative Systems:** Address the need for guidance on navigating administrative systems. Providing clarity on administrative processes and procedures within the department can alleviate potential confusion for incoming students.
- Facilitate Social and Peer Connections: Prioritize opportunities for social and peer connections. Organize events and activities that encourage students to build relationships with their peers and faculty members. These connections can provide valuable support and a sense of belonging.
- Support Faculty and Student Networking: Introduce students to various faculty members across the department. This exposure can help students identify potential mentors and build a network of academic support: "The relationship with my professors helped me succeed in the program more than anything else."
- Support Transition and Lifestyle Changes: Recognize that graduate students may be going through significant lifestyle changes. Provide resources and support to help them manage the transition into graduate school effectively. For example, one participant stated they "worked full time, had two little kids at home...maybe an online orientation that I could have gone through after I put my kids to bed would have been helpful."
- Facilitate Effective Communication: Maintain open lines of communication with program directors. Ensure that students are aware of the support systems in place and feel comfortable reaching out for assistance as needed.
- Orientation for special populations: Such as nontraditional students, as one participant noted that "[n]on trad students need their own orientation. This student population is very different from the MA student that's gone straight through from BA to MA to PhD." Also, programs should "try to serve both the in person and off campus students at the same time with a variety of different formats."

The project contributes to the growing scholarship on TPC professionalization and provides valuable insights for designing effective orientation programs for graduate students in technical and professional communication programs. Aligning with TPC graduate orientation studies (Watts 2019), survey results show that students want peer-to-peer interaction. The results of this study have important implications for the professionalization of TPC doctoral students. The findings suggest that different types of professionalization, including the academic path and community-building activities, are essential for students' success in future careers (Saul Carliner, 2012).

Another implication of this study is that TPC can focus on programmatic efforts to aid the transition to graduate school in addition to initiatives such as Pennell, Frost and Getto (2018) for early career scholars and new faculty. This is similar to Perez (2016) noting explorations of early socialization experiences that tend to focus more heavily on the transition to practice than they have on the transition to graduate school. Aligning with research (Patiño, 2022), findings show participants concerned with improving the graduate student onboarding procedures, facilitating and building socialization through peer-to-peer support. A tiered model of current and previous graduate students can help design customized orientation programs tailored to students at different stages of their studies. Orientation programs have the potential to improve student motivation and satisfaction, as shown by previous studies (Benavides & Keyes, 2016).

The results of this study highlight the importance of team-building exercises in student retention and the need for adaptable elements in orientation programs, such as flexible timing, presentations by faculty, refresher courses, and updated session content. These findings are in alignment with published literature on graduate orientation, such as Benavides & Keyes (2016). These suggestions align with previous research findings and can help to improve the overall experience of TPC doctoral students.

Overall, the project results contribute to the growing body of scholarship on TPC professionalization (Carliner, 2012) and provide valuable insights for designing effective orientation programs and activities for TPC graduate students. In accordance with previous research, to better meet student needs, important elements need to be adaptable, such as changing orientation times to allow more attendance, more presentations by faculty and adding refresher courses for academic research writing and statistics (Shore, 2016), and updating session content (Benavides & Keyes, 2016).

Delivery Methods

Effective delivery methods for improving the experience of TPC doctoral students include team-building exercises and adaptable elements like flexible timing, faculty presentations, refresher courses, and updated content to enhance student retention.

Preliminary results suggest that a half-day orientation program can introduce essential aspects of the graduate program and academia, supplemented by ongoing support through the Professional Development Seminar, Canvas Course (ECU's preferred learning management system), and workshop series to provide more in-depth knowledge and guidance over time. Respondents preferred a combination of a Canvas course and workshop series/brown bag lunches for orientation, emphasizing the importance of both online and in-person elements in meeting students' needs. This aligns with the use of a LMS course for orientation in other institutions, promoting effective online learning experiences (Taylor, Dunn, & Winn, 2015). Additionally, community-building and social events were identified as vital components, making an in-person half-day orientation valuable for addressing both formal and informal information needs.

Faculty/Student Interaction

The importance of faculty/student interaction, especially for traditionally marginalized graduate students, is emphasized. Research by Montgomery, Dodson, & Johnson (2014) highlights the distinction between advising and mentoring, underlining the need for meaningful and honest relationships to support individual students. The findings suggest that graduate orientation should provide both program rules and expectations and opportunities for student/faculty interaction. Additionally, Patiño's research aligns with these findings, emphasizing the significance of peer-to-peer and faculty/peer relationships for student support and a sense of belonging. Alumni involvement in orientation is recommended for networking and program success, while organizing a LMS course based on students' time in the program aligns with web-based graduate orientation research.

Formative Assessment

To enhance orientation and professional development for TPC graduate students, it's recommended to involve the students themselves in the process, strategically time the information provided, and seek regular feedback and evaluation from them, similar to existing practices in other universities. Implementing an assessment method through surveys and focus groups aligns with the literature on student-developed orientation, and forming a development team with graduate assistantships can contribute to the development of online course orientation materials in the department.

Cross-Campus Collaboration

Continuing with recommendations informed by study results, it is suggested that TPC faculty and administrators include a collaborating interdisciplinary team with offices and faculty across campus. Graduate school administrations and student success programs can offer practical advice to program administrators. Remind graduate students of the resources available on campus. Invite the offices that provide those resources to hold workshops or brief sessions to introduce their points of contact at orientation. Patiño (2022) admonishes academic advisers to notice when students appear burnt out and struggling to balance their workload during check-ins. Connect with the writing center or center for academic success that can offer graduate workshops. These cross-campus workshops with other student success initiatives can help students find balance in completing readings and writing more quickly, for example. Another example would be if beginning graduate students frequently experience imposter syndrome. In that case, advisors and mentors should check to see about the counseling or wellness center wants to offer imposter syndrome workshops during orientation refreshers and check-ins. Also, provide orientation and onboarding programming before the start of the semester to build a programmatic foundation so that orientation efforts are not condensed on the first days before or after the semester begins. As Patiño points out, graduate students need time to establish strong connections with their peers, academic advisors, and faculty.

Making a Mandatory Online Orientation

Mandatory online orientation is recommended to ensure students do not overlook it,

with quizzes included to ensure engagement, as shown by Jones (2013). However, University of Central Florida's example offers a more flexible, non-mandatory online orientation with modules that students can choose based on their needs, including a welcome from the dean and success tips from current students and faculty (Pavlik, 2020). To compensate for the lack of in-person engagement, additional relationship-building events and online workshops on personal and professional development are suggested to foster connections among graduate students (Pavlik, 2020).

Building Relationships and Peer-to-peer Connections

Feeling supported is one indicator of a successful comprehensive graduate orientation program. The survey findings align with existing literature emphasizing the importance of fostering peer-to-peer connections and supportive communities for graduate students. Montgomery, Dodson, & Johnson (2014) advocate for more effective mentoring models, particularly for underrepresented individuals, emphasizing the integration of teaching, research, and service activities. Pennell, Frost, & Getto (2018) suggest hosting social gatherings to create program culture and model professionalization practices. Patiño's (2022) research highlights the impact of peer-to-peer support, faculty engagement, and institutional resources on students' sense of belonging, with cohort-based programs fostering stronger bonds and interactions among students. Programs that mandate similar coursework and aspirations tend to facilitate smoother transitions to graduate school.

Social Justice and Diversity

Embedded in this survey project is the aim to promote diversity and social justice by being inclusive of graduate student's self-identified needs. East Carolina University is a primarily white institution. As such, students of color have unique needs and need an avenue to express them. Nontraditional students are another marginalized population. The data scope includes students in these populations (as the researcher has personal knowledge of many of the participants), and the study design aligns with social justice in TPC programs through a justice-oriented design for student support systems.

Limitations

One limitation of this study is that it takes place in one program, namely the PhD in Rhetoric, Writing, and Professional Communication at East Carolina University. While this may lead to results not being generalizable to TPC as a field, I know that local context matters. Local context includes the specific graduate programs' students, programs, and departments, and also the projected academic and professional career paths of said graduate students. Local context could even include geographical information, for example, in places where social events could look much different than in other areas of the world.

The survey form was anonymous, so answers are not linked with individual identifiers. This choice limited the study because marginalized and under-represented users' or students' needs were not explicitly identified in the study, due to the survey population being relatively small and these identifiers at a PWI could lead to responses being connected to individual participants. The study did not

collect personal identifiers from study participants such as race and gender. Because participants cannot be identified, this approach would not be useful for seeing what could be done to orient certain populations, such as international students, Black students, or specific intersectional identities of race, ethnicity, gender, sex, orientation, etc.

As noted in Pennell, Frost & Ghetto (2018), those who self-select for studies like this are likely to share other features in common, which could lead to trends in professionalization that are not truly representative of the general field. For example, respondents may share a commitment to disciplinary service work, the value of studies based on reporting experience, or the capacity to set aside time for being research participants. Also, "it has been documented that people experience professionalization differently depending on identity characteristics" (Pennell, Frost, & Getto, 2018, p. 80), so some perspectives or particular trends may be limited or overlooked.

Future Research

More sites of inquiry for graduate orientation in a TPC program include differences in students' time in the program, such as during onboarding and the first semester of their studies, through the professional development seminar, and in-person, on campus, and in the LMS. The feasibility of a social media campaign to help build social presence and community among prospective students and alums should also be researched and assessed. Assessment surveys, such as in Watts's (2019) article on course-embedded online student orientation, are another possible study agenda.

Similar to Perez's (2016) recommendations, future research should consider methods to gain a deeper understanding of socialization contexts (p. 775). Additionally, longitudinal data could observe correlations, if any, with students attending department graduate orientationand doctoral attrition over time. While Richards-Schuster et al. (2019) have developed MOOCs in social work, there is currently no MOOC available in the TPC field. Future research could focus on innovating and implementing a MOOC in the TPC context to engage more learners and help them understand the foundations of TPC.

The study's contributions could be enriched by addressing the complexities of balancing diverse student needs in the research design. Despite well-meaning efforts, administrators and faculty may inadvertently overlook marginalized students' requirements in orientation systems. General survey outcomes may not adequately capture these needs.

To enhance the research's social justice aspects, a more focused approach on one TPC program could benefit from qualitative methods like interviews and additional participant background inquiries. Moreover, participatory design strategies such as UX workshops and pre-orientation surveys could provide a deeper understanding of students' experiences and preferences. These methods would help identify and address the challenges faced by marginalized students, fostering inclusivity in academic settings.

I intend to conduct further research on graduate orientation to enhance the existing dataset. Specifically, I desire to delve deeper into potential mismatches between the expectations and experiences of program/department administrators and graduate students. This future research aims to expand the scope of respondents beyond graduate students to include various stakeholders such as graduate school administrators, department directors, writing center administrators, and staff members of other relevant offices. By including these diverse respondent groups, the study aims to explore differing perspectives and identify areas where there may be discrepancies or alignment in expectations between administrators and students. This approach would enrich the understanding of graduate orientation processes and enable a more comprehensive assessment of the needs and challenges faced by all stakeholders involved. Moreover, extending the research across different programs and regions could provide valuable insights into how orientation practices vary in different contexts, contributing to the broader understanding of graduate education and student support initiatives.

Conclusion: Socialization And Professionalization in TPC Orientation Programming

Orientation programs play a critical role in helping graduate students transition into their academic and professional communities. Socialization issues, such as isolation and a lack of connection, can hinder students' sense of belonging and academic success. Emphasizing socialization through peer-to-peer and faculty-student support, along with a focus on both enculturation and professionalization, can enhance the effectiveness of orientation programs. In addition to professionalization as defined earlier, enculturation in the context of graduate programs, particularly in technical and professional communication, refers to the process by which individuals become integrated into the cultural and professional norms of their field. This involves the acquisition of specialized knowledge, skills, and behaviors that are characteristic of a particular community of practice. According to Catherine G. Latterell (2003), enculturation in technical and professional communication graduate school programs involves socializing new PhDs into the values and real work of the institutions where they will find employment.

These programs should prioritize building a graduate community and providing informal mentoring and social gatherings to help students integrate into the academic culture before focusing solely on professionalization.

Continuously Adjust in Response to Changing Conditions

This article surveys current and former TPC doctoral students, namely ECU Ph.D. in RWPC students, to explore their perspectives on what constitutes an effective and supportive orientation program. Positive user experiences are indicators of success. Recognition of students and alumni's narratives and taking action to meet their needs through formal and informal means is social justice, ensuring that program participants are heard and their needs are valued.

Orientation is an important form of technical communication that addresses the

specific needs of university student populations and assists in their transition into graduate school. Poock's (2002) pivotal orientation study additionally indicated that students valued departmental orientation over campus-wide programming. Different terms have been used to describe the process of students being oriented into academic cultures, including student success, socialization, and enculturation. Studies on graduate student professionalization, socialization, and enculturation studies can inform a departmental orientation program that prioritizes graduate student development. Departmental and programmatic orientations can help graduate students transition to graduate school, though departmental orientation has been the subject of less scholarship.

The first year is one of the hardest and most important times in graduate degree completion (Hardré & Pan, 2017; Fakunmoju et al., 2016; Patiño, 2022) . Graduate students' needs shift over time (Hardré & Pan, 2017). Thus, formal academic job market training could wait until the incoming cohort is acclimated to their program. Ph.D. students benefit from orientation at the start of their program and continuing onboarding efforts throughout their time in graduate school. TPC program faculty and administrators must support graduate students, prevent institutional neglect, lower dropout rates, and improve doctoral programming. Prioritizing student development and addressing common graduate school challenges through orientations may benefit those in TPC graduate programs.

Orientation programs in graduate schools are essential for helping students transition into their academic communities, and they should be tailored to meet the specific needs of students entering technical and professional communication programs. While campus-wide orientation is important, departmental orientation is often viewed as more critical by students. These graduate orientation programs should prioritize student development, address common challenges during the transition to graduate school, and adapt to changing student needs over time to improve retention and improve program quality.

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Appendix A

TPC Graduate Student Orientation Survey

Help design ECU's RWPC doctoral student orientation. What do you wish you had known that would improve your graduate student experience? No one knows better than you what helps grad students succeed!

You are being asked to participate in a research study titled "On Developing a TPC Program Graduate Orientation" being conducted by Codi Renee Blackmon, a PhD student at East Carolina University in the English department. The goal is to survey 50 individuals in the PhD program in Rhetoric, Writing, and Professional Communication at ECU. The survey will take approximately 10 minutes to complete. It is hoped that this information will assist us to better understand how best to develop and implement orientation options for the PhD program. Your responses will be kept confidential and no data will be released or used with your identification attached. Your participation in the research is voluntary. You may choose not to answer any or all questions, and you may stop at any time. We will not be able to pay you for the time you volunteer while being in this study. There is no penalty for not taking part in this research study. Please call Codi Renee Blackmon at (252) 328-6378 for any research related questions or the University & Medical Center Institutional Review Board (UMCIRB) 252-744-2914 for questions about your rights as a research participant.

I confirm that I voluntarily agree to be a part of this study, and I understand that I can withdraw my consent at any time.

☐ I agree

- Q1: According to Upcraft and Farnsworth (1984), 'orientation is any effort on the part of an institution to help entering students make the transition from their previous environment to the collegiate environment and to enhance their success in [graduate education]' (p.27). Tell me about any orientation efforts you remember your department or college providing.
- Q2: What do you believe are the most important things to know when beginning a graduate program generally and a PhD program specifically?
- Q3: According to the literature, these are some components to be included in an orientation. Rank them using the following scale.

Five-Point Scale: (1) Not important, (2) Slightly important, (3) Fairly important, (4) Important, (5) Very important.

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Information about University Services and Campus Programs

	1	2	3	4	5	
Not Important						Very important
Time managemen	t					
	1	2	3	4	5	
Not Important						Very important
Navigating doctors path, assistantshi		-			uling, (career-related coursework, degree
	1	2	3	4	5	
Not Important						Very important
Graduate school c	ulture,	, the "ເ	ınspok	en" rul	es	
	1	2	3	4	5	
Not Important						Very important
Social and peer co	nnecti	ions				
	1	2	3	4	5	
Not Important						Very important
Academic professi academic jobs & lo					y prepa	aration, study skills, tenure-track
	1	2	3	4	5	
Not Important						Very important
Department or pro	ogram	standa	ards &	culture)	
	1	2	3	4	5	
Not Important						Very important

Faculty and studer	nt netw	orking				
	1	2	3	4	5	
Not Important						Very important
Stress and persona	al crisis	s mana	igemer	nt		
	1	2	3	4	5	
Not Important						Very important
Navigating adminis	strative	e syste	ms			
	1	2	3	4	5	
Not Important						Very important
Transition and lifes	style ch	nanges				
	1	2	3	4	5	
Not Important						Very important
Technology suppor	t and i	resourc	ces			
	1	2	3	4	5	
Not Important						Very important
Q4: You might remremember about a						on. What, if anything, do you dent orientation?
Q5: What changes efforts?	would	you lil	ke to s	ee in o	our Ph[) in RWPC program orientation
Q6: What kind of i program?	nforma	ation is	helpin	ng or h	elped y	you succeed in ECU's RWPC
-	th onli	ne and	l in-pe	rson o _l	otions.	ol offers a campus-wide What, if anything, do you
Q8: Did the inform as you began grad						luate School orientation help you why not?

Q9: Did/does the information presented in the ECU Graduate School orientation

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help you to complete graduate school? If so, how, why, or why not?

Q10: Thinking back, is there anything you would have liked to be included in the ECU Graduate School orientation?

Q11: Do you feel any information needs to be added to the ECU Graduate School orientation? Do you feel any information needs to be deleted?

Q12: Do you feel all the information in the ECU Graduate School orientation was relevant and necessary at the beginning of your program? If not, when would be the best time to receive this information?

Q13: What is your preferred method(s) of delivery for a PhD Program orientation?
□ Canvas course
☐ In-person half-day orientation
☐ Workshop series/brownbag lunches on key topics
□ Other

Q14: Do you have ideas for orientation options to add?

Appendix B

Coding

Coding Categories: Emergent Themes from Literature & Data	Coding Description
Academic professionalization	The inner workings of studying, planning, and building a career in higher education. Doctoral study preparation, study skills, tenure-track academic jobs & long-term career goals
Time management	Students ability to comprehend and manage the amount of time needed to invest in doctoral work and to prepare their schedules to accommodate doctoral study and all outside responsibilities, including cutting out activities where necessary while in doctoral program
Technology support and resources	The understanding of and access to the technological tools needed to be successful in both in-person and online coursework, and where additional technology, both hardware and software, is available to them as a doctoral student
Faculty and student networking	Professors in the doctoral program and department being active in mentoring, networking, and researching with students and serving as dissertation chairs and committees
Graduate school culture	The "unspoken" rules: Informal base of knowledge towards graduate student success, including how graduate school works overall and the particular tips and tricks to be successful in graduate school
Department or program standards	Formal knowledge base specific to doctoral program and departmental culture
Navigating administrative systems	Procedures for bureaucratic requirements
Social and peer connections	Being introduced to and able to get to know others in your program and field outside of formal academic spaces and topics

Coding Categories: Emergent Themes from Literature & Data	Coding Description
Transition and lifestyle changes	Moving from one stage of the process to another, such as from being accepted to moving locations and starting the program as a new graduate student, or from being a Ph.D. candidate to being on the job market. Adjusting to and settling into the new requirements and realities of the next stage in the process
Stress and personal crisis management	Problems, issues, and concerns outside of, but not divorced from, doctoral and academic study that impact one's ability to navigate the program requirements easefully and may acquire accommodations or additional aids to overcome
University Services and Campus Programs	Information about Campus-wide resources, provided by the university, available to all students, and usually paid for in student fees
Navigating doctoral program	Specific choices offered by student's doctoral program which can be tied to student's future career goals—course scheduling, career-related coursework, degree path, assistantship opportunities, etc.

Author Information

Codi Renee Blackmon (she/her) holds a BA in English and a master's degree in Professional and Technical Writing. She has experience in various fields, including high school and university libraries, writing centers, and after-school programming. She is currently pursuing her PhD in Rhetoric, Writing, and Professional Communication at East Carolina University. Her research interests include professional and technical communication, anti-racist writing instruction, and Technical and Professional Communication (TPC) Black women's research and scholarship. She uses cultural rhetorics, digital media, activism, and Black digital feminist research methodologies to promote diversity and inclusion in professional discourse communities.