BUT IS THAT RELEVANT HERE?

A Pedagogical Model for Embedding Translation Training within Technical Communication Courses in the US

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This article illustrates how self-identified monolingual technical communication students can prepare to work with translators in the creation and dissemination of multilingual content. Drawing on a case study that traced a collaboration between a Language Services office and a technical communication course in the US, the author suggests technical communication students can benefit from understanding the practices and activities of translation, primarily by being better-prepared to design and work with multilingual audiences in cross-cultural settings. Through a discussion of this collaboration, the author argues translation is a valuable aspect of contemporary technical communication, helping students understand the challenges and affordances of designing for a wide range of users.

Keywords. Translation, Technical Communication, Pedagogy.

Introduction

During the Spring semester of 2015, I worked as a technical translator in a small translations office serving the Latinx community in Grand Rapids, Michigan. My job was to both to translate technical documents (e.g., birth certificates, medical records) from Spanish-English (and vice versa) and to serve as a project manager for incoming translation projects that needed to be delegated to additional translators. At the same time, I was teaching an undergraduate upper-level technical communication course at a Predominantly White Institution (PWI)

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in the Midwest. My class consisted of 25 students, all of whom identified English as their primary and dominant language. Being in their last semester of college, a majority of students in my class either had already acquired or were currently seeking employment as technical communicators or professional writers for various organizations (e.g., magazines, publishers, businesses, non-profit organizations).

Given my own background and training as a bilingual technical communication researcher, teacher, and practitioner, I wanted to use my technical communication course as a way to help students experience the diverse, expanding, and overlapping responsibilities and practices of contemporary technical communicators. As recent work has indicated, contemporary technical communicators in the United States now frequently have to navigate a wide range of practices, moving beyond traditional notions of creating and editing content to developing interactions that require training in design and user experience (Blythe, Lauer, & Curran, 2014; Brumberger & Lauer, 2015; Gonzales & Turner, forthcoming; Lauer & Brumberger, 2016). In addition, training in translation and intercultural communication is increasingly being valued in technical communication programs, as technical communicators prepare to work with diverse communities and contexts in multilingual settings (Groznaya, 2013; Haas, 2012; Maylath et al., 2013; Thatcher & St. Amant, 2011; Walton, Zraly, & Mugengana, 2015; Williams & Pimentel, 2014; Yu & Savage, 2013). Given the chance to teach technical communication students in their last semester of their undergraduate career, I wanted to provide an opportunity for students to experience a fast-paced collaboration with professionals who work across activities, languages, and contexts to serve their communities (Baca, 2012; Bowdon & Scott, 2003; Scott, 2008).

The brief (one semester-long) collaboration between my technical communication students and the translations office in which I worked resulted in a practical illustration of how translation training can be embedded into technical communication programs, helping students both understand and enact aspects of successful bilingual and multilingual technical communication, even when students don't identify as bilingual or multilingual themselves. Although all of my

students came into my course identifying as monolingual¹ English speakers, this collaboration helped them understand how technical communicators can collaborate with translators to better understand the practices and activities of translating technical content.

In this hybrid teaching case and industry perspective, I'll first provide an overview of recent conversations connecting technical communication and translation training. As I demonstrate in the literature review, the emerging connections between translation and technical communication in the US echo ongoing calls for intercultural and international technical communication pedagogies both in and beyond Western contexts (i.e., the US). Following this overview, I provide some background on the objectives and goals of my technical communication course, outlining how students collaborated with a translations office to develop bilingual materials that provide access to information for the Spanish and English speaking Latinx community in Grand Rapids. Finally, drawing on sample student projects, course assessments, and reflections, I provide implications and applications for how and why English-based technical communication courses can provide students with valuable training in translation.

Intercultural, Multilingual Pedagogies in Technical Communication

Issues of race, culture, power, and language have been central to the work of technical communicators for decades (Agboka, 2013; Barnum & Huilin, 2006; Haas, 2012; Jones, 2016; Longo, 1998; Scott, Longo, & Wills, 2006; Savage & Mattson, 2011; Savage & Matveeva, 2011). As Haas (2012) explains, "race and place matter to technical communication research, scholarship, curriculum design, and pedagogy. In fact, they are key to what can be imagined, what gets imagined, and who imagined in our profession" (p. 279). Thanks to the important work of technical communication researchers and teachers, and to ongoing efforts by organizations such as the *CPTSC Diversity Committee*, research on technical communication pedagogies continues to advocate for increased diversity and intercultural training for technical communication students, faculty, and

administrators (Jones, Savage, Yu, 2014; Savage & Matveeva, 2011). As part of this work, emerging research emphasizes the role of technical communication in social-justice advocacy, presenting technical communication training as an opportunity for students and practitioners to enact cross-cultural competency, empathy, and dignity (Colton & Walton, 2015; Walton, 2016; Jones, Moore, and Walton, 2016).

While frameworks for teaching and practicing socially-just, cross-cultural technical communication are widespread and varied, the overarching consensus in these approaches is the understanding that teaching technical communication in culturally-situated ways "require[s] alternative teaching approaches," to both support linguistically and culturally diverse students in technical communication programs and to equip future technical communicators to work with linguistically and culturally diverse clients and communities outside of the University (Matveeva, 2015). As technical communication pedagogies continue to work toward intercultural frameworks, it is also critically important for technical communication teachers and researchers to "understand [the] historical, colonial, apparent and unapparent ways" in which concepts like "diversity" get (mis)represented, addressed, and supported in our programs (Jones, Savage, and Yu, 2014, p. 133).

For instance, as technical communication research and training continues expanding outside of the US, interests and need for international technical communication have contributed to the development of "educational practices" in technical communication that aim to "equip students to succeed in today's globalized workplace" (St. Amant, 2011, p. 3). This push for globalization has led "undertakings that were once reserved for rare occasions, such as technical translation, [to] become commonplace business practices" (St. Amant, 2011, p. 2). In turn, as technical communication programs prepare students to work in global contexts, issues of translation and multilingual technical communication continue to gain interest and attention (Maylath et al., 2013; Verzella & Tommaso, 2014). Yet, Agboka (2013) clarifies, it is important for technical communication researchers and teachers to prevent equating a push for globalization with efforts to ethically increase diversity in technical communication. Indeed, Agboka (2013)

clarifies that it's important for technical communication researchers to understand the connections between diversity and power in technical communication, and to train students to do the same. For this reason, Agboka (2013) "invite[s] more research and scholarship involving specific case studies, research methodological approaches, and analyses of communication practices that intersect with social justice in international contexts," and, I would add, in U.S. contexts working with international immigrant populations (p. 30).

Although I have always aimed to embed discussions and awareness of race, culture, and language into my technical communication courses, working in a small, community-based translations office helped me ground theoretical discussion of difference in everyday activities within existing organizations. That is, as I worked as a technical translator in a community-based translations office, I had the opportunity to witness (and participate in) field convergences (Maylath, Muñoz Martín, & Pacheco Pinto, 2016) between intercultural technical communication, race and linguistic relations, and translation. Facilitating the transformation of birth certificates, legal records, and other technical documents across languages, and witnessing how these translations impacted the lived realities of immigrant community members from various nations, helped me operationalize the exigence for intercultural, multilingual technical communication training. In turn, in this article, drawing on established models for teaching intercultural and multilingual technical communication, I argue for more specific training in translation within traditional technical communication programs in the US. The purpose of this discussion, then, is not only to present translation as a profitable practice that can enhance the success of international technical communication, but, perhaps more importantly, to also highlight how training in translation can help technical communication students to understand the power dynamics and linguistic complexities embedded in all contemporary technical communication work.

Translation in Technical Communication: Moving Beyond the Metaphor

Translation has been referenced in technical communication work for quite some time, helping technical communicators create and disseminate information and technologies across diverse cultures and contexts (Agboka, 2013; Batova & Clark, 2015; Maylath, 1997; St. Amant & Olaniran, 2011; Sun, 2012; Weiss, 1997). As early as 1997, for instance, Weiss argued, "technical communicators have always been translators, or bridge builders, between different groups and audiences" (p. 322). Here, Weiss used the term "translation" as a metaphor to describe the language adaptations that all technical communicators engage in as they create and distribute content to various audiences. That same year, Maylath (1997) provided one of the earliest frameworks for teaching technical communication students to prepare documents for translation across languages, in an effort to help students gain an "awareness of their own language and its key differences from other languages" (p. 343). In this way, translation was initially described as either a metaphor for the work of technical communicators or as a supplementary activity that helps technical communicators reach wider audiences. Yet, as Maylath, Muñoz Martín, and Pacheco Pinto (2016) explain, "Despite diverse attempts at acknowledging the importance of approaching professional communication as translation or as involving translation-related skills (e.g., Hoft 1995; Weiss 1997, 1999; Melton 2008), the activity of translation in itself "often remains invisible both in the literature and in the training of (international) professional communicators" (p. 3, emphasis added). Although courses in intercultural and international communication are now common in a wide range of technical communication programs, explicit training in translation remains limited for U.S.-based technical communication students (Ding, 2010).

As much as the word *translation* has been used metaphorically to describe technical communication work, researchers such as Grabill (2009) note a hesitance to perceive all technical communicators as mere information conduits who metaphorically "translate techno-science for others" (n. pag.). Instead, honoring technical communicators' roles as researchers and rhetoricians, Grabill

(2009) urges technical communicators to leave behind the translation metaphor and "move toward: a focus on rhetorical problems, a focus on groups and organizations, a focus on how things like 'culture' work, [and] a focus on the materiality of rhetorical work." Achieving the moves that Grabill suggests now requires strong, reciprocal collaborations between technical communicators and translators, experts in both areas who can work together to help diverse people and organizations communicate with each other (Yajima & Toyosaki, 2016; Walton, Zraly, & Mugengana, 2014). The critical move here is a step away from the metaphorical understanding of technical communicators as "translators" or transmitters of information to a practical understanding of translation as a culturally-situated, rhetorical activity that is now broadly relevant in technical communication practices.

Drawing on recent conversations that highlight the value of translation in technical communication (Maylath, Muñoz Martín, and Pacheco Pinto 2016; Walton, Zraly, & Mugengana, 2014; Yajima & Toyosaki, 2016), this article explores how technical communication students can gain training and expertise in and through activities of translation. Stemming from a case-study tracing a collaboration between a technical communication course and a translations office, this article illustrates how technical communication students can use translation as a framework for engaging in culturally-sensitive, multilingual, cross-cultural communication. As technical communication continues highlighting the importance of culturally-situated, cross-cultural technical communication (Brumberger, 2014; Sun, 2012), we should also continue to develop pedagogies that reflect the importance of these concepts. In the section that follows, I'll introduce the Language Services Department at the Hispanic Center of Western Michigan, a translation and interpretation office that partnered with my technical communication course for this project.

Technical Communication and Translation in Practice: The Language Services Department at the Hispanic Center of Western Michigan

The Language Services Department is a translation and interpretation office located inside of a non-profit organization, the Hispanic Center of Western Michigan. Although the office is situated in a non-profit, the Language Services Department does charge a fee for translation and interpretation services. However, all profits made within the Language Services Department get fed back into the overall non-profit organization. In this way, the Language Services Department functions as a small, community-driven business, working to make partnerships with hospitals and government organizations to gain income that then gets reinvested into the community.

Although the Language Services Department is a business, being situated within a non-profit organization results in certain resource and personnel limitations. For instance, the office does not employ marketing personnel. Instead, the translators and interpreters in the office work together with Sara, the office director, to develop promotional materials that might increase the resources coming into the organization (and in turn increase the income of employees within the business).

The Language Services Department employs over 25 translators and interpreters. These employees are trained in-house, meaning that the Language Services Department recruits bilingual members of the community and trains them to work as professional translators or interpreters. Interpreters facilitate conversations between Spanish-speaking community members and medical practitioners, counselors, case workers, and city officials in various contexts (e.g., home visits for Child Protective Services; legal hearings with local police; town and city meetings; parent-teacher conferences). In addition, translators in this organization are responsible for performing written translations of birth certificates, medical documents, school records, and other community materials (e.g., flyers, neighborhood operational guides). Translators in the Language Services Department perform "mirror translations" of technical documents,

meaning that the translated documents identically match the design, layout, and formatting of the original text (Gonzales & Turner, forthcoming). In this way, a person with no knowledge of the original language can see where each piece of the original document is represented in the translated project. Hence, by formatting and designing texts across languages, translators in the Language Services Department perform technical translations, which Byrne (2006) defines as "a type of specialized translation that deals with technology and technological texts" to make visuals and digital resources accessible across languages (p. 3).

In part due to resource and personnel limitations, employees in the Language Services department frequently work across activities—serving as translators, technical communicators, designers, user-experience researchers, and marketing specialists, often simultaneously. Because the Language Services department is located in the heart of the Latinx community in Grand Rapids, the office often serves as an emergency resource for Spanish-speaking community members, those who come in during a crisis to request assistance translating an important document or attending a meeting with English-speaking officials or medical practitioners. In this way, this office serves as a perfect site for students to experience the converging activities of translation, technical communication, and user experience, primarily as they are enacted by individuals who want to support their community. Employees in this organization have fluid responsibilities and work descriptions, providing a useful perspective of the various activities embedded in contemporary technical communication contexts.

Technical Communication Course Profile

Serving as one of the core courses in the program's Professional Writing Major, the Technical Communication that I during the Spring of 2015 (WRA 320: Technical Writing) was intended to help students enact "principles and practices of effective writing in the workplace" (institution course catalogue, 2015). According to the course catalogue, skills to be learned and practiced in the course "include[d] audience and organizational needs, visual rhetoric, information design, electronic publication, ethics, technical style, usability testing, and team writing."

As evidenced in this course-catalogue description, the course I taught aimed to prepare students to work not only as technical communicators, but also as agile information designers, user-experience researchers, and visual communicators who can address the needs of various audiences. In this way, this course intended to introduce students to overlapping and expanding activities among technical communication, user experience, and information design, reflecting the disciplinary convergences now common in professional contexts (Blythe, Lauer, and Curran, 2014; Brumberger & Lauer, 2015).

As the instructor, it was important to me that students understood how these different but converging skills can and should be applied when working with the diverse, multilingual audiences. As many technical communication researchers have repeatedly argued, being able to work with diverse communities is now a standard practice for technical communicators—professionals who must understand how their content and designs may be adapted across languages, cultures, and contexts (Agboka, 2013; Batova & Clark, 2015; Sun, 2012). Rather than leaving training in cross-cultural, multilingual communication for specified international or cross-cultural technical communication courses, my goal is to purposely embed these conversations in the "traditional" curriculum, thus using a service-learning model to technical communication pedagogy (Baca, 2012; Bowdon & Scott, 2002) to provide students with an accurate representation of how issues of culture and language are intertwined among all technical communication activities.

The Readings

Course readings primarily included selections from Johnson-Eilola & Selber's (2013) Solving Problems in Technical Communication and selections from the 2015 special issue of connexions: international professional communication journal focused on translation and technical communication. In addition, the course was structured through an emphasis on what Moore (2013) describes as "relational work, or work that draws attention to the complex relationships among people, ideas, places, events, institutions, and things" (p. 63). That is, as students in the

class read about the tools (Swarts, 2013), contexts (Spinuzzi, 2013), and ethics (Scott, 2013) of technical communication, they also listened stories and provided input about technical communication and translation projects as they were being enacted by our partners in the translations office. Rather than introducing our partnership with the translation office in a single assignment, this collaboration was introduced from the beginning of the course, so that connections between course material and our partnering organization could be carried throughout the semester.

Because a majority of my students had limited previous experience with intercultural, multilingual communication, particularly as it is enacted in multilingual work contexts, it was easy for initial conversations about linguistic and cultural diversity to be dismissed or isolated as scenarios that happen "out there" in "special" diverse sites. While my students were incredibly respectful and bright, their lack of lived experience in multilingual, intercultural contexts led to some initial difficulty understanding how and why this linguistic diversity is actually relevant to all technical communicators, and not just those who come from or aim to work with diverse populations. It was for this reason that I chose to pair our collaboration with a translations office with what may be considered "traditional" or "standard" texts in technical communication scholarship—texts that don't necessarily address issues of linguistic and cultural linguistic diversity directly. In this way, it was my students' responsibility to make the connections between these traditional texts and practices and our community partners, noting how the professionals in the translations office can and do contribute to the class's understanding of technical communication more broadly.

The Assignments

As students read and engaged with the course readings and as they built relationships with their community partners, they were asked to complete two major projects with several layers:

Project #1: Defining Technical Communication. After reading scholarship discussing the expanding and overlapping activities of technical communicators (e.g., Blythe, Lauer, and Curran, 2014; Brumberger & Lauer, 2015), and after practicing technical communication in multilingual contexts through their community partnership, students were asked to provide (through both a written memo and a verbal presentation) a definition of technical communication that was grounded both in their own experiences and in the scholarship they read. These definitions were to be assessed based on students' ability to weave examples that were both theoretical and practical, linking to their own research and experiences as well as those of others. Students who successfully completed this assignment were those who could provide concrete citations and experiences that grounded their approaches to defining technical communication work.

Project 1 desired learning outcomes included:

- Students read and become immersed in current definitions of technical communication.
- Students understand technical communication as a fluid and constantly evolving field and practice that shifts due to contextual and cultural factors.
- Students develop their own informed orientation to culturally-situated technical communication work.

Project #2: Developing a Tool to Facilitate Multilingual Community Work. In addition to their emerging understanding of technical communication, students were asked to work in teams to develop a tool (e.g., infographic, video tutorial, website component) intended to facilitate a particular goal or activity in the collaborating translations office. Since students became increasingly familiar with the purpose and goals of our partnering translations office, and since they began to establish relationships with translators in the office, their goal was to think of a way to contribute to the organization through the development of a specific tool, visual, or platform.

Project 2 desired learning outcomes included:

- Students practice ethical listening with clients in multilingual, intercultural settings.
- Students practice designing, testing, revising, implementing feedback, and sharing technical communication work with community partners.
- Students understand technical communication as a linguistically and culturally situated practice through their first-hand experience with community partners.

Since the translations office was teaching us about their work, our goal as ethical technical communicators in this course was to then reciprocate the efforts and time of our collaborators by developing something that might make their work easier. The targeted audiences for these tools would range from Spanish-speaking community members with Limited English Proficiency (LEP) to English-speaking funders and business owners who could benefit from the translation services offered by the Language Services Department. The specific goals and materials developed by students depended on the ongoing activities currently taking place in the Language Services Department, hence helping students practice the flexibility and adaptability that they may have to enact in their future workplaces.

In the sections that follow, I'll provide specific examples of how students' understanding of translation and technical communication developed simultaneously through their partnership with the Language Services Department. In particular, I'll explain how working with the translations office allowed students to operationalize three themes that emerged from the course: 1) Connections between technology and language accessibility, 2) Challenges of cultural representation in technical communication, and 3) Incorporating translation in technical communication workflows. All of these factors, I argue, helped students prepare to work as technical communicators in diverse contemporary contexts.

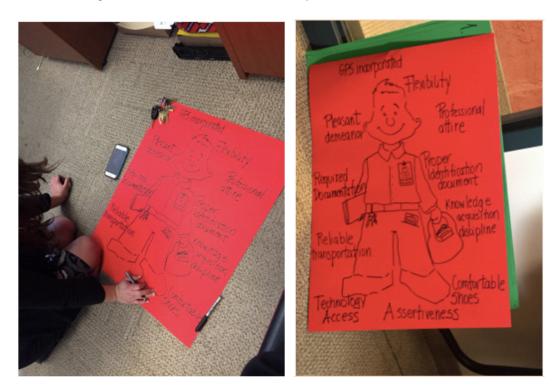
Theme 1: Connections Between Technology and Language Accessibility

Students in my technical communication course were assigned to read several articles discussing usability, accessibility, and user experience, including Ceraso's (2013) "How can Technical Communicators Plan for Users?" and Mirel's (2013) "How can Technical Communicators Evaluable the Usability of Artifacts?" in conjunction with pieces about the role of translation in digital environments (e.g., McGinnis and Hanson's (2015) "Social Inclusion: Text optimization for translation and readability in a multilingual world"). As they read, students also Skyped into and physically visited the Language Services Department office (depending on their own transportation and scheduling availability). During these visits, students witnessed how translators in the Language Services Department navigated digital platforms as part of their work.

For example, students Skyped into the translations office on a day when Sara, the director of the office, was creating materials for her upcoming professional interpreters' training. Although we regularly scheduled Skype sessions with the Language Services office, these meetings were frequently more of an office observation rather than an interview or specific discussion with translators. Since the Language Services Department is so busy, students often used our Skype sessions as an opportunity to observe what employees in the office were doing, rather than having the undivided attention of these employees for a designated period of time. During this particular Skype session, students observed as Sara created a poster for her interpreters in training. As evidenced in Figure 1 (p. 89), Sara was using a black marker and red poster board to sketch what she called "the qualities of a successful interpreter." These qualities include having reliable transportation, knowledge of the discipline, flexibility, and professional attire (among others).

After witnessing Sara design this poster during our Skype session, a group of students in my class wondered if the organization could benefit from having a digital version of the poster that could be re-used during different training sessions. After having a follow-up conversation with Sara regarding this possibility after

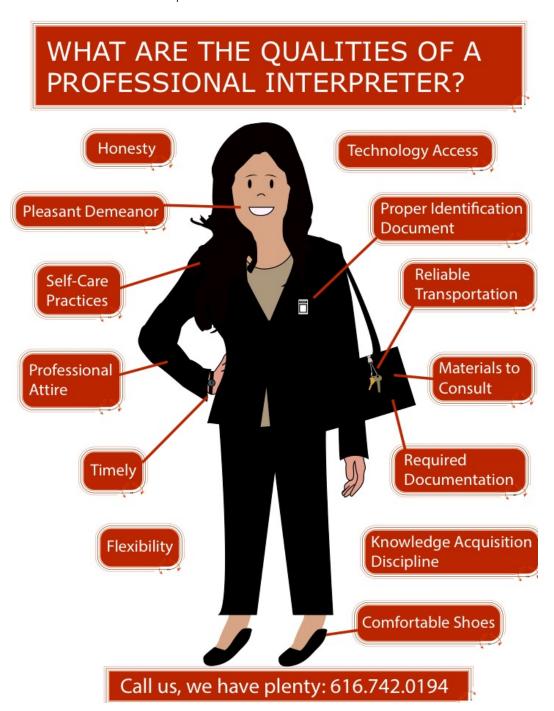
Figure 1
Sara Creating a Poster of a Professional Interpreter



going through several rounds of feedback where they considered how to create a design that would be easily accessible and translatable, students in this group shared the poster depicted in Figure 2 (p. 90) with Sara and the Language Services Department. As evidenced in Figure 2, students in this group used their project to design a poster illustrating the qualities of a professional interpreter. This poster is now distributed during all interpretation trainings, and is being developed into magnets in both English and Spanish that can be used as marketing materials for businesses and organizations who may be interested in interpretation services.

As evidenced through this brief example, as they learned about the activities embedded in a small Language Services office, students participating in

Figure 2Revised Professional Interpreter Poster

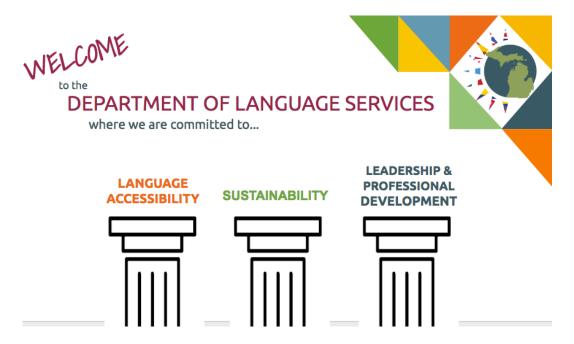


this collaboration contributed their emerging understanding and skills in technical communication. In this way, students' understanding of translation and cross cultural communication grew alongside (rather than in isolation) from their understanding of technical communication as a field of research and practice. As students crafted and revised their definitions of technical communication through our course assignments, they centralized discussions of linguistic and cultural diversity without being necessarily prompted to do so.

During another Skype session, students witnessed how Holly, one of the translators in the Language Services Department, struggled when translating government seals that required the re-creation of advanced graphics or logos. Because the Language Services Department does not have access to design software like Adobe Illustrator, to successfully complete complex projects like those involving intricate seals and logos, translators like Holly had to rely on their own creativity adapting Google images with Microsoft Paint and PowerPoint. In addition, when translating logos and images, employees in the Language Services Department had to manipulate sentence structures to address space limitations and alphabetic symbols, for instance only using tools that could accommodate the Spanish "ñ" and account for Spanish accents (e.g., "Á," "É"). Thus, as students read about access, usability, and user experience in theoretical terms through the assigned readings, they also had the opportunity to witness how translators navigated technological and linguistic challenges in a small community-based business.

One team of students designed a banner that could be displayed in the office to describe the mission of the Language Services Department for both employees and potential funders: 1) Providing Language Accessibility to the Latinx community in Grand Rapids by translating technical information for city residents and by providing interpretation services for community members at city meetings and medical/legal appointments, 2) Providing financial sustainability to the department through the funds acquired in the office, and 3) Providing leadership and professional development opportunities for bilingual community members interested in becoming professional translators and interpreters. Initially, the students in this particular team used several different platforms to draft banner

Figure 3Banner Designed by Technical Communication Students



designs, including InDesign, Photoshop, and other web-based services. However, after going through several rounds of revision, the team decided to design their banner on Google slides, the product of which can be seen in Figure 3, above.

In her final course reflection, Maggy, a technical communication student who worked to create the banner illustrated in Figure 3, explained the role that usability and accessibility play in effective bilingual technical communication, stating,

One of the biggest challenges technical communicators face is working with whatever tools are at your disposal. I know we initially struggled with this as we were deciding which tool to use in creating our banner design, and we eventually settled on Google Slides because we knew the Language Services Department would have access to it and be able to edit and translate it as needed. Google slides is open access and can incorporate

signs and symbols in multiple languages, including Spanish, which is not always the case in the other tools that we used. Without knowing the kinds of tools that your client has, it can be tricky to design materials in a way that they can be living documents and not just stagnant texts. For instance, if we had used InDesign or some other software that the Hispanic Center doesn't have, they probably would have had to start over if they ever wanted to update or translate their banner. Even if you have access to a tool, if you don't know how to use it effectively, and if it doesn't include features needed to reach diverse audiences, it's not a useful tool.

In her reflection, Maggy discussed access and usability in terms of both technology and language, identifying ways in which her decision making was guided by an understanding of the Language Services Department's culture and institutional resources, as well as her knowledge of how platforms facilitate translation across languages (i.e., "Google slides is open access and can incorporate signs and symbols in multiple languages, including Spanish"). Although reading about access to technology through our course readings provided a foundation for students like Maggy to approach their community partnership, it was through interactions with the Language Services Department that students got a chance to experience how resource and language limitations impact the everyday activities of technical communication professionals. By seeing how professionals in the Language Services Department adapted technologies to meet their needs when specific resources were not available, Maggy's understanding of successful technical communication relied not just on a mastery of tools and technologies, but rather on an understanding of which tools are available and suitable for the needs of specific communities.

Theme 2: Challenges of Cultural Representation in Multilingual Technical Communication

In addition to acknowledging and accounting for the accessibility of tools and technologies across languages, students in my technical communication course were faced with the challenge of representing diverse, multilingual communities in their designs. For example, one of the first needs noted by my students after meeting the Language Services Department was the fact that the office did not have a specific logo or design strategy that could be used in all materials used to bring profit into the organization. For this reason, a team of students decided to work together to design a logo for the department.

As students conducted research to design the logo, they learned that the Language Services department employs translators and interpreters who come from over 22 Central and South American countries. Through their conversations with these employees, students noted the national and cultural pride that each employee held for their specific country of origin, conducting several interviews with employees at the Center, all of whom identified their cultural background with one or more Central or South American nations. As students developed potential logos, they worked to incorporate the employees' cultural backgrounds into design mockups.

Figure 4 (p. 96) illustrates some of the design ideas initially developed by this team of students, all of which aimed to represent a wide range of nationalities with Spanish language speakers in their design.

In addition to experimenting with typefaces and colors, what students in this group struggled with the most is what one student described as "fitting all the nationalities and cultures of the center into one logo." Indeed, as the work of Sun (2012) and Brumberger (2014) illustrates, accounting for the multiplicity of histories, languages, and backgrounds often embedded in cross-cultural design (without resorting to stereotypes and generalizations) can be a tough challenge for technical communicators and user experience designers. For this reason, technical communication researchers are aiming to move beyond what Sun (2012) describes as "ad-hoc cross-cultural communication guides" that present lengthy lists of "DO's and DON'Ts" as heuristics for effectively designing across cultures (p. 8).

As students got to know the employees in the Language Services Department, they were able to understand the cultural and linguistic complexities encompassed in designing a representative logo. They saw that terms like "Hispanic"

Figure 4
Logo Design Ideas



or "Spanish" served as general identifiers for people, cultures, and languages with complex layers of meaning. While they had been advised by their community partners to include South and Central American flags in their design, "fitting" all the nations of the departments employees in one logo proved to be a challenge. In their final logo design, the students in this group decided to include patterns that would resemble the colors of South and Central American flags, without including country-specific seals or logos that would alienate or prefer one nation over the other. In this way, the students decided, each individual who saw the Language Services logo could use their own experiences and histories to identify with specific colors and other aspects of the design.

In her final course reflection, another student, Donna, discussed the challenges she faced as a technical communicator working in cross-cultural, multilingual settings, particularly when designing this logo. She explained,

We had to put into account every single nation and nationality that we were representing. We had to do this in a way that was appropriate and meaningful not only to English speakers, but also to Spanish speakers. These types of obstacles are extremely meaningful to me as a technical writer, mostly because it's out of my comfort zone—speaking for other nationalities that aren't my own can get a bit awkward for me, just because I don't always know what could possibly be offensive or inappropriate. Throughout my time working with the Language Services Department, I've learned how to ask questions when working with communities from other cultures to make appropriate and also engaging content. I wanted to design something in this logo that was inclusive without generalizing.

Donna's reference to cross-cultural design that is both "appropriate and meaningful" echoes the goals of technical communication researchers who emphasize the need for cultural awareness and sensitivity in successful cross-cultural design (Brumberger, 2014; St. Amant, 2002; Sun, 2012; Vogel, 2009). By aiming to create an "inclusive" but not "generalizing" design, students in Donna's team learned how to honor cultures without essentializing them, even in situations that were, as Donna explains "outside of [their] comfort zone." Since Donna and other members of the class got the chance to meet practitioners in the Language Services Department, they were able to see how each individual Central or South American culture and language was embodied in the lives of specific people. Hence, doing research on "Hispanic" or "Latino" cultures may not have rendered the same personalized results that these students experienced by meeting individuals from these particular countries.

Theme 3: Incorporating Translation in Technical Communication Workflows

Technical communication researchers are increasingly pushing for a move away from thinking of translation as an afterthought to content design and development. That is, as Batova & Clark (2015) explain, it is no longer enough

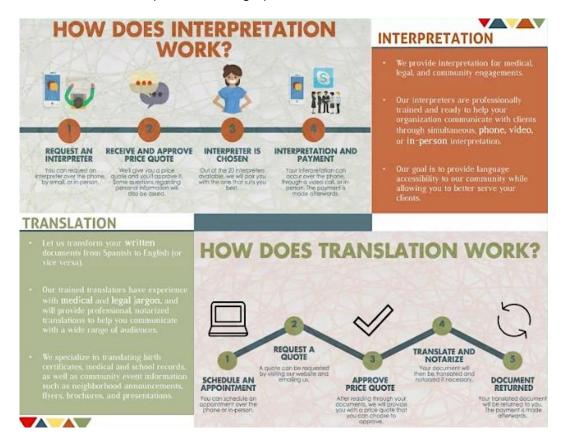
for information to be created in a single language to be later adapted into other languages and cultures. Instead, successful technical communication is now often created in multiple languages simultaneously, with designers, developers, and translators collaborating through several stages of the design and dissemination process (Gonzales & Zantjer, 2015; Maylath et al., 2013; Sun, 2012).

Through their collaboration with the Language Services department, students in this technical communication course were able to practice and visualize how translation can be incorporated into technical communication workflows. More specifically, one group of students focused developed infographics to describe the process of requesting and receiving translation and interpretation services through the Language Services Department. To do so, students had to consider the various activities enacted by employees in the Language Services Department throughout these transactions, considering how information moves across systems, documents, tools, and languages simultaneously.

Figure 5 (p. 98) represents a flyer designed by technical communication students after studying the processes of translation and interpretation as they are enacted in the Language Services Department. As the infographics in Figure 5 illustrate, translation and interpretation projects require the coordination of several activities, including an initial project assessment and quote, approval and negotiation of terms between the client and translator/interpreter, the completion of the translation project itself, as well as proofreading, notarization, and certification cycles.

To understand how employees in the Language Services department handled translation and interpretation requests, students in this group had to observe translation and interpretation projects as they get distributed among professionals from start to finish, understanding how information was being transformed across languages for particular clients. For example, students in this group learned how one translator researched the specific cultural background of her clients before deciding on specific Spanish word choice translations. Students observed as translators converted files from various formats into editable texts that

Figure 5Translation and Interpretation Infographics



could be adapted and revised. Finally, students observed as translators made specific design decisions throughout their translation process, providing mirror translations that gave access to information for both professional clients and for community members. For technical document translations, for instance, the project manager in the Language Services Department had to contact translators with certain types of language and technological expertise, in order to ensure that the translation would adhere to professional standards in specific areas (e.g., medical, legal, areas).

Through this work, in addition to developing materials for their partnering organization, students also developed a critical understanding of how

communication can be designed specifically for multilingual audiences. In her course reflection, another student, Grace, described her experience designing these workflow infographics for translation and interpretation projects, explaining,

For me, the experience of creating translation and interpretation infographics was about learning to ask questions that considered all the people we serve as communicators before crafting any content. To me, all communication should be ethical communication—or communication that aims to reach diverse users in their language of choice. This means that as technical communicators we can't expect our messages to be understood by all, but we must do the research to ensure that we are meeting the cultural and language expectations of our clients and communities. It's not enough to only consider one audience, but we have to consider multiple audiences from multiple backgrounds. In the case of our flyer and infographics, we had to think of a way to honor the work that translators were doing while still communicating the information clearly to potential clients.

Grace's discussion of the need to conduct research "before creating any content" exhibits the complex, iterative design cycles that technical communicators must engage in when working with translators to disseminate content across languages. Although Grace herself was not creating content in Spanish, her experience working with interpreters and translators in this collaboration, specifically seeing how information is transformed across languages, helped her understand the need to pause and ask questions before making assumptions about how information may be received by specific users. In addition, Grace's concern with "honor[ing] the work that translators were doing" in communicating with clients echoes current calls to further understand translation as an intellectual practice relevant to technical communication work (Maylath et al., 2013; Walton, Zraly, & Mugengana, 2015).

Implications, Limitations, and Conclusions

Embedding training in translation and cross-cultural communication is not a new phenomenon in technical communication programs. For example, since the late 1990s, collaborations within the Transatlantic & Pacific Project led by Bruce Maylath at North Dakota State University have been pairing technical communication students in the US with translation students across the globe, leading to dozens of publications describing the impacts of translation and technical communication collaborations (Vandepitte et al., 2015; Sorensen, Hammer, & Maylath, 2015; Verzella & Mara, 2015).

The projects and partnership described in this teaching case and industry perspective are unique in that they illustrate how technical communication students enacted design and writing activities in their work with a professional translations office. Unlike previous translation-technical communication partnerships, the final deliverables in this case study included visual tools and designs that are reflective of the type of products technical communication students may develop in contemporary workplace contexts. The focus here was not necessarily on linguistic transformations alone, but rather on how visuals, technologies, and media could be used and adapted to meet the needs of linguistically and culturally diverse users. Through this work, students practiced the technologically-mediated elements of technical communication, while interacting with professionals and community members with diverse histories and perspectives.

Rather than having theoretical discussions about cross-cultural, multilingual technical communication and then fitting these discussions into practice across media, this course was designed to help students make these connections through their own experiences. Students had to understand how tools and technologies facilitate and limit communication, particularly in cross-cultural, multilingual environments. In turn, situating this partnership with a small Language Services office located within a non-profit organization also provided some perspective for technical communication students aiming to work in community-driven organizations with limited resources.

Although this particular case study is an isolated instance of a technical communication and translation partnership, the presented implications of this project suggests future studies could further explore how translation training can impact the training of contemporary technical communicators aiming to write and design technology-mediated content for diverse communities. Students' final reflections and their emerging definitions of technical communication suggest that this partnership provided an opportunity for self-identified "monolingual" students with limited cross-cultural experience to more deeply understand the constraints and affordances of successfully executing technical communication work for multilingual audiences. As technical communication researchers and practitioners continue developing strategies for preparing students to succeed in the constantly enacted in contemporary professional contexts, partnerships like the one described in this study may prove increasingly valuable. More importantly, as we continue training technical communication students in the United States to work ethically and responsibly with diverse users, it's important that we continue highlighting the importance of cross-cultural collaborations grounded in reciprocity and integrity, where all linguistic and cultural knowledge considered intellectual, valuable, and critical to successful technical communication.

Notes

In this article, I use the term "monolingual" to reference individuals who selfidentify as speakers of a single named language (i.e., English). I acknowledge that the term monolingual is broadly contested and is frequently used in relation to additive models of language and language acquisition. However, I use the term monolingual in this article with an understanding that languages are fluid and constantly evolving, and that there are multiple Englishes used in various cultures and contexts within and beyond the US.

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