The purpose of this design case was to document rigorously the process and decisions made during the development of a five-day, pre-semester virtual orientation for International Graduate Teaching Assistants (IGTAs) and their domestic counterparts, teaching in an English as a Second Language Composition (ESLC) Program of a large land-grant university. The design was grounded in a front-end analysis as well as a theoretical framework comprising Crenshaw’s (1989) Intersectionality and Wenger’s (1998) Virtual Community of Practice (VCoP) theory. These theories were leveraged to focus the design on IGTAs’ educator identity development and their linguistic and cultural marginalization. VCoP theory provided a practical architecture for the virtual learning environment with its three modes of belonging (i.e., engagement, imagination, and alignment) as well as several enabling structures (i.e., support, sponsorship, and recognition). The design intended to purposefully engage IGTAs in social practices and dialogue that would support their sense of belonging and educator identity. While significance can be extracted from the pre-planned, explicit alignment of certain design elements with the modes of belonging, precedent can also be derived from elements that emerged during the design process.

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INTRODUCTION

Our design challenge was to build an orientation for International Graduate Teaching Assistants (IGTAs) in an English as a Second Language Composition (ESLC) program at a large, land-grant university during the COVID-19 pandemic. To create an orientation that intentionally supported the IGTAs’ professional educator identity, we drew not only from a traditional instructional design model (i.e., Dick & Carey model; Dick et al, 2015), but we also based the design on a theoretical framework including Crenshaw’s (1989) Intersectionality and Wenger’s Virtual Community of Practice (1998). We will explore the theoretical framework after a brief discussion of the problem IGTAs face when developing educator identity in higher education institutions in the United States.

IGTAs, students who are enrolled in graduate studies outside of their country of origin and employed to teach college-level courses, are plunged into teaching positions as the instructor of record (IoR) requiring the development of an educator identity, intersecting it with their other salient identities. IGTAs enter this complex time of identity development with cultural and linguistic social identities that do not match the prototypical teaching assistant in United States’ universities (Ates & Eslami, 2012; Kasztalska, 2019; Zhu...
Imagination should orient IGTAs in 1991; Smith et al., 2017). Often, non-native speakers of English (NNSE), IGTAs may struggle with self-efficacy related to their own command of the language, let alone their ability to teach it to others (Christiansen et al., 2018; Kasztalska, 2019; Zheng, 2017). Despite recent trends toward Translingualism and world Englishes that celebrate linguistic and cultural diversity (Ghimire & Wright, 2021; Kasztalska, 2019; Li, 2021; Zheng, 2017), the stigma attached to NNSES continues to hinder the professional identity development of IGTAs (Ates & Eslami, 2012; Zhu & Bresnahan, 2021). As a result, IGTAs in these positions are subject to biases and discrimination from their students, fellow teaching assistants, and faculty, frustrating their ability to develop new educator identities (Duran & Jones, 2019; Yaw & Kang, 2021; Zhu & Bresnahan, 2021).

**THEORETICAL FRAMEWORK**

Intersectionality (Crenshaw, 1989) and Virtual Community of Practice (VCoP) theory offer a guiding identity framework for building an orientation that actively honors IGTAs’ salient identities and centers a sense of belonging as the first step in educator identity development (Farnsworth et al., 2016; Smith et al., 2017; Wenger, 1998). At its core, Intersectionality “emphasizes how overlapping axes of oppression uniquely impact individuals with multiple marginalized identities” (Duran & Jones, 2019, p. 455). Holding membership in more than one oppressed identity (e.g., language and culture), compounds marginalization. An Intersectionality view of identity is needed to sufficiently address the way in which IGTAs are subordinated due to their linguistic and cultural identities. Through this view, the design can build awareness of biases and discrimination faced by IGTAs, the relative positions of privilege enjoyed by the domestic teaching assistants, and the impact on educator identity development for both groups (Wijeyesinghe & Jones, 2019). Intersectionality taught us to find opportunities to draw out and celebrate the IGTAs’ salient social identities within the orientation.

VCoP theory also foregrounds identity development (Farnsworth et al., 2016; Smith et al., 2017; Wenger, 1998) by relying on positive social interactions within a community of people who share a unified professional goal or interest. Wenger (1998) devised ‘three modes of belonging’ as a blueprint for building a VCoP. The three modes of belonging—imagination, alignment, and engagement—help all members express belonging and move from the periphery of the community toward full participation (Lave & Wenger, 1991; Smith et al., 2017). Imagination should orient IGTAs in the space, history, meaning, and power structures of their work environment; knowledge of the bigger picture helps them to envision their place as a professional in the domain. Alignment is adopting the discourse and best practices of a community within one’s personal practice. Engagement supports the continuity of the practice through elements such as documentation and storytelling to jointly solve problems, negotiate meaning, and create artifacts. The three modes of belonging become anchor points from which to hang design elements within the VCoP. Additionally, Wenger (2004) believed the community must be supported and sponsored by the administration to be successful, calling these enabling structures. In this design case, the teaching assistant Coordinator (hereafter “Coordinator”) fulfilled this role, providing resources, time, and space for the IGTAs to work as a community (support), while also legitimizing their ideas by extending them as viable solutions to the rest of the department (sponsorship).

**CONTEXT**

This design case is situated in the English as a Second Language Composition (ESLC) Program at a large research university in the American Midwest. The ESLC Program provides direct instruction to nearly 450 international undergraduate and graduate students each year. The program hires between 10-12 teaching assistants, the majority international, each year to teach second language (L2) writing. Though the orientation design discussed here was built for all teaching assistants in the ESLC Program, the focus of this design case is on IGTAs professional educator identity development. Therefore, for the purposes of this article, we employ the term “teaching assistant” and more rarely “GTA” to refer collectively to international and domestic graduate teaching assistants. The IGTAs at the center of this design case are most often assigned to be the IoR for an undergraduate L2 writing course called 1902. This course is a pre-requisite for undergraduates before entering the university’s general education composition courses. At the time of this study, the majority of 1902 students were from China and taking the courses from China due to pandemic travel restrictions.

The ESLC Program courses are a critical step between international students and their core classes, creating a high-stakes instructional need. Yet, at the time of this design case (Autumn 2020–Summer 2021), no orientation existed for incoming IGTAs; they relied instead on weekly course meetings during the semester to address any immediate concerns. The weekly meetings consisted mostly of reacting to problems rather than proactively building educator identities to support overall IFTA success. Program administration requested formal training for all teaching assistants in the program to provide proactive support. An orientation intentionally designed with the aforementioned theoretical framework would specifically support the IGTAs’ educator...
identity development, with specific attention paid to the IGTAs facing marginalization.

The design team consisted primarily of the Coordinator, Karen Macbeth, and a doctoral student of instructional design, Jaclyn Gish-Lieberman. Macbeth has over 20 years of experience in the department and had been a teaching assistant in the composition program herself. She was also appointed to facilitate the orientation. Gish-Lieberman was a former adjunct faculty in the program with extensive experience teaching ESL in the United States and abroad. Gish-Lieberman worked and studied instructional design and asked permission to use the design opportunity as the basis for her dissertation study. As this design focused on identity development for a marginalized population, the authors wish to position themselves as U.S.-born, cis-gendered, white women whose first language is English. Thus, despite their experiences in the learning environment, they recognized the importance of conducting a thorough front-end analysis that sought to better understand IGTAs’ lived experiences.

After Gish-Lieberman conducted the front-end analysis in Autumn 2020, she met weekly with Macbeth during Spring 2021 to discuss design decisions and implementation. During the design process, the design team (hereafter “we”) occasionally called upon a veteran lecturer teaching in the ESLC Program to provide in-depth details about the 1902 composition course IGTAs would be teaching. Finally, we collected feedback on the orientation design in Summer 2021 with a testing period. Figure 1 provides an overview of the design timeline with a brief discussion of the front-end analysis, design & development, and testing period to follow.

**Front-End Analysis**

The front-end analysis in the Dick and Carey model determines instructional goals by looking carefully at the target learners as well as the contextual design barriers. The initial front-end analysis interviews lasted approximately two months from November 2020 to January 2021. Gish-Lieberman conducted Zoom interviews with former ESLC Program teaching assistants (3) and current program teaching assistants, both international (8) and domestic (3), to learn about their experiences teaching in the ESLC Program. First, the front-end analysis provided insight into available resources and boundaries for the design. Second, the interviews helped to paint a picture of the attitudes, skills, and knowledge that IGTAs need to be successful when they start teaching in the ESLC Program, which became the instructional goals guiding the design. Design team meetings followed these interviews until the pilot stage so that Macbeth and Gish-Lieberman could constantly compare the new instructional materials against the instructional goals as identified in the front-end analysis.

**Design Boundaries**

It became clear through the interviews that the IGTAs wished to have access to training prior to starting the semester so that they could be ready on day one. Therefore, we
decided to offer the orientation over five weeks immediately before the start of the Fall semester. We presented content asynchronously in the university’s learning management system (LMS), Canvas, with engaging activities through H5P.com to provide flexibility for IGTAs attending from different time zones, as they would not yet be required to be at the university. The asynchronous course would then also create a repository of information that could be visited at any time during their service as a teaching assistant. Being unable to offer credit or other incentives (e.g., salary) for IGTAs to attend summer orientation, we discussed making a light workload with a limited time commitment. Additionally, weekly asynchronous discussions in Canvas and a weekly synchronous meeting on Zoom, facilitated by Macbeth, provided an early platform for IGTAs to build community.

**Instructional Goals**

The front-end analysis revealed themes, or areas of content, that IGTAs wished they knew before starting the semester. We distilled these into instructional goals for the orientation and sequenced them from general program information to specific course tips that would prepare them for day one. Figure 2 shows how we organized the front-end analysis themes into major module themes, readings and topics, discussions, and assignments for each week of orientation.

### Design & Development

An iterative design and development period stretched from February to August 2021. Macbeth acted as a subject matter expert, drawing from her extensive knowledge of the program along with the themes discovered during the front-end analysis. The veteran 1902 lecturer was asked to consult on the content for the later modules that got into the specifics of teaching the 1902 course. Gish-Lieberman translated the content into the virtual learning environment, Canvas. The final module (i.e., module 5) development overlapped with the testing and piloting period, so this module was not tested.

### Testing & Pilot

To test the materials, Gish-Lieberman conducted learning experience design (LXD) interviews over Zoom with eight participants possessing a variety of perspectives (i.e., five current program IGTAs, two program lecturers, and one former program administrator). Participants were asked to navigate through at least one module and think aloud about usability and user-friendliness. The pilot, run by Macbeth as the Coordinator, resulted in four completed program evaluation surveys from current program IGTAs. Throughout the following sections we will share feedback from participants collected during the testing period, referred to as “testing participants”.

In addition to the design boundaries and instructional goals determined through the front-end analysis, the five-week orientation design process was influenced by the theoretical framework. Therefore, part of the design process included determining how the theoretical constructs would be manifested in the orientation. Table 1 highlights how discrete theoretical constructs from the framework influenced certain design elements, which will be discussed in detail in the following sections on building the learning environment and building the five orientation modules.

### BUILDING THE LEARNING ENVIRONMENT WITH SUPPORT AND SPONSORSHIP

We began the design of the five-week orientation by constructing the learning environment within the LMS, Canvas, following Wenger’s enabling structures, support, and sponsorship (2004). A third enabling structure, recognition, is intended to praise teaching assistants for their work in the classroom, and thus, was added to later professional development opportunities after they were established instructors.
(e.g., department newsletter celebrating accomplishments, awards, etc.). As mentioned, support and sponsorship must flow top-down from program administration. Macbeth, as the Coordinator and orientation instructor, was the clear choice for our design. The Coordinator is traditionally responsible for easing teaching assistants into their instructor positions. Before COVID-19 restrictions, Macbeth welcomed them to the ESLC Program, showed them around the office, and introduced them to the staff and adjunct lecturers. She disseminated institutional knowledge gradually as she formed individual relationships and shepherded them into the department. Additionally, she wrote a teaching assistant handbook that became the basis of much of the orientation content. Our first design challenge was to replicate Macbeth’s warm, supportive introduction of teaching assistants, and IGTA’s especially, into the program in a virtual setting.

**Welcome Messages**

To start, we wanted to supply welcome messages throughout the Canvas learning environment. A large ‘Welcome!’ greeted IGTA’s as the first message on the orientation

**TABLE 1.** Alignment of theoretical constructs with design elements.

<table>
<thead>
<tr>
<th>THEORETICAL CONSTRUCTS</th>
<th>CONSTRUCT DESCRIPTIONS</th>
<th>DESIGN ELEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support (CoP)</td>
<td>The provision of resources, time, and space for the community to continue its work (Wenger, 2004); Ongoing professional development (Ghanem, 2018)</td>
<td>Welcome Messages, Learner-Centered Syllabus, Coordinator Avatar Videos</td>
</tr>
<tr>
<td>Sponsorship (CoP)</td>
<td>The legitimization of the VCoP and their work by encouraging their solutions for the classroom (Wenger, 2004); Respect for new IGTA’s ideas (Gretton et al., 2017)</td>
<td>Coordinator as Facilitator, Coordinator as Research Collaborator</td>
</tr>
<tr>
<td>Imagination (CoP)</td>
<td>Participants envision themselves as members of the profession (Farnsworth et al., 2016; Wenger, 1998)</td>
<td>Stuff You Should Know Callout Boxes, Veteran Teaching Assistant Stories, Reflection Callout Boxes</td>
</tr>
<tr>
<td>Alignment (CoP)</td>
<td>Participants align themselves with domain best practices (Farnsworth et al., 2016; Gretton et al., 2017)</td>
<td>Interactive video, Lecturer Screen Capture Videos</td>
</tr>
<tr>
<td>Engagement (CoP)</td>
<td>Engagement supports continuity of the practice through elements such as documentation and storytelling to jointly solve problems, negotiate meaning, and create artifacts (Wenger, 1998, 2000)</td>
<td>Asynchronous and Synchronous Meetings, Artifact Assignments, Microsoft Teams Space for Water Cooler Moments</td>
</tr>
<tr>
<td>Intersectionality</td>
<td>Honors claims to competence (Farnsworth et al., 2016); Recognizes linguistic and cultural differences as assets. Builds awareness of privileged populations (Cho, 2016; Crenshaw, 1989)</td>
<td>Veteran Teaching Assistant Stories of NNSE Bias and Discrimination, Veteran Teaching Assistant Stories of Students’ cultural adjustments</td>
</tr>
</tbody>
</table>

**FIGURE 3.** Welcome message on the orientation homepage.
Welcome to the Summer Orientation for the ESL Composition Program!

What to Expect
In this orientation, you will be introduced to many concepts and resources to help prepare you for your first week of teaching. Over the next five weeks, you will explore the topics below (1 per week). Read the Syllabus and Schedule pages to learn more about readings and assignments associated with each module.
1. Module 1: The ESL Composition Program (July 19-25)
2. Module 2: Profiles of Students in the ESL Composition Classroom (July 26 - August 1)
3. Module 3: Being an Effective Writing Teacher (August 2 - August 8)
4. Module 4: Effective Online Teaching (August 9 - August 15)
5. Module 5: Ready of Day One (August 16 - August 22)

This Is a Resource For You
It is important to note that you are not expected to master all of this information by the end of the orientation. There is a lot of information in these modules, and at times it may feel like you are drinking from a fire hose! That’s ok! This orientation will remain open to you so that you have it as a resource to visit as often as you would like during your first semester of teaching.

ESL Community of Practice
Use the next five weeks as an opportunity to get your feet wet and get to know your ESL Community of Practice. You will have many opportunities to get to know each other and hopefully some other IGTA and program staff through weekly discussion boards and synchronous Zoom meetings.

For now, start by watching this message from your GTA Coordinator, [name], who will lead you through this orientation and working with you throughout your time as a GTA.

FIGURE 4. Welcome message on the “Start Here” page.

Co-ordinator Avatar Videos
Initially, we wanted to incorporate a digital teaching assistant handbook to provide new IGTA with a general overview of the program. However, to enhance feelings of support and connection to the Coordinator, we decided to present the same content in an animated video format. Using Vyond (https://www.vyond.com) as our animation tool, we modeled an onscreen avatar after the Coordinator and had her voice the video narration. We knew an avatar designed to look like and embody the Coordinator could further enhance the learning experience (Clark & Mayer, 2016; Mayer & Fiorella, 2014). Additionally, the decision to build videos was influenced by Wenger’s (1998) imagination, knowing that orienting IGTA in time and space can enhance how they envision themselves in that time and space.

We made three videos with the avatar: (a) History of ESL Composition, (b) Department Organization, and (c) Program Placement (e.g., how international students are placed within ESLC Program courses). The videos featured the Coordinator’s avatar next to a whiteboard on which appeared real photos of the ESLC Program offices and staff as well as existing handbook graphics. Figure 6 demonstrates how the videos with the Coordinator’s avatar were incorporated into the content pages. An example video, the History of the ESL Program, can be accessed and viewed through the link in the caption.

Testing participants were delighted by the avatar, calling it “reassuring” and “comforting.” One person called it “a pleasant improvement over generic figures and disembodied voice-overs.” The feedback was overwhelmingly in favor of the avatar, as participants appreciated the time spent to create new, personalized materials. As one noted, “I was so amazed by her, you know, this image. It really matched with her appearance. The video is made for this orientation. It’s not like, um, borrowed from a YouTube video.”

Coordinator as Facilitator
Beyond welcoming IGTA to the ESLC Program, we knew the Coordinator also needed to sponsor their voices and ideas as educators (Gretton et al., 2017; Wenger, 2004). Many of the IGTA come to the program with teaching experience, so we wanted opportunities for them to share their experiences, especially as they related to the new teaching context. We

Learner-Centered Syllabus
To further support IGTA, we pivoted from a traditional, text-heavy syllabus to a colorful, graphic, learner-centered syllabus (see Figures 5a and 5b). As a first point of contact, the syllabus presents a positive tone, especially when presented with images that act to “soften the tone […] make it more approachable and personal” (Richmond et al., 2019, p. 12). We wanted IGTA to enjoy their time getting to know the program and its people, and we felt the learner-centered syllabus offered a good first impression.
planned space for this in the weekly asynchronous discussions and synchronous meetings where the Coordinator would facilitate discussion, encouraging IGTAs to share their ideas related to the weekly content. Macbeth was responsible for commenting on IGTAs’ discussion posts, often breaking the ice with her own responses to the weekly prompt. For the synchronous meetings, facilitation involved leading IGTAs in a discussion of the module materials, their asynchronous discussion posts, and assignments from the week.

Coordinator as Research Collaborator
Our front-end analysis revealed that ESLC Program teaching assistants are highly valued because they are exposed to emergent research and best practices in L2 writing instruction within the graduate courses they take. Indeed, many of the veteran IGTAs interviewed mentioned a deep appreciation for being able to use the ESLC Program classrooms as a basis for their own research. With this knowledge, Macbeth, on an “About Your Facilitator” page, offered herself as a sounding board and collaborator for classroom-based research. This early invitation was an attempt to create synergy between the IGTAs’ work and study and provide them an opportunity to drive innovation within the department. As researchers and innovators, Macbeth could then showcase their expertise to the other department lecturers and administration. One testing participant liked the invitation, enjoying the proactive offer to work with the Coordinator.
BUILDING MODULES WITH THREE MODES OF BELONGING

With the learning environment established on a foundation of support and sponsorship, we next crafted the module structure for the orientation. We wanted five modules to reflect the five topics identified during the front-end analysis (see Figure 2), and we wanted to be intentional about building the module infrastructure around the three modes of belonging: imagination, alignment, and engagement. These cornerstones of VCoP design shape activities and dialogue within the learning environment to promote a sense of belonging within the community (Smith et al., 2017; Wenger, 1998).

Figure 7 shows our prototyped module structure around Wenger’s (1998) three-mode architecture. We envisioned organizing the module into distinct components (i.e., introduction, content presentation, asynchronous discussion, synchronous meeting, and reflection assignment) in alignment with the three modes, as seen in the far-right column. The introduction would spark imagination (I) with videos of veteran teaching assistants telling stories or giving advice related to the module topic. Alignment (A) would happen as IGTAs learned about best practices through handbook content presented in readings, videos, and H5P.com interactions to draw attention and reinforce understanding. Engagement (E) was planned through asynchronous and synchronous discussions of problems teaching assistants in general and IGTAs in particular commonly face. Finally, the module would end with a reflection assignment, invoking imagination (I) once more by asking IGTAs to make personal connections to the module content. The final orientation module structure in Canvas, shown in Figure 7, is very similar to the original design. It retained the same major components, though several of our early ideas for achieving imagination, alignment, and engagement shifted during the design.

Imagination

Imagination helps IGTAs envision themselves as members of the department (Farnsworth et al., 2016; Wenger, 1998). They must understand the department’s history, mission, structure, and personnel to see where they fit. Additionally, they need an opportunity to picture themselves interacting in the department. Reflection, as a final piece of imagination, encourages IGTAs to connect their experiences with their new roles.

Stuff You Should Know Callout Boxes

We recognized that a part of orienting oneself to the department is understanding larger organizational connections and jargon. Remembering our own experiences as new instructors in the program, we knew that providing IGTAs with the vocabulary and acronyms they needed to talk about their new professional environment would further allow them to express their belonging. To this end, we employed callout boxes throughout the module to draw attention to key terms and information. The callout boxes appeared as black boxes with an icon of a lightbulb to distinguish them from the surrounding module text. For example, Figure 8 shows a callout box with acronyms commonly used for the college (i.e., EHE) and department (i.e., T&L) in which ESLC Programs belong. We drew inspiration from a popular podcast to name the callout box ‘Stuff You Should Know’ as it matched the informal tone and emphasized the nature of the information within. We used these boxes throughout the
modules to share small, but important bits of information like common terms, websites, and resources.

Testing participants appreciated the boxes. One explained, “You hear so many names and acronyms and departments, and you see people, and you have no idea how they fit into everything.” Feedback indicated that the boxes were useful resources to which IGTA could return for quick refreshers.

**Veteran Teaching Assistant stories**

In our initial design, we planned to record videos of veteran teaching assistants introducing each module to help IGTA imagine themselves in their new roles. We reasoned that IGTA would hear tales of teaching and envision themselves doing the same. Unfortunately, it was difficult to obtain videos from the current program teaching assistants, most of whom were studying for candidacy, writing dissertations, or applying for jobs. To resolve this challenge, we pivoted to capture authentic teaching assistant voices in text format by inserting brief stories and quotes throughout the module content where relevant. We sourced these stories from the front-end analysis interviews and the existing teaching assistant handbook. The stories were plentiful and became a design thread across all modules, adding cohesion and enhancing opportunities for imagination. Some stories highlighted interactions with students (see Figure 9), others shared experiences of teaching online during the pandemic, while still others focus on being a member of the ESLC Program virtual community of practice. We set the stories off from the rest of the content with bold, red quotation marks.

Testing participants described the stories as “real” and “authentic” cases that “could really happen.” One remarked, “I think that they’re [the stories] good because they’re always very on point. So, they’re always […] a problem that they [IGTA] did have specifically. I think making the quotations very prominent is a good idea.”

The stories help IGTA see themselves interacting with students and solving problems in their future courses. One participant remarked succinctly that “the experiences shared by previous GTAs through quotes were very helpful for me to imagine scenarios and strategies in my future classes.”

**Reflection Callout Boxes**

Reflection is an important component of imagination, helping IGTA associate their new context and duties with their past experiences. While we initially imagined each module ending in a short reflection paper, we decided instead to add smaller reflection points throughout the modules in callout boxes (see Figure 10). Not only did this allow us to preserve that end-of-module assignment for the IGTA to develop an artifact for their classrooms (as will be discussed in the Engagement section), but it also allowed us to break up the content presentation with frequent reflection opportunities targeting adjacent content. Further, they created space for IGTA to consider some of the frequent problems they may encounter in their future classrooms.

For example, the callout box shown in Figure 10 invited IGTA to reflect on how to handle poor student attitudes. The callout box appeared directly after some authentic stories taken from the front-end analysis presented on HSP.
The reflection callout boxes, like the veteran teaching assistant stories, became a common thread throughout the orientation design, supporting several instructional goals across all modules. They promoted a sense of belonging by encouraging IGTAs to both imagine themselves interacting with students and to engage in problem-solving.

The feedback about the reflection boxes was positive. One participant commented that it “gets them [new IGTAs] to think about their own experiences and what they might do.” However, several noted some anxiety because of a lack of clear instructions about how they should be reflecting. They wanted to know if they should write down their answers, especially if they would be asked the same questions later. To address this issue, we later highlighted one reflection question from each module to be discussed during the synchronous module.

**Alignment**

A sense of belonging can also be achieved through the alignment of one’s teaching methods with domain best practices (Wenger, 2004). Previous research shows that teaching assistants express belonging and identity through understanding their content and knowing how to best deliver it to students (Ghanem, 2018). The pedagogical approaches used by the program, including the workshop approach, collaborative writing, peer review, and writing conferences, may be new and unfamiliar to IGTAs and their students. The challenge of aligning IGTAs with the ESLC Program best practices was to present materials in a way that would support buy-in and adoption.

**Interactive Video**

To justify collaborative writing as an approach, the Coordinator, Macbeth, originally created a nine-minute, voiced-over PowerPoint video explaining why it is a critical skill for many different professions. The video is packed with valuable information, but we worried that it was too long to hold viewers’ attention. Therefore, we used H5P.com’s interactive video tool to segment the video up into bookmarks that viewers use to navigate to specific sections (Fiorella & Mayer, 2018; see Figure 11a). We also inserted quiz questions throughout the video to create engagement and check understanding (Fiorella & Mayer, 2018; see Figure 11b). The interactive enhancements made the video a resource that IGTAs could return to time and again. The bookmarks make it easy to navigate to a section to grab just-in-time information as IGTAs begin to explore collaborative writing with their students.

Testing participants appreciated being told the Coordinator’s expectations around the program’s pedagogical approaches (e.g., collaborative writing) and the source-based rationale that justified them. One participant explained that “having...
sources and feeling like this is a legitimate thing that research really backs up is critical. The explanations can support IGTAs as they reconcile their teaching beliefs in a space. One survey response explained, “becoming aware of how my own teaching philosophy sits within the greater heritage of ESL instruction is useful for understanding how other instructors, students, or researchers may understand and respond to my teaching.”

The challenge was that we, as a design team, did not possess detailed knowledge of how the 1902 course teaching assistants implemented collaborative writing assignments and other pedagogical approaches among students spread far and across many time zones. To resolve this issue, we wanted to recruit help from someone with first-hand experience in teaching the course. Veteran 1902 teaching assistants were unavailable due to their exams and dissertation writing, so we turned to a veteran adjunct lecturer who had taught the course many times. The lecturer shared his screen during a recorded Zoom conference to model many of these procedures (e.g., how to set up Microsoft Teams, rather than Google Docs, for collaborative writing assignments). We planned to use these recorded Zoom sessions as a source for building new Vyond.com videos but quickly realized that the video created during the meetings organically and more authentically accomplished the goal, saving time and effort. So, with the lecturer’s permission, we cut the screen capture recording into smaller segments and added on-screen text to highlight key websites, buttons, and steps. Knowing both the why and the how behind the ESLC Program pedagogical approaches helps IGTAs to align their instructional methods and strengthen their professional identity.

Recruiting the veteran 1902 lecturer to explain the nuts and bolts of teaching his course online was so helpful that we created several other screen capture videos in the same manner. For example, the front-end analysis also revealed a

**Lecturer Screen Capture Videos**

Alignment stems not just from understanding pedagogical best practices but also from knowing procedures for applying them (Wenger, 1998). Collaborative writing, for example, is easier said than done, especially in an online space. The Coordinator’s interactive video justified its use as an approach to L2 writing instruction, but we needed the orientation to also scaffold how to implement it in the classroom. For example, IGTAs must learn that they cannot use the popular platform Google Docs for collaborative writing because their students, the majority of whom took the courses in China during the pandemic, are blocked from access.
Engagement

Engagement, as the final mode of belonging, describes how IGAs can express belonging through professional dialogue and mutual activities. It is a space for interacting and developing artifacts to support practice (Wenger, 1998, 2000).

Connected Asynchronous and Synchronous Meetings

Asynchronous and synchronous discussions were planned as a space where IGAs can begin to share ideas and help one another. We initially planned to form weekly discussion board topics around very specific problems IGAs might face, as engagement can be achieved through joint problem-solving (Wenger, 1998). Macbeth collected specific problem cases from veteran teaching assistants for this purpose. IGAs would engage with one another to solve the problem presented in the case (e.g., A student comes to you upset about their placement in your course: What would you do?). However, we found it challenging to match the problems supplied by the veteran teaching assistants to the orientation module themes derived from the front-end analysis. The problems were often suited for content that would be covered later by professional development opportunities after their first semester of teaching began. Further, we worried IGAs as novices to the department context and policies might not yet be equipped to answer the questions. We did not want IGAs to fear having the wrong answer, thus stifling the discussion. Therefore, we shifted toward broader questions that enabled IGAs to tap into their experiences as teachers. For example, the Module 2 reflection assignment question was about building relationships with students: “What do you need to know about your students in order to be able to best serve them?” The question was low risk, encouraging IGAs to pull from their past teaching and learning experiences to answer without apprehension. Further, the Coordinator could highlight some of the discussion board responses during the synchronous sessions, providing continuity between the two areas of engagement. We retained the specific cases collected by Macbeth for discussion during IGAs’ first semester of teaching.

The asynchronous and synchronous spaces seemed to lower initial feelings of anxiety. One testing participant noted that “knowing the concerns of other people that might align with mine, […] that’ll make me feel more comfortable to share.” Additionally, the opportunity to share views across multiple platforms (e.g., Canvas discussion board and Zoom) helped to further reduce fears, as another participant explained:

New GTAs who may feel self-conscious posting written texts in the discussion may have a chance to elaborate their points in the synchronous session. Similarly, people who feel more self-conscious talking in synchronous sessions may feel more comfortable to express in the written form.

Artifact Assignments

We realized that the module design lacked an opportunity for IGAs to create and negotiate instructional materials for their courses, an important piece of engagement (Wenger, 1998). IGAs who participated in the front-end analysis made a similar request to make instructional tools before the semester started. We remediated this by replacing...
our initial idea for a weekly reflection paper with practical, artifact-building assignments related to the module topic. For example, Module 2 content was focused on the ESLC Program students, emphasizing how IGTAs should build rapport and relationships early in the semester. A natural extension of the module was to ask IGTAs to prepare an online survey, which they could use to learn more about their students in the first week of classes. The artifacts would also be discussed in the synchronous meetings to provide space for IGTAs to help one another with their tool development. Other module assignments included creating a welcome video and setting up an online scheduling system to support one-on-one writing tutorials. The new assignments enhanced engagement as GTAs considered with their peers how to best prepare tools for their courses.

Most testing participants considered the module assignments “practical,” “helpful,” and “a good idea.” Several admitted that they had wanted to incorporate an online scheduler into their courses but lacked time to try it out. Playing with the tools as assignments before classes started created this time. One participant further explained she would be more motivated to build the tools during orientation because “it’s kind of fun because you’re doing it with other people. It’s not like a chore.”

**Teams Space for Water-Cooler Moments**

As the COVID-19 pandemic continued and teaching assistants could not physically occupy their normal shared office space on campus, they would not experience the informal connections and conversations that occur there. The IGTAs in the front-end analysis talked about how running into other IGTAs or lecturers in the hall or stopping into the Coordinator’s office provided “water-cooler” moments that created additional opportunities for engagement. To recreate this in the virtual community of practice, we discussed using Microsoft Teams. The Teams space afforded asynchronous messaging and a place to store files shared during meetings. Additionally, while the Canvas shell provided a good space for the orientation, it was exclusive of other members of the larger community (e.g., veteran teaching assistants, adjunct lecturers, course designers, and administration). A transition from the LMS into the Teams space would open the community up to all members. Though we were hopeful that Teams would create additional community space, we had concerns about introducing new technology to IGTAs. We, therefore, created a video walk-through of the space to support understanding and usage. Unfortunately, testing revealed participants were unfamiliar with the Teams platform, despite the walk-through video, and lacked the willingness to navigate outside of the LMS orientation space. One participant wondered, “Why do I have to ask questions there in Microsoft Teams? I mean, can I just ask questions to [the Coordinator] or just post questions to the discussion board?” Future design iterations need to address this concern by collapsing the orientation LMS and Teams space or by lowering the barrier to use.

**Intersectionality**

Intersectionality (Crenshaw, 1989) centers the lived experiences of those who are subordinated and oppressed because of the intersection of their salient social identities within a certain context. IGTAs who differed greatly from the prototypical teaching assistant in U.S. universities (linguistically and culturally) recalled facing NNSE bias from students. We learned from the literature (Chen, 2021; LaCroix, 2018; Zheng, 2017) and front-end analysis that negative interactions with students eat away at an IGTAs’s identity as an educator. One IGTU who had a great deal of teaching experience coming into the ESLC Program explained succinctly, “Usually, when students see me in their class, they were surprised, or they were disappointed because they didn’t come to U.S. to study under another Asian teacher.”

**Stories of NNSE Self-Efficacy and Bias**

We employed stories here again to center and build awareness of NNSE bias among both international and domestic teaching assistants. While we explicitly described NNSE bias and provided widespread evidence of the phenomenon from scholarship, we also wanted to present personal stories of ESLC Program IGTAs confronting biases and discrimination within the orientation. To incorporate this, we anonymized stories from the front-end analysis for the orientation. The example first-hand account shown in Figure 13 illuminates how IGTAs are marginalized and must work harder to identify as an educator in relationships with their students. We used this story and others like it as a springboard for presenting strategies and tips for handling NNSE bias and for discussion in the week’s synchronous discussion. The stories further promoted both imagination and engagement as IGTAs have space to discuss their own salient identities as sources of strength to solve NNSE-related problems.

**Stories of Students’ Cultural Adjustments**

We found that IGTAs also appreciated the space to reflect on how their students, who are international themselves, may be similarly experiencing cultural adjustments. Specifically, the front-end analysis revealed how some IGTAs had to help students feel comfortable with unfamiliar classroom activities like group work and one-on-one writing tutorials. Therefore, we leveraged stories of student difficulties, putting them in concert with the stories of NNSE bias.

The testing participants found the discussion of students’ cultural adjustments promoted self-reflection of their personal cultural strengths as educators. IGTAs drew a parallel between their students’ experiences and their own. A participant noted, “The academic cultural adjustments section prepared me better before entering my classrooms.
I was able to reflect on my own culture and also increase my awareness that my students would be from diverse cultures. Another explained, “It’s important to let them know that I endorse, you know, them adjusting here. I’m here for them when they feel like they’re not fitting in because that could happen in their personal life.” As IGTA prepare for a classroom of students whose experiences often mirror their own, they are encouraged to consider how to support and celebrate their students’ differences by first honoring their own.

**DESIGN REFLECTION**

IGTAs in U.S. universities face daunting challenges when starting off their career as educators. Their social identities mark them as linguistically and culturally different, potentially leaving them vulnerable to bias and discrimination from students in their classrooms as well as from peers and faculty. This might be amplified when IGTA are the instructor of record in an English composition course where their own insecurities as a non-native speakers of English make create additional insecurities. All of these challenges serve to undermine their ability to develop a professional educator identity. An instructional intervention is required that draws on existing identity theory as well as traditional instructional design models. The design process described here aligned design elements with a theoretical framework comprising Virtual Community of Practice theory (Wenger, 1998) and Intersectionality (Crenshaw, 1989). The bulk of the design decisions discussed here involved early planning of the learning environment around these theoretical constructs. As the design team, we hoped the alignment of design decisions with theoretical constructs would create a firm foundation from which to promote a sense of belonging and educator identity development for IGTA as they start out in the ESLC Program. Preliminary learning experience design (LXD) testing and a pilot outlined positive design outcomes as well as areas for growth. We should note, however, that LXD testing and the pilot provided anecdotal evidence from key stakeholders (e.g., IGTA, lecturers, and an administrator), which served only to help us tweak and improve the design prior to full implementation with a new cohort of IGTA. We recognize more data are needed to determine if the orientation impacts IGTA's educator identity development.

**Positive Outcomes**

The testing feedback about the design was overwhelmingly positive. In general, participants who participated in the LXD interviews and pilot felt it would alleviate anxiety for new IGTA and make them feel “like they’re ready to rock and roll.” This feedback stands in stark contrast to how front-end analysis participants described their first weeks as an IGTA, using words like “overwhelming”, “dreadful”, “not smooth”, and

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**FIGURE 13.** Story portrays NNSE bias.
and “struggle.” By using the enabling structures of support and sponsorship, we were able to create a foundation that fostered a sense of belonging by making IGTAs feel safe and valued. Welcoming messages, a learner-centered syllabus, and Coordinator avatar videos helped IGTAs feel welcome in the five-week orientation. Additionally, positioning the Coordinator as facilitator and research collaborator sponsored IGTAs, providing avenues and assurances for their voices to be heard. This testing participant’s comment summarized the potential impact of these efforts on IGTAs:

“I think having a chance to think about all this upcoming journey itself is already a good step to start preparing for their [IGTAs'] classes. That way, they will engage in critical reflection more often and in-depth. Courses like this should make them feel less scared when they are first assigned to teach new courses.”

Additionally, certain key design elements stood out as innovative ways to promote the three modes of belonging. First, the veteran teaching assistant stories pulled largely from the front-end analysis, created many spaces for IGTAs to imagine their role as IoR in the ESLC Program. The authenticity of the stories fostered reflection and spurred an exchange of ideas and joint problem-solving, both hallmarks of a strong virtual community of practice. Additionally, the 1902 course lecturer screen capture videos helped show rather than simply tell IGTAs how they can align their instructional practices with materials, and assignments, the lecturer provided procedural knowledge that would normally take IGTAs many semesters to master. Finally, the asynchronous and synchronous discussion spaces encouraged engagement within the community. One testing participant noted, “This course helped me connect with my supervisor, previous IGTAs both through the Carmen assignments and the synchronous session.” They paved the way for continued discussions during weekly course meetings, later professional development opportunities, and professional collaborations.

**Areas for Growth**

The resulting orientation design, as a first iteration, had clear areas for growth. First, there must be expectations early in the orientation about how, if at all, IGTAs will be assessed. We failed to make it clear that the reflection points were just for formative learning, designed to help them pause and engage with the materials. We remediated this design failure by explicitly calling the orientation a resource with no points or grades attached in the syllabus. Additionally, we made it clear that the reflection callout boxes would be revisited in the synchronous discussions, so IGTAs should prepare to discuss their reflections verbally. Next, the front-end analysis indicated that IGTAs could achieve alignment by seeing many aspects of their future courses explained and modeled by an experienced lecturer. However, evaluation participants expressed a desire for hands-on exploration of their course spaces as well. A hands-on orientation would help them internalize and own the course as well as modify it to their unique teaching styles. Finally, testing showed that participants were confused by the additional Microsoft Teams space for water-cooler moments. They did not want to learn a new platform in addition to learning the LMS, Canvas. These two spaces should be simplified to one to streamline navigation and remove extraneous load (van Merriënober & Sluijsmans, 2009), leaving IGTAs to focus on learning.

**CONCLUSION**

“I think I’ll be less overwhelmed knowing that […] there is a formal setting for me to learn because without such things it’s, you know, sometimes people don’t feel like they’re brave enough to ask all these questions because you feel like it’s just your job.”

The goal of the orientation design transcended simply preparing new IGTAs for their first days and weeks in the classroom. The design was grounded in the theoretical framework of a Virtual Community of Practice (Wenger, 1998) and Intersectionality (Crenshaw, 1989) to intentionally foster a sense of belonging and identity development. It created a space for IGTAs to view teaching as more than “just your job,” but as an opportunity to cultivate an identity as an educator at the intersection with their other salient identities. The space was especially needed for IGTAs who face additional hurdles to “fitting the mold” of teaching assistants in U.S.-based universities. A five-week orientation seeded a virtual community of practice in which IGTAs could overcome anxiety about teaching in a new context, with new pedagogical approaches, and new students.

As a design team, we set out to build an orientation as a virtual community of practice and to establish precedent for future designers working in a similar space. To do this, we designed the learning environment around the architecture described by Wenger’s (1998) Virtual Community of Practice (e.g., enabling structures and three modes of belonging) and Crenshaw’s (1989) Intersectionality. First, we wove the enabling structures of support and sponsorship into the learning environment. Then, we built our module structure, shifting to accommodate the realities of our learners and the limitation of resources. Design elements helped IGTAs imagine their roles through veteran teaching assistant stories and reflection, align their practice through lecturer screen capture videos, and engage in professional dialogue in linked asynchronous and synchronous discussions as well as classroom artifacts. Further, IGTAs were encouraged to draw from their own salient identities as a strength in the classroom to protect against bias and to support their students’ cultural adjustments.