High Tension: Graduate Student Instructors, Professional Judgment, and Emergency Remote Teaching

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Abstract: *This study examines tensions faced by graduate student instructors (GSI) and how they navigated those tensions during the transition to emergency remote teaching (ERT) during the COVID-19 pandemic. GSIs encountered competing concerns while transitioning their courses online, as captured by our three*

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categories of tensions: Empathy v. Rigor, Planned v. Possible, and Desire v. Capacity. GSIs navigated these tensions by soliciting student feedback, engaging in communities of practice, and exerting their own agency. Navigating the tensions exacerbated by ERT resulted in development of professional judgement for many GSIs. Allowing GSIs the agency to navigate tensions, while providing the necessary support to make informed decisions, benefits the experience of undergraduates and increases the quality of instructors who matriculate to the professoriate.

Introduction

In March of 2020, university courses suddenly transitioned to online environments as university campuses shut down in response to the COVID-19 pandemic. Given this drastic and instantaneous shift, instructors confronted competing concerns, or tensions, as they adapted their instruction to an online environment and addressed the uncertainty and anxiety that infiltrated their undergraduate students' lives. In this article, we identify tensions that a group of graduate student instructors (GSIs) experienced as they transitioned to emergency remote instruction (ERT; Hodges et al., 2020) and explore how they navigated those tensions during the remaining weeks of the spring 2020 semester. While the tensions GSIs experienced in their practice were not unique to ERT, given the circumstances surrounding the pandemic, the need to address these tensions became more urgent, and GSIs had to make context-based judgments to navigate them. For many GSIs, this continuous decision-making led to pedagogical growth and a greater sense of professional identity. By examining the ways GSIs navigated tensions during the pandemic, we illuminate how universities can support GSIs' development of pedagogical reasoning skills, so GSIs can navigate the often unpredictable tensions inherent within the instructional component of the professoriate.

Conceptual Framework

We situate this work around the notions of tensions as defined by Berry (2007) within the self-study field of teacher education. Here, we apply the concept more broadly to examine the development of professional judgement in GSIs in a College of Education both within and beyond the field of teacher education. Tensions refer to the internal struggle instructors experience as they encounter competing concerns in the classroom and must decide which to prioritize. Berry (2007) explains:

The notion of tensions is intended to capture the feeling of internal turmoil that many teacher educators experience in their teaching about teaching as they find themselves pulled in different directions by competing concerns, and the difficulties for teacher education is learning to recognize and manage these opposing forces. (p. 32)

One example Berry (2007) provides is the common tension teacher educators encounter between planning and being responsive as they try to both follow a concrete lesson plan and be responsive to learning opportunities that arise in the classroom. Tensions are made known as teacher educators describe moments of struggle, uncertainty, or internal debate.

Although GSIs may struggle with tensions they encounter in their practice, their navigation of tensions can lead to growth because it forces them to articulate their instructional priorities (Berry, 2007). Thus, the study of tensions requires an examination of GSIs' moments of pedagogical uncertainty and how they confront those uncertainties to ultimately make decisions about their practice.

Literature Review

The transition to ERT in higher education increased the complexity of teaching and exacerbated the preexisting tensions within instructors' practice. Teaching is inherently filled with a degree of uncertainty that requires instructors to balance goods that appear as "competing concerns" (Berry, 2007, p. 32). During ERT, instructors had to rely on their pedagogical reasoning skills (Loughran et al., 2016) to render

increasingly context-sensitive judgments. Teacher educators (e.g., Back, 2002; Berry, 2007; Loughran et al., 2016) describe professional judgment as not a competence but rather a virtue that must be perceived and internalized by "living through" situations that require its exercise and refinement (Loughran & Berry, 2005, p. 198). Instructors develop their pedagogical reasoning skills through a "willingness to reframe, reconsider, contextualize, and problematize their practice rather than seek to mimic" (Loughran et al, 2016, p. 411). In response to ERT, many instructors had to reconsider their instruction because they had no prior mental models to emulate.

During the transition to ERT, undergraduate students experienced an increased sense of instability (Alvarez, 2020), which compelled instructors to make professional judgments to navigate the tension between student learning and student well-being. Consequently, many instructors adopted "progressive educational practices (ungrading, eliminating unnecessary work) that centered students" (Johnson et al., 2020) and broadened their definitions of well-being to consider students as whole people whose energies and capabilities are pulled in multiple simultaneous directions and whose personal satisfaction and investment in course materials may decrease (Alvarez, 2020). Since instructors are agents of the university bound by certain policies and institutional mandates, "it is sometimes a challenge to stay focused on students as people deserving of our best selves when competing demands drain our energies and deplete our limited resources" (O'Brien, 2010, p.114). This problem is exacerbated for GSIs who do not have the protection of tenure nor sufficient prior experience to adeptly navigate through these competing demands.

Despite their lower status in the university, GSIs are crucial to undergraduate instruction, serving as the primary instructors for approximately "46% of undergraduate students at four-year colleges" (Bettinger et al., 2016, p. 64). However, GSIs often receive limited preparation or sustained support for these roles (Chiu & Corrigan, 2019; Smollin & Arluke, 2014). While some universities now offer formal trainings for GSIs, these trainings are typically isolated events focused on "generic teaching skills" and "discipline-specific teaching strategies" (Chiu & Corrigan, 2019, p. 2). Consequently, "feelings of unpreparedness" and "a lack of confidence" plague many GSIs, who are

concerned about their "actual teaching skills" and their "ability to deal with unexpected events" (Smollin & Arluke, 2014, p. 31).

In the absence of more adequate formal training, GSIs learn to teach and develop their professional judgement through informal mentoring (Chiu & Corrigan, 2014; Kajfez & Matusovich, 2017) and peer-to-peer interactions (Park, 2004; Smollin & Arluke, 2014). Having communities of support reminds GSIs that they are not alone and supports them as they navigate tensions that arise in their practice such as to "figure out when it was appropriate to take a stand or give in to student demands" (Smollin & Arluke, 2014, p. 34).

The context of COVID-19 and the pivot to ERT present a novel opportunity to study how GSIs navigated the tensions inherent to the context and how this experience informed GSIs' development of professional judgment.

In this study, we apply the notion of tensions to GSIs who were pulled in multiple directions as they transitioned to ERT and address the following research questions:

1. What tensions did GSIs experience in the transition to ERT?
2. How did GSIs navigate the tensions that arose?
3. How did navigating tensions during ERT influence GSIs' development of pedagogical reasoning skills and their sense of professional identity?

Methods

The data presented in this paper are part of a larger study on graduate student instructors' rapid pivot to remote teaching during the COVID-19 pandemic. While the tensions described in this study are not unique to ERT, the sudden shift from in-person to online instruction forced instructors to make decisions and encounter tensions they may not have faced during a typical semester.

Participants

Study participants were a convenience sample of 11 GSIs, all doctoral students in the College of Education at a large research university in the mid-Atlantic United States (see table 1 for participants' self-reported demographic identities). During the spring 2020 semester, all participants were instructors of record for undergraduate courses that were originally designed to be face-to-face and transitioned to being fully online, remote courses mid-semester. As presented in Table 2, all but one GSI had at least 1 year of prior teaching experience at either the university or high school level.

Table 1. Participant Demographics

Variable	Group	N	% Sample
Gender Identity	Man	4	36.4%
	Non-binary	0	0.0%
	Transgender	0	0.0%
	Woman	7	63.6%
Race/ Ethnicity	American Indian and Indigenous	0	0.0%
	Asian, Asian-American, or Pacific Islander	0	0.0%
	Black or African American	1	9.1%
	Latinx	0	0.0%
	Multi	1	9.1%
	Pacific Islander	0	0.0%
	White	9	81.8%

Table 2. Teaching Experience & Course Descriptions

Name	Prior Semesters Teaching in Higher Education	Taught this Course Prior	Course Description
Taylor	4+	No	Undergraduate course focused on early education reading and writing instruction within a special education framework.
Frankie	1	Yes	Undergraduate seminar course covering the foundations of education and schooling in the U.S..
Blake	8+	Yes	Undergraduate course on the history and philosophy of American education.
Geddy	6+	Yes	Undergraduate course on the history and philosophy of American education.
Jules	10	Yes	Undergraduate course focused on children's literature and literacy.
Peyton	7+	Yes	Undergraduate leadership development course for fraternity and sorority presidents.
Morgan	10+	No	Senior undergraduate course for pre-service teachers on teaching linguistically diverse students. The course blends special education and literacy education
Logan	1	Yes	One-credit methods course on science and math secondary teaching. It is a required course for undergraduates majoring in secondary teaching, but many students take it as a general education requirement.
Angel	1	Yes	Undergraduate scholarship in practice course on peer counseling skills and mental health advocacy.
Ryan	6	Yes	Undergraduate literacy methods course for junior pre-service teachers.
Parker	1	Yes	Undergraduate methods course for pre-service teachers focused on the teaching of English to speakers of other languages. It is a requirement for the education minor.

Note: All names are pseudonyms.

Data Collection

In March 2020, the university announced that all classes would be moved to an ERT model for at least two weeks and in April 2020, decided all courses would remain online for the rest of the spring semester. Between late March and early April, the researchers received IRB approval from the university and recruited graduate students enrolled in the university's College of Education to complete a brief online survey. Our survey and the subsequent semi-structured interview protocols were based on the

questions in the MSECT-O, a validated instruction feedback and evaluation tool (Byrne & Donlan, 2020). The survey gathered participants' demographic data and information on their prior teaching experience, knowledge of online teaching, and current teaching responsibilities.

We then invited survey participants who self-reported that they were teaching a face-to-face course that transitioned to being fully online to a one-hour semi-structured interview and one-hour focus group in April 2020 and another one-hour semi-structured interview in September 2020. Interviews and focus groups were held on Zoom, audio recorded, and transcribed. The first and second interviews and the focus groups focused on the participants' experience pivoting to remote teaching, their support for students during the transition, and the emotional aspects of the transitions. For example, we asked, "How are you feeling about teaching online? What has gone well? What are you concerned about?" "How have you found support that you are making the right decisions?" "How did you see your teaching impacted with the move to online?" (Byrne & Donlan, 2020). We sought to increase the validity of our findings around the tension GSIs faced during ERT and how they navigated those difficulties by posing similar questions from the same instrument across two interviews and the focus groups in order to triangulate the data (Yin, 2014).

Analysis

The first two Authors developed a codebook based on the notion of tensions defined by Berry (2007) and described in our Conceptual Framework. During the initial round of open coding, we referenced Berry's (2007) six tension as a guide for how to identify and name tensions. When identifying tensions in the data, we looked for key phrases such as struggle, uncertainty, evaluate, debate, and internal dialogue. For example, the statement "I don't know, I guess I feel like I'm doing the best with what I know. But could I be doing more?" indicates a tension because the GSI is expressing uncertainty around their instructional decisions. We identified navigation of the tensions by how GSIs sought resolution for their described tensions. See Table 3 for definitions of the three tensions and the navigation employed by GSIs.

Table 3. Description of Tensions and Navigation of Tensions

Tension	Description of Tension	How GSIs Navigated the Tension
Empathy v. Rigor	Empathy is considering students' human needs while rigor is maintaining the original expectations for the course.	Solicited student feedback Increased flexibility Prioritized course goals
Planned v. Possible	Planned refers to the intended syllabus, learning goals, and activities of the course. Possible refers to what is now possible in the online environment, including platform capabilities, students' access to technology, and students' familiarity with the online platforms.	Inferred student need or solicited student feedback Utilized thought-partners and communities of practice Leveraged their agency
Desire v. Capacity	At the instructor level. Desire is what the instructor would ideally want to do with their course in terms of technology and learning outcomes for students, based on good instruction. Capacity is what the instructor is able to do in terms of knowledge, time constraints, and emotional energy.	Chose technology they were familiar with Prioritized their own needs, in terms of emotional energy and available time

The first round of open coding led to the development of five preliminary categories of tensions: Empathy v. Rigor, Agency v. Compliance, Desire v. Capacity, Own Need v. Student Need, and Planned v. Possible. After establishing the initial categories, we reviewed the data for a single participant and met to rectify codes and adjust the codebook. We then coded the data set for a single participant and repeated the process. After we both coded the remaining data independently, we met to reach agreement on all codes. During this phase of analysis, we determined that the original categories of Agency v. Compliance and Own Need v. Student Need were not tensions but rather ways that GSIs navigated the other tensions. As a result, we re-coded any data originally labeled as

Agency v. Compliance or Own Need v. Student Need as one of the other three tensions.

Results

In this section we illustrate the tensions of Empathy v. Rigor, Planned v. Possible and Desire v. Capacity as described by the GSIs and identify the different resources and strategies employed by GSIs as they navigated each tension.

Empathy v. Rigor

The tension of Empathy v. Rigor highlights GSIs' struggle to both empathetically respond to their students' heightened sense of uncertainty during the pandemic and to ensure their students achieved the course learning outcomes.

Description of the Tension. GSIs struggled to balance empathy and rigor as they sought to acknowledge and address their students' academic and personal struggles. They recognized their students had not chosen to take their courses online (Frankie, Parker, Morgan, Logan) and that many university faculty members and administrators were treating the current situation as "business as usual" (Taylor), indicating that classes should proceed as normal. Thus, many GSIs, felt compelled to "relieve the students' stress" (Blake) since their undergraduate students were dealing with obstacles including uncertain living situations (Parker), sudden relocations (Ryan), separation from friends and support systems (Peyton), and heightened financial, health, and familial concerns (Parker, Taylor). Many GSIs felt the university had provided them with inadequate guidance on how to adjust course expectations to meet their students' current realities (Blake, Taylor, Parker).

GSIs also experienced the tension of Empathy v. Rigor when determining how to appropriately express empathy for their students. When initially pivoting to ERT, many GSIs agonized over the extent of communication to have with students. Morgan captured this sentiment stating:

> I'm really struggling with how much to reach out to them with important announcements, or just checking in with them, knowing that this might be a time that they're getting a lot more emails than usual.

GSIs wanted to address their students' needs, but they struggled to determine what would be beneficial for their students and what would instead create an added burden.

The tension of Empathy v. Rigor also surfaced around GSIs' decisions regarding how to grade students during the online portion of the semester. The university offered undergraduate students a pass/fail option for the semester, but some GSIs still had students in danger of failing their course because the student had stopped participating in class meetings and activities (Ryan, Parker, Angel). Ryan had a student that was causing them concern:

> When she didn't show up the first week, I was like, okay, hopefully she will show up. The second week, I did reach out to her, and I have not heard anything back. And she hasn't turned any work in... So, that's troubling because she can't stay in the program if she doesn't pass these classes.

Like Ryan, many GSIs grappled with whether it was appropriate to penalize students for missing work or limited class participation given the fact that many students were experiencing personal issues that might impede their ability to complete the work. At the same time, GSIs wanted to ensure that students who passed the course had successfully met the course learning objectives (Ryan, Blake, Angel).

Navigation. One way GSIs navigated the tension between Empathy and Rigor during the initial transition to ERT was by implementing surveys (Parker, Taylor, Frankie, Geddy) or other check-ins (Blake, Logan) to assess their students' mental and emotional state (Parker, Taylor, Frankie, Geddy). Logan described:

> In the first class, we did this exercise where students held up paper, and I asked a series of questions like: How are you

> feeling? Where are you right now? Where do you wish you were right now? … And I think they're feeling overwhelmed and anxious just like the rest of us.

By using surveys and check-ins to gather information and assess students' needs, GSIs could then use student feedback to navigate the tension of Empathy v. Rigor and make strategic decisions around how they would engage with students (Peyton), the extent to which they would adjust students' workloads (Parker, Frankie,), or how they might restructure the course (Blake, Geddy). By soliciting student input during the transition to ERT, GSIs prioritized their students' personal well-being and hoped to decrease their students' uncertainty and anxiety during this period of instability (Taylor, Peyton, Logan, Frankie, Parker).

Not only did GSIs make sure to survey and check-in with student at the beginning of ERT, but many of them also incorporated regular check-ins throughout their courses (Blake, Angel, Taylor, Parker, Logan, Peyton). Regular check-ins helped GSIs assess whether students' needs were changing as the pandemic progressed and allowed them to gather student feedback on aspects of the course such as course format, the workload, or assignment modifications. Angel described their approach stating:

> The second week, I literally stopped in lecture and was like, "how is everyone doing? Hold on? Like, do you like this format? Do you want me to teach asynchronously? What can I do for you that would help you learn the most?"

Through their in-person check-ins, Angel and other GSIs demonstrated their willingness to work with students to ensure that they successfully completed the course.

GSIs also used flexibility to navigate the tension of Empathy v. Rigor. Many GSIs claimed to be relatively flexible instructors prior to ERT, (Taylor, Frankie, Ryan, Blake); however, their flexibility increased significantly during ERT. GSIs were more flexible with assignment due dates, granting frequent extensions and minimizing or disregarding penalties for late work. Their decision to permit flexible due dates allowed GSIs to prioritize students' work quality and completion, while also minimizing students' stress around rigid deadlines (Peyton, Taylor,

Parker, Ryan, Angel). Peyton described how they decided to prioritize completion over the timeliness of the submission:

> It [the assignment] was 10 points out of 100, so this is 10% of his grade... I kind of did the "Hey, if you can get this in by May 1, I'll give you five points instead of zero." And then on the call yesterday, it was very clear that he just had a lot going on and ...he's like, I can do it this week." And I'm like, "yeah, that's fine. I'll just take a point off," ...I didn't realize I was going to be so quick to be like, "Oh, yeah, that's not a big deal." Whereas just a few days before I had been very articulate and saying, here's the strategy to get some points and then I kind of flipped all that on its head when I was live interacting with that student.

Like Peyton, many GSIs reconsidered their decisions around assignments or other aspects of their courses after they had personal interactions with students that illuminated the obstacles students were currently dealing with in their personal lives.

GSIs flexibility also extended to norms for class participation. Ryan, Blake, and Parker gave students the option of attending synchronous class sessions or completing asynchronous work. Other GSIs (Logan, Angel) redefined their perceptions around active participation. Logan explained:

> I was just a lot more flexible in the ways that students participated in that, for example. So, did you contribute to the chat? Did you talk on Zoom? If you couldn't make it to class did you watch the recording of class and send me your thoughts on what people had said?

GSIs offered a variety of ways for students to engage with the content of the course as a way to balance accommodating students' individual situations while still centering student learning.

Finally, GSIs navigated the tension of Empathy v. Rigor by prioritizing their course goals. Several GSIs wanted to adjust their course's workload to help reduce students' stress, but they also needed to ensure students

achieved the course learning objectives. Consequently, GSIs modified or eliminated assignments strategically; they thoroughly considered which activities and assignments would allow students to demonstrate knowledge of the course content in the most efficient manner possible. Geddy described the methodical way they determined that synchronous discussions would be more beneficial than an asynchronous discussion board:

> I was thinking about, okay, what is it that we need to accomplish this semester?...What are the assignments going to do to advance those goals? One of the big assignments that I wouldn't want to change is crafting a personal philosophy of education, which is the last project in the class. And so, I was really thinking what is it that we do to move towards that and make that a really rigorous thoughtful assignment and adding a lot of other you know, mini assignments, or just reflection questions seemed to detract from one, the experience of classroom conversation and two, the time they have to sink into making that good.

Geddy kept the final assignment because they believed students would solidify their understanding of course content by articulating a personal philosophy of education. However, Geddy also intentionally structured the online portion of the course in a way that would decrease student stress relating to this final assignment. Other GSIs employed similar decision-making processes as they sought to promote student achievement of course goals while also acknowledging that students' current level of concentration and overall mental health made it necessary to adjust the workload.

Taylor perfectly captured GSIs' experience navigating the tension of Empathy v. Rigor stating, "we want them to learn all the things to learn and, you know, acquire all the knowledge there is to acquire, but we also need to be considerate of their basic needs or their human needs because that is the foundation that will support their learning." At the end of the semester, several GSIs realized that while both empathy and rigor may be necessary, there could be no real rigor without empathy.

Planned v. Possible

The tension of Planned v. Possible captures the strain between the GSIs' original plans for the course and what was possible to enact during ERT. GSIs had to consider what elements of the course or syllabus could be executed as planned, and which elements would need to be adapted in response to the constraints they encountered during ERT, including limited time for planning and instruction, online platform capabilities, and student or instructor comfort and ease of use with platforms.

      Description of the Tension. When transitioning from in-person to ERT, all but one GSI (Peyton) articulated a tension between the original format of the course (i.e., discussion based or collaboration focused) and the extent to which that format could be recreated online. Of those instructors, all but two (Taylor, Morgan) attempted to replicate their course as much as possible through synchronous online sessions. For example, Frankie stated, "I just tried to do as much of what I would normally do in a classroom. I tried to just replicate in Zoom." GSIs who opted for synchronous online sessions faced an additional tension of whether to meet online for the entire class time, which depending on the course ranged from 75 minutes to three hours, or whether to pair synchronous instruction with asynchronous components. As a result of these structural changes, multiple GSIs (Taylor, Morgan, Jules) struggled to determine whether and how to reduce course content.

The tension of Planned v. Possible was also made apparent in how GSIs addressed the loss or interruption of a practice-based course element. Several GSIs (Taylor, Ryan, Logan, Parker) taught practice-based teacher education courses where a portion of the course work revolved around undergraduate students working with K-12 students. For Ryan, the loss of students' internship experience had a ripple effect: "So the fact that they're no longer doing their internship has made it difficult to implement certain assignments in the way that we had originally designed them." Ryan was faced with possibly redesigning all of the assignments in their course in response to the loss of the internship component. Similarly, Taylor's course relied heavily on undergraduates leading one-on-one tutoring sessions with elementary students, which could no longer occur with the transition to ERT. Taylor's tension of

what was now possible in their course with the loss of the interactions with elementary students was exacerbated by the lack of guidance from the overall undergraduate program:

> [I]t would have also been nice to hear from someone with more power in the program that like, "we're going to try to support you on these virtual implementation sessions" or "you know what, like, let's not worry about that we're going to find opportunities to give them or we're going to find ways to provide them with opportunities to tutor in the fall with actual first graders" or something like that. I just, I would have liked to know that it's not just on these two instructors to provide our students with like the necessary support that they need to be successful before student teaching.

 Even GSIs who were originally planning on using role playing or mock teaching in their courses (Parker and Angel) faced a tension of whether to adapt the assignment for the online context:

> I had kind of an internal dialogue about whether I really wanted to try to do a teaching demo online. Because there are pros and cons to doing it online. There's the pros of wanting to make sure that students have that kind of experience of just doing a demo lesson. There's wanting to have students have the experience of being able to do it online and be able to use those tools to facilitate learning. But on the other side, it's forcing them to do that, when they didn't sign up for it. And it's asking them to pick up these technologies that a couple of weeks ago, they probably had very little to no familiarity with. (Parker)

Parker recognized that the teaching demos were still possible to do online but wrestled with whether it was appropriate to require students to do so.

Navigations. GSIs relied on a variety of resources and supports to navigate the tension of Planned v. Possible and arrive at a solution. All GSIs considered the needs and capabilities of their students, whether assumed or solicited, when making decisions about the course format, content delivery, and modification of assignments. Overall, GSIs were

concerned about the sudden demand for students to be virtually present in online classes for several hours a day. As a result, Logan, Jules, and Peyton reduced the amount of synchronous interactions. Some GSIs anticipated that students would be hesitant to participate in the new online space, and in response divided their classes into smaller groups of students that met synchronously (Blake, Logan). Taylor, Morgan, and Jules determined that it would be more beneficial for students if the course content was reduced to its essential components. Taylor explained, "I reduced the content… I just tried to focus on what was absolutely essential and leave it at that."

Other instructors (Geddy, Taylor, Morgan, Ryan, Parker) sought feedback from their students to help navigate the tension of Planned v. Possible. When considering how to reformat the class structure after the transition to ERT, Geddy, Parker, and Ryan surveyed their students about their access to technology:

> I ended up sending out a need survey of what they had access to, what kind of access they had, as well as what availability they had during our regular hours...honestly doing that survey was huge because it helped me realize what a lot of the home environment situations are for some of my students. And, not only what kinds of access they've got going on, but the quality of that access. Whether they have access to the internet. Whether they're able to do voice because like one of my students is in a house with 10 people. (Parker)

Ryan's and Geddy's survey results also illuminated how students' different home environments might impact their ability to access the course materials and synchronous sessions. Taylor did not survey their students prior to the transition to ERT, but instead collected regular feedback about the asynchronous course format. Each week students completed exit tickets that contained questions about the course content as well as two reflection questions about the course in general. Taylor received positive feedback from students regarding the organization and clarity of the course modules online. Students' performance on the content-specific questions of the exit ticket, paired with their ongoing positive feedback about the learning environment communicated to

Taylor that students could achieve the course learning goals in an asynchronous format.

GSIs also utilized 'thought partners' or 'sounding boards,' colleagues with whom they could exchange ideas while navigating the tension of Planned v. Possible. Angel and Logan each taught with a team of instructors and consulted with their teams when making decisions about how to best transition to ERT. When navigating how to reduce course content, Morgan consulted the previous course instructor: "And I don't know if [this content] is something that would be appropriate for me to drop. I didn't know. So, I checked with [the previous instructor] and she was like, 'Don't drop that. They need to know.'"

Other instructors (Geddy, Blake, Ryan, Parker) relied on peer groups to help them negotiate their tensions. Geddy and Blake reached out to fellow GSIs for feedback on their curricular decisions: "at this point...we had a syllabus that was all in place, the question was, what to cut, if anything" (Blake). Ryan and Parker regularly participated in a community of practice for graduate student teacher educators. Parker identified this community of teacher educators as their primary source of support. Ryan also relied heavily on this existing community of practice for teacher educators to navigate the decisions related to transitioning their course online:

> So I left that seminar knowing, pretty much what I was going to do, based on the ideas that I had gotten from them, so I haven't really used, I haven't really had to use many other resources because like, you know, having also having [peer] in there who knows a lot about the resources that are available has been helpful, and they've been able to help me like troubleshoot anything that's come up.

Ryan and Parker regularly consulted with their community of practice for feedback on their pedagogical choices.

Finally, GSIs leveraged their own sense of self-efficacy and agency to help them navigate the tension of Planned v. Possible. GSIs, who were teaching courses they had taught in previous semesters, expressed

confidence in their curricular and pedagogical decisions. For example, Ryan stated,

> I had to own the fact that like, I do [know what I am doing], I am the expert in that space. So, I have to own what I know, and then be willing to ask for help about what I don't know, do some research, and reach out to people and figure out the best resource to use.

Ryan acknowledged their authority in the space and articulated that they have the self-efficacy to seek support and make the necessary decisions. Although Morgan was teaching their course for the first time, they relied on their prior experience of teaching an asynchronous online course when deciding how to transition their current course into an online space: " I did the class this way because I taught another class online in a previous semester in a similar structure and I got very positive feedback." Morgan's sense of agency comes from having prior experience making similar curricular decisions for a different course.

Desire v. Capacity

The tension of Desire v. Capacity encompasses the strain between what an instructor desires to do and what they are able to do in terms of knowledge, time constraints, and emotional energy. In contrast to Planned v. Possible, the tension of Desire v. Capacity occurs at the instructor, not course, level. The instructor feels caught between what they would ideally want to enact in their now online course, in terms of technology and student learning, and compromising what they see as "good instruction" for the sake of their own personal needs during a global health crisis.

Description of Tension. Some GSIs expressed ongoing tensions between their desires for their course and not knowing how to enact it or not having the capacity to enact it (Blake, Frankie, Geddy, Morgan). Often, they desired to recreate an in-person activity in the new online space. For example, Frankie wanted to find a way to do gallery walks, a discussion technique that allows students to engage with different prompts as they walk around the classroom, virtually: "I would do

gallery walks if I could, if we were in a physical space. So how can I kind of replicate that sort of experience? And I know that I can, that those resources exist, and it's just I haven't really thought about... figuring out how to kind of transfer them over." For their asynchronous class, Morgan wanted to find an alternative to traditional discussion boards but was not sure what other options existed: "[Discussion boards] are not authentic or natural...I would love to find something to do, ugh, that could take the place of discussion boards that shows students have done their reading and have engaged with it." Both Frankie and Morgan lacked the technical knowledge or awareness to provide students with the desired instructional activities, a common issue when teachers begin to adopt technology in their teaching as framed by the TPACK framework (Mishra & Koehler, 2006).

Not only did some GSIs lack the necessary technical expertise to perform as desired, but they also felt limited by the time constraints of transitioning to ERT. Morgan had to convert their course for online instruction while concurrently defending their dissertation: "But it was a quick turnaround time... part of it was may be laziness on my part. Like coming off of the dissertation, trying to really think about, okay, how to make this really engaging and having these virtual Zoom meetings."

While Morgan wanted to create an engaging online course for students, they also had limited time to both develop the course and complete tasks related to finalizing and submitting their dissertation. Similarly, due to their own course load and the needs of their family, Frankie had limited time to redesign their course:

> Um, I haven't really thought about anything else other than Zoom and [the university's learning management system] only because that is all the attention that I have. Like, between taking classes doing this and then as you saw, [having kids] I'm not, I'm not trying to.... I'm trying to provide a reasonable facsimile of what they would have gotten if the world hadn't gone crazy, while also recognizing that my own standards are going to be like, have decreased somewhat.

Frankie's decisions regarding which technologies to incorporate into their class were impacted by the time they had available to research

resources. In addition to having limited time to devote to the transition to online instruction, GSIs also had limited emotional capacity for seeking solutions to desired pedagogical goals. When reflecting on their course evaluations during the second interview, Blake said, "It just didn't occur to me to do my kind of own surveying of them just because I was kind of at peak capacity with other things…And [in past semesters] I've even done like an additional anonymous survey, but it felt like too much at the time." Blake's feelings of being overwhelmed ("peak capacity"; "too much") interfered with their usual classroom practice of collecting student feedback.

Navigations. In contrast to the variety of ways GSIs approached other tensions, those GSIs, who experienced a tension between Desire v. Capacity, navigated the tension in primarily the same way - by prioritizing their personal needs and relying on their existing technological knowledge. Rather than seeking solutions to support their desired enactment, GSIs decided to stick with what they were familiar with. Frankie commented on the lack of time to seek solutions:

> I wish I'd had more time to investigate ... how to transfer some of the in-person things I like to do, like the gallery walks into an online environment... like actually sitting down and kind of spending you know, the hour kind of playing around with something and making sure it worked. And I just didn't have the time or the like energy to do that.

Similarly, Morgan resorted to using traditional discussion boards, even though they disliked them: "I hate discussion boards…I use it because I haven't come up with a better solution yet...I could have sat down and maybe thought of a different or better activity. And I just, I didn't because of time purposes." GSIs' decision to rely only on the technologies they were familiar with resulted in monotony. Geddy described that when revising their course assignments, everything became writing assignments because they had limited time to think of different formats: "[I] might have done something different/better if given the time."

After GSIs made decision about the format, design, and modality of their online courses, they maintained those structures, even if they felt dissatisfied about how they were working. For example, Blake recognized that the selected online tools were not always sufficient. However, they stated that "I can't say for sure that another tool wouldn't have caused other problems. But like, I didn't have time." Blake did not have the time to seek out new tech solutions, even when they encountered issues.

Discussion

Teaching amidst a pandemic created new and heightened tensions for the GSIs in our study, but it also provided them with opportunities for professional growth. At times, GSIs struggled to make decision as they encountered competing concerns, but as they learned to balance these competing concerns, they refined their pedagogical judgment, as Berry (2007) predicted. In many cases, the GSIs believed the lessons they learned while navigating these tensions would have a lasting effect on their practice and professional identities. In this discussion, we highlight the ways navigating tensions supported GSIs' development of professional judgement and consider how the presence or absence of supports during the navigation process influenced their professional growth.

Paying Attention to Student Need

As GSIs adjusted their instructional approach in response to ERT, they gained an increased awareness of students' needs exacerbated by COVID-19 (Alvarez, 2020). Through navigating the tensions of Empathy v. Rigor and Planned v. Possible, GSIs adopted a more humanistic approach to working with undergraduate students. GSIs frequently consulted with students about technological and emotional needs, provided flexibility to students, and reprioritized learning objectives, acknowledging that their courses fit within narratives of students' whole lives (Dunne, 2003). GSIs thoughtfully considered how the decisions they made supported or potentially impeded students' successful course completion. Consequently, GSIs realized that prior to ERT they had not adequately considered their students' personal needs when making decisions about their courses, but they were now committed to

considering these factors when making pedagogical decisions in the future.

Agency

The process of navigating tensions in response to ERT helped GSIs cultivate their pedagogical reasoning skills since they regularly had to make context specific judgements that required them to consider the needs of students and articulate their instructional priorities. Since even veteran faculty were overwhelmed, uncertain, and unprepared for this situation (Johnson et al., 2020), the GSIs had nowhere to turn for concrete advice and were thus compelled to assert their professional agency. For some GSIs, the pandemic simply reinforced a sense of agency they already possessed, but for others it provided them the freedom to assert agency in a manner that had not previously felt possible. Their newfound agency allowed them to exercise their professional judgement as they eliminated or heavily modified assignments, altered course readings, determined the format of their classes, and adjusted grading methods. Loughran and colleagues (2016) claim "professional knowledge develops in response to, and is informed by context" (p. 387). Consequently, GSIs' pedagogical reasoning skills and confidence in those skills increased as they consistently had to make professional judgments informed by their understanding of the current moment, their own needs, and their students' needs. Ultimately this increased agency helped them to define their instructional styles and more clearly articulate their professional priorities (Park, 2004).

While the GSIs experienced professional growth as described above, the presence or absence of additional factors, including prior teaching experience, collegial support, and personal capacity, either supported or impeded the extent of that growth. GSIs with prior teaching experience in either K-12 schools or higher education, especially those who had taught the same course in previous semesters, demonstrated more confidence in their ability to navigate the tensions that emerged during ERT. This confidence aligns with Loughran and colleagues' (2016) assertion that educators' "pedagogical experience shapes what and how they see in a given situation" (p. 393) and with Kajfez and Matusovich's (2017) finding that GSIs' prior experience positively impacts their sense

of competence. GSIs, who had strong familiarity with course content, made more strategic decisions about course structures and how to best adjust assignments without altering course goals. Additionally, GSIs, who had a supervision structure, were part of a teaching team, or belonged to a professional learning community, were more willing to take risks. GSIs, who had support networks, used these resources to determine how to grade during a pandemic, discover and practice new technologies, and in some cases, share the workload when making necessary course adjustments. In contrast, GSIs without a support network felt less competent in their instructional abilities (Kajfez & Matusovich, 2017) and appeared to have more difficulty navigating tensions.

Finally, GSIs who had limited capacity, given the demands of their personal lives or schoolwork, often made decisions based on their personal needs rather than on students' needs. As a result, their decisions were often less strategic, and they did not experience as much professional growth. A few GSIs even noted that the transition to ERT stunted their professional growth because it made it both acceptable and easier to maintain prior practices rather than research new strategies and take risks that would push them to adapt and grow. In these circumstances, GSIs are not living through situations that allow them to exercise, refine, and ultimately internalize professional judgment (Loughran et al., 2016). As a result, they may be left with continued feelings of unpreparedness for instructor roles (Smollin & Arluke, 2014).

Conclusion and Implications

Tensions experienced during instruction are not unique to ERT nor are they only relevant for GSIs, they are ever present in the profession (Loughran et al., 2016; Berry, 2007). However, the COVID-19 pandemic highlighted how universities may be neglecting key aspects of GSIs' professional development by not providing them with the necessary supports and opportunities to develop the pedagogical judgement needed to fully navigate tensions encountered in the profession. As a result, during the pandemic, when many GSIs were left on their own to make in the moment decisions regarding the curriculum, they did not always have the tools needed to make fully informed decisions. Prior to the pandemic they had in some cases had limited agency over the course and were

simply expected to present the content in a format that had been provided for them. In other cases, GSIs had been assigned to instruct courses where they did not have a strong background in the content, and thus, struggled to adapt and modify the content when they transitioned to ERT. Ultimately, the GSIs who were most successful in navigating through tensions often had a strong expertise in the content of the course, a familiarity with the course, its goals, and its assignments, and an existing network of support.

The experiences faced by GSIs during the pandemic can inform certain changes universities may need to make to better prepare and support GSIs' development of pedagogical judgment. First, universities should allow GSIs some agency over curricular decision in their courses, so GSIs can make necessary adjustments and informed decisions that best meet the needs of their students. At the same time, universities must ensure that GSIs have the prerequisite knowledge and available supports to help them make informed decisions. Universities must do a better job of assessing GSIs' areas of knowledge and expertise before assigning them courses to teach. One way to support GSIs' development of expertise around a particular course would be the opportunity to TA a course before they become the instructor of record or to be involved in the course development stage of the course. Once a GSI becomes an instructor of record, universities should continue to provide GSIs with ongoing sources of support through communities of practice (Lave &Wenger, 1991) or teaching teams (Chiu & Corrigan, 2019). These experiences would allow GSIs to build a clear understanding of the course objectives and learn how different course activities support students in meeting those objectives (Park, 2004; Smollin & Arluke, 2014). Finally, if universities want GSIs to be effective and responsive instructors, they must be realistic about GSIs' dual role as both student and instructors. Often universities assign GSIs course loads that underestimate the amount of time that goes into teaching a course for the first time (Smollin & Arluke, 2014) and fail to realize the extra time and attention needed to be a responsive instructor - holding office hours, checking in with students, providing feedback all take time and emotional capacity (Hoessler et al., 2016). During ERT, many GSIs found their teaching responsibilities impeded their own academic progress, yet they seemed to get limited support from the university

when trying to balance both the increased needs of their undergraduate students and their own needs as doctoral students. Thus, while many GSIs emphasized the importance of showing empathy for their students, it is also important that universities demonstrate a sense of empathy for GSIs.

ERT demonstrated that universities need to do more to support GSIs, so they are prepared to respond in a crisis and can develop as professionals, who are prepared to make tough decisions that ultimately center the humanity of their students. GSIs who intend to be instructors in the future or even those who will be asked to teach multiple semesters during their graduate studies, need to be able to develop strong pedagogical reasoning in order to best meet the needs of students. Allowing GSIs the agency to navigate tensions and providing the institutional support necessary to make informed decisions, would ultimately benefit the experience of undergraduates and increase the quality of instructors who matriculate to the professoriate.

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