# 4. User Experience and Transliteracies in Technical and Professional Communication

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**Abstract:** Drawing on data from a user experience (UX) class facilitated at a university on the Mexico/U.S. border, this chapter connects concepts of transliteracy and UX, positioning these frameworks as useful models for introducing students to intercultural technical communication. Using student narratives and course assignments, the authors trace students' connections to intercultural communication, UX, and transliteracy, while also assessing students' experiences in a piloted UX class. Ultimately, the authors argue that by incorporating UX strategies and practices in curricula, and by providing students with opportunities to reflect on their own connections to UX course concepts and tools, technical and professional communication (TPC) programs can continue to "emphasize the complexities of culture" and the role of technical communicators as designers who create meaning among and across "texts, contexts, artifacts, and media" (Walwema, 2018, p. 335). The authors suggest that multidisciplinary approaches that pair UX and transliteracy can introduce new students to intercultural technical communication while also providing avenues for students to shape and localize course design and content through their own interests, backgrounds, and experiences.

**Keywords:** intercultural communication, localization, participatory design, borderland UX, journey mapping

**Key Takeaways:**

- Incorporating UX research methods, specifically affinity diagramming and journey mapping, into course design research can provide useful feedback for instructors and programs seeking to incorporate UX and technical communication courses in their curricula.
- Instead of waiting until the end of the semester to formally assess student data and make curricular changes in a transliteracy-focused UX course, a reflexive and iterative feedback loop during the course allows instructors

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to make curricular changes throughout the semester as they trace students' experiences alongside students themselves.
- Transliteracy is a helpful framework for bridging connections between UX and intercultural technical communication.
- Combining transliteracy with iterative course design practices drawing from UX can bring empathy, efficiency, and emotional engagement by intentionally co-creating experiences with students.

While many technical and professional communication (TPC) and writing studies programs incorporate and acknowledge the value of user experience (UX) pedagogies and training for students, not all programs have established infrastructures for teaching UX. In these cases, faculty may have the challenge of developing UX courses for and with students and other faculty who may not have previous experience in this area. This was the case for Laura, who was faculty in a rhetoric and writing studies program that wanted to increase training for graduate students in technical communication and user experience. In the fall of 2017, Laura piloted a UX course as a special topics offering for M.A. and Ph.D. students. In this course, Laura used the concept of transliteracy as a way to connect her students' previous experiences and interests with concepts in UX. She also incorporated elements of UX research practices, such as affinity diagramming and journey mapping, into her course assignments to gain iterative feedback from students throughout the course. This approach helped illustrate how students in Laura's program, many of whom came from composition, literature, and philosophy backgrounds, oriented to and engaged with UX research practices and methodologies, particularly as they prepared for an increasingly competitive job market.

Rather than starting the course with a more traditional discussion of technical communication and UX, starting with the concept of transliteracy allowed Laura to begin her course by asking students to examine their own transliteracies (i.e., ability to read, write, and interact across a range of media) and interests as they intersect with various platforms, tools, and media, ranging from different social media platforms to material practices that they navigate in their everyday contexts. *Drawing on these experiences, as well as on Josephine's training and experiences in intercultural technical communication, this chapter threads concepts of transliteracy, UX, and intercultural technical communication.* In addition, we discuss how incorporating UX research methods, specifically affinity diagramming and journey mapping, into a piloted UX research course can provide useful feedback for instructors and programs seeking to introduce UX and technical communication courses in their curricula.

## Defining Transliteracy

For students from interdisciplinary backgrounds, such as those introduced in this chapter, the concept of UX and the field of technical communication might ini-

tially seem disconnected from other fields traditionally found in English studies, including literature, creative writing, English education, and even rhetoric. Because UX has historically emphasized White/Western concepts and approaches, these areas of work may also be unwelcoming to students from various racial, ethnic, and linguistic backgrounds (Cardinal et al., 2020). For these reasons, we, as authors of this chapter, find the concept of transliteracy to be a useful entry point into UX and intercultural technical communication, particularly due to transliteracy's emphasis on digital making and cultural localization.

A dominant approach to intercultural communication in TPC draws from Geert Hofstede's (1980) six cultural dimensions that subsume people's values within cultural differences, Edward Hall's (1976) low- and high-context cultures, and Fons Trompenaars and Charles Hampden-Turner's (1993) distinction between universalism and particularism. These approaches, while instructive in understanding differences across national cultures, are also abstract theories that can perpetuate preconceived notions of people and their cultures. Critical challenges to these dominant theories of intercultural communication argue that these theories view culture as a stable construct (see Spyridakis & Fukuoka, 2002; Honold, 1999) and nations as indicative of cultural differences (Walwema, 2018). Our study addresses these challenges by grounding our analysis of technical communication and UX in the concept of transliteracies (Thomas et al., 2007). In particular, we find Stornaiuolo et al.'s (2016) transliteracies framework fitting for our project in that it "examines the situated, contingent, and ideologically rooted nature of meaning making across modes" (p. 72). This framework is instructive in its attention to the way people make meaning both socially and materially. It allows us to account for the increasingly global movement of people; advances in the technologies they use (Gonzales & Baca, 2017); and, in the era of global migration, the expanded cultural, ethnic, and national backgrounds through which communication occurs. Based on this framework, we can tease out the myriad of subcultures that exist within perceivably dominant cultures (Vertovec, 2017), while simultaneously helping students new to technical communication and UX to see themselves as important contributors to these fields of study due to their own interests and backgrounds.

The prefix *trans-* articulates literacy beyond its *a priori* understanding of individual competencies to transliterate acts "across a broad range of communication platforms" and practices constitutive of all human activity (Stornaiuolo et al., 2016, p. 71). *Transliteracy*, then, is a means to interrogate participatory narratives that emerge from transcultural and cross-cultural communication; to make meaningful connections across media, boundaries, and spaces; and to develop a more expansive understanding of a people. This broad reading of transliteracies conceives of texts as inclusive of media across platforms. It encompasses not just digital technologies but also the social, cultural, political, economic, and historical practices from which texts emerge. It challenges established biases towards print text as the definition of literacy and the ability to read, write, and make (linear)

arguments, as opposed to other multimodal literacies in which meaning can be co-constructed through multiple media.

A transliteracies framework shifts the focus from individual ability to meaning making across technologies, platforms, and media. In essence, transliteracies are facilitated by humans' adaptations of technology to encompass "digital tools, multimodal representation, a global audience, and dynamic movement across physical, and virtual contexts" (Stornaiuolo et al., 2016). Consider, for example, thriving communities on social media such as Black Twitter and Black LinkedIn that convey the counterpublic voices of Black Americans. As Marc Hill (2018) notes, these spaces serve as "critical rejoinders" to, for example, Habermas' public square, which, in assuming dominant cultural norms, excludes the oppressed class. Through these media, Black Americans challenge dominant narratives about themselves and thus express their truth without the gatekeeping functions or boundaries imposed by White cultural dimensions. Similarly, Ashanti Martin (2020) observes that LinkedIn has, in the wake of the pandemic and the outpouring of grief over the killing of George Floyd, become Black America's "virtual water cooler" (para. 7), where Black Americans speak directly to business executives about workplace expectations of respectability and professionalism. The resulting texts generated in such forums, media, and platforms, be they audio or video, become sites and texts for critical interrogation and engagement. These texts act as knowledge sources invaluable to intercultural technical communication, as transliteracy practices are open to seeing cultures as dynamic and people's movements, interactions, languages, and artifacts as constitutive of texts worth critical examination. This fluidity among cultures and digital platforms is at the core of what we want to teach our students in UX—to develop methods for understanding culture not as a fixed entity, but as fluid, constantly emerging, and iterative. Transliteracy thus provides students with an entry point into broader conversations in UX regarding user research and ethical technology design. As we will illustrate in the next section, we use transliteracy and its connecting of culture and media as an overall orientation and approach to teaching UX and technical communication, particularly when introducing new students from diverse backgrounds into the practices, theories, and orientations of these fields.

## User Experience and Transliteracy

According to the International Organization for Standardization's (2019) definitions of ergonomics of human-system interaction, *user experience (UX)* encompasses a person's "perceptions and responses that result from the use and/or anticipated use of a system, product or service" (section 3.15). User experience researchers are concerned with understanding how a person feels when using a product, service, or interacting with an organization (Rose et al., 2017). As the contributions in this collection make clear, UX is increasingly gaining attention in technical communication curricula, although, as Janice Redish and Carol Bar-

num (2011) argue, the two fields have always been closely related and intertwined. As these overlaps continue, we argue that UX, particularly when taught through a transliteracy approach, can provide an avenue for programs to prepare students to engage with increasingly global and diverse communities, understanding the fluidity embedded in communication practices across platforms and cultures. As Emma Rose et al. (2017) explain, "Technical communication has had an intertwined history with UX and the skills that technical communicators possess overlap with those required in UX positions" (p. 6).

Increasingly, just as with technical communication research and practice, UX researchers and practitioners acknowledge the presence, importance, and value of *user localization*, which Huatong Sun (2012) defines as "design situations of localizing a technology for assorted local cultures and those of designing a technology for collaborative use between users from different cultures at the same time" (p. xvi). UX, through its "shift from a systems-centered approach to a user-centered approach" (Rose et al., 2017, p. 3) can help emphasize the *humanistic perspective to technical communication*, which Natasha Jones (2016b) defines as the understanding "that technical communication is not neutral or objective. Instead, technical communication is imbued with values" (p. 4).

In "Social Justice in UX: Centering Marginalized Users," Rose et al. (2018) use UX frameworks, methodologies, and practices to "center groups that are often overlooked or marginalized to consider how design, methods, and practices might shift and change . . . through the lens of social justice that can reinvigorate design practice and its impact with an attention to oppression" (p. 1). In this piece, Rose et al. (2018) present several projects that leverage methods and practices in UX to enhance cultural awareness and sustainability, arguing that "a social justice perspective can reinvigorate ethical discussions of design" (p. 1).

As previous research demonstrates, UX is a valuable field that can help students to practice a cultural awareness across various platforms and media. As an innovative framework, UX can be deployed to tackle social issues that are constantly shifting and that resist single solutions. Although many programs and courses have argued for the value of UX training, particularly within technical communication curricula, the notion of technology design and UX research more broadly can be intimidating to students who do not have experience in this area, especially given the overwhelming whiteness of UX as a field and industry.

Transliteracy can be a starting place for innovating UX that traverses cultures and addresses stakeholder needs. It frees UX design from pre-conceived constraints; produces new paradigms; and allows UX to listen to cultures and people, preferably in their own words, spaces, and mediums, by providing channels through which this knowledge can be accessed. Like UX, transliteracy begins by developing and understanding insights about the people we intend to work with. Bringing a transliteracy perspective to UX practice allows students to work toward centering users' cultural traits in the design process; to avoid making assumptions of users; and to research culture more expansively beyond academic

journals in order to design tools and technologies that are reflective of local users, avoid stereotypes, and differentiate stereotypes from cultural characteristics. The transliteracy model helps UX designers determine what the target culture communication patterns might be. By gaining a snapshot of the communication environment in a particular culture to discuss implications for intercultural UX, technical communicators can interpret what they have listened to, generate new ideas, and incorporate those ideas to create UX that emerges from the users' sociocultural contexts.

UX research practices can also provide valuable opportunities for instructors and program administrators to design courses that are localized to students' needs and interests. Designing curricula through a UX orientation can provide insights into how students understand course concepts and ideas, allowing students to become co-creators of their own pedagogy. As Ann Shivers-McNair et al. (2018) explain, "a collaborative approach to designing and redesigning for usability not only in the structure of a class, but also in the projects that happen in and beyond that class" can help instructors to "implement participatory, accountable user-centered design (UCD) principles and practices in their teaching and writing" (p. 36). Thus, as Laura piloted a UX course through a transliteracy approach, we (the authors of this chapter) also employed UX methods and strategies to assess students' experiences with course content.

## Using UX Methods to Trace Students' Journeys in a UX Course

In this classroom case study, we demonstrate how transliteracy in UX functioned in a graduate course with students from various racial, linguistic, and disciplinary backgrounds. Since this is not an empirical study of classroom practice but is instead an experiential pilot study of a single course, in the following sections we provide details about the course content, readings, and assignments, before presenting narratives from four students who illustrate, in their own words, how they oriented to UX and transliteracy through their own projects. The purpose of sharing these narratives and examples is to continue expanding the frameworks through which UX is introduced and taught in interdisciplinary programs, particularly with students from non-traditional backgrounds.

### Course Overview

The UX course piloted by Laura took place at a university situated on the Mexico/U.S. border. The course consisted of 12 graduate students, all of whom were enrolled in a rhetoric and writing studies program at either the M.A. or Ph.D. level. In the borderland context in which this course was situated, community members (including the students in the course itself) communicate across a wide range of media as they move across the Mexico and U.S. borders. For example,

several of the students in this course (as well as the students in the university more broadly) live in Ciudad Juarez, Chihuahua, Mexico, and commute to El Paso, Texas, to attend school each day. Through these transitions, students engage in transliterate practice as they communicate in various languages (including Spanishes and Englishes) across digital platforms that have different functionalities on each side of the border. These platforms include international messaging apps like WhatsApp, social media platforms like Instagram and Snapchat, as well as learning management systems and cloud-based services like Blackboard or Google Drive. In this way, although students in this particular course did not identify previous experiences with UX before starting the course described in this chapter, students did have ample experience engaging with transliteracy. Thus, bringing UX and transliteracy concepts and practices together in the course allowed students to recognize their own expertise in these areas while also learning new methods for technology design.

## Methods

In order to both get insights into how students from various disciplinary, linguistic, and cultural backgrounds oriented to UX and transliteracy and to get feedback from students in this pilot course, we incorporated assignments and activities that allowed students to trace their journeys through their course and report their findings. We also engaged in iterative analysis of student work, both as faculty and researchers in UX and in collaboration with the students themselves. Rather than being an empirical study of student work, this course was an experiential pilot study intended to facilitate pedagogical and curricular improvements. Instead of waiting until the end of the semester to formally assess student data and make curricular changes, the reflexive and iterative feedback loop between students and the instructor allowed us to make curricular changes throughout a single semester as we traced students' experiences alongside students themselves. All 12 students in the class completed the same assignments and participated in the same discussions, and we obtained Institutional Review Board (IRB) approval (identification number 1201128-1) to publish student work stemming from this course.

In this chapter, we draw on our own experiences working with students in this course while also including narratives from four students who expressed interest in publishing their journeys through this course in this particular collection. The four students are Estefania, a transfronteriza Chicana student who lives in Juarez, Chihuahua, Mexico, and commuted to school in El Paso, Texas; Mohammed, an international Ph.D. student from Ghana who previously studied English literature and philosophy; Corina, a Chicana student in her second year of her Ph.D. program in rhetoric and writing studies; and Jennifer, a White Ph.D. student in rhetoric and writing studies who also works as a K-12 teacher.

We eschew conducting formal analysis and coding of student projects in favor of incorporating unedited narratives from students into this chapter while

discussing how these narratives and their surrounding discussions shaped the structure of the course itself as well as our own understandings of how UX and transliteracy came together throughout the class. Because students enrolled in the course were graduate students, we felt that it was important to include their perspectives on course material without positioning these perspectives as our own. Furthermore, drawing on important work on the value of narratives in technical communication and human-centered design (Jones, 2016a), we wanted to include complete student narratives to thoroughly illustrate students' experiences in their own words.

Collaboratively, the authors of this chapter and all students in the course practiced UX methods to assess and evaluate the course experience on a weekly basis, as well as to assess how students' definitions of UX were developing throughout the course. For example, every two weeks, the class used affinity diagramming to come up with themes and illustrations of course concepts. According to Kara Pernice (2018) , *affinity diagramming* is a UX research method intended to "efficiently categorize then prioritize UX ideas, research findings, and any other rich topics" along with various stakeholders (n.p.). In the class, students would use sticky notes to define UX as they saw it at that point in the semester, and then they would theme the definitions based on similarities. For instance, in the affinity diagramming exercise that students completed as they were reading Indi Young's *Practical Empathy*, students defined UX on their sticky notes as "combining your heart and your brain," "learning to see the world through another's eyes and ears," "listening to user's stories and experiences," and "understanding that failures are part of the UX design process." Then, students grouped these definitions under the theme of "empathy," which they then discussed through the week's readings, through their presentations of current apps and platforms, and through their practicing of different UX research methods as described in Baxter et al.'s (2015) *Understanding Your Users: A Practical Guide to User Research Methods.* By tracing the development of students' definitions of UX throughout the semester, we could consistently assess the impact that course readings and activities had on student learning while also making adjustments to the readings and other course materials when necessary.

In addition to in-class activities, drawing on the concept of *journey mapping*, which Sarah Gibbons (2018) defines as "a visualization of the process that a person goes through in order to accomplish a goal" (n.p.), students provided weekly feedback that reshaped the course through their comments on a collaborative Google Doc that we called the Notebook of Relations. As stated on the course syllabus, the purpose of this Notebook of Relations was for students to "practice collaboration and content management, which are critical components of UX and tech comm research and practice." Each week, each student was expected to contribute approximately 500 words to the Google Doc, where they were to synthesize the readings for the week, make connections between each other's assessments and discussions, and reflect on what they were learn-

ing in the class as a whole. Instead of individual reading reflections, the Notebook of Relations was intended to be a space where students made purposeful connections not only across the course readings, but also between the course readings and outside content, their own interests, and each other's evaluations. In this way, the Notebook of Relations served as a space where students practiced transliteracy by making purposeful connections across disciplinary conversations while simultaneously working across platforms as they moved from taking their individual notes to organizing and curating notes in a collaborative document.

As a journey map that provided insight into both individual and collective student experiences, the Notebook of Relations also allowed both the instructor and students to make adjustments to course content based on iterative feedback throughout the semester. For example, as students made connections between the course readings and their own interests, one student commented in the Notebook of Relations that he was interested in learning more about content strategy, especially as it relates to the design of non-governmental organization (NGO) websites that depict African communities (communities that he is invested in as an international student from Ghana). Based on this comment, the student and two classmates searched for and selected readings on content strategy that the whole class read and that these three students in particular presented in class in lieu of their previous presentation plan. This flexibility and reflection throughout the course allowed students to more mindfully engage in their own learning, while also helping the course instructor and other interested stakeholders to trace the themes and issues that most resonated with students in this pilot class.

At the end of the semester, students were asked to condense their Notebook of Relations into written course reflections that also drew on journey mapping methods by asking students to discuss their journeys through the class and their growing understanding of UX and transliteracy in this context. Through these narrative reflections, the course instructor, as well as program administrators, gained insights into how students from diverse disciplinary, cultural, and linguistic backgrounds oriented to UX concepts and ideas. In this way, these journey maps served as reflections on a single course while also informing the development of future courses and program structures. By incorporating UX methods in the design of a course focused on transliteracy and UX, we were able to trace how students made connections between culture, literacy, usability, and ethics throughout a semester.

## Course Goals

As stated in the course description, the UX course that we describe in this chapter was intentionally positioned as interdisciplinary, drawing from fields like rhetoric and writing studies, technical communication, and literacy studies. Leverag-

ing students' diverse cultural, racial, linguistic, and disciplinary backgrounds, the course took on a transliteracy orientation by encouraging students to recognize the fluidity of languages, cultures, and media as they are enacted in their own transnational context on the Mexico/U.S. border. For example, students practiced UX methods in the course, including contextual inquiry, field studies, card sorting, participatory design, interviewing, focus groups, and usability testing. They practiced these methods by making connections to their own disciplinary interests and applying new skills and frameworks to established skills. For example, one student in this course identifies as a veteran with previous training in journalism. For his project, he brought together a group of veterans in his community and conducted focus groups about veterans' experiences at their university. Through several focus groups and interviews with veterans in the area, this student created a participatory design project intended to inform university stakeholders about the needs that veteran students may have on campus. This project required collaboration between the on-campus veteran services office, the disability services office, and the writing center. Throughout the course, the student involved in this project referenced his training in journalism as a skill that allowed him to condense the perspectives of various stakeholders and report them to different units on campus to facilitate communication in this participatory design project. A transliteracy approach, in this case, allowed this student (as well as others in the course) to identify how their interests and previous skills could merge with new course content.

Course texts included readings specifically on transliteracy and technical communication (i.e., Walwema's [2018] "Transliteracies in Intercultural Professional Communication), as well as readings that introduce transliteracy concepts in rhetoric (e.g., Horner et al.'s [2015] discussion of transmodality and translingualism, Shipka's [2016] discussion of transmodality, Gonzales' [2015] discussion of translingualism and rhetorical genre studies, as well as Alim and Pennycook's [2007] "Glocal Linguistic Flows"). In addition, students read Indi Young's (2015) *Practical Empathy*, Janine Butler's (2016) "Where Access Meets Multimodality," Sean Zdenek's (2015) *Reading Sounds*, Huatong Sun's (2012) *Cross-Cultural Technology Design*, and Whitney Quesenbery and Kevin Brooks' (2010) *Storytelling for User Experience*. To practice UX research methods throughout the course as they developed their own projects, students also read and took turns presenting on various chapters in Baxter et al.'s (2015) *Understanding Your Users: A Practical Guide to User Research Methods.*

The purpose of pairing interdisciplinary readings together in the course was to find points of connection between students' backgrounds and interests and what was a totally new field of study for them: technical communication and UX. Further, by incorporating readings across areas, students had the opportunity to not only read about but also practice transliteracy, as they made connections across discrete areas of study, platforms, and contexts, as well as cultures, through their course projects.

## Course Assignments

In addition to the Notebook of Relations and the final narrative reflection, each week, one student presented a short (approximately 5-minute) discussion on a tool or technology that exhibited some of the conversations and practices that were discussed in class. For example, one student shared the Calor App, which is an Apple Watch-compatible app that is being designed to monitor body temperature and is intended to prevent heat strokes for farm workers who work in extreme temperatures on a daily basis (https://startsomegood.com/calorapp). Through their brief presentation, students were to not only discuss the features of an app but to also assess the implications and design of the app as it pertains to various populations. For example, the student discussing the Calor App not only analyzed the design of the proposed app platform but also brought up potential implications of this design, including the fact that having farmworkers wear an Apple Watch had implications of privacy issues, especially in relation to location tracking and documentation status. In this way, students considered not only the profits, design, or usability of a potential platform but also the implications that new designs may have for these particularly vulnerable workers and, more broadly, for historically marginalized communities.

The biggest project of the semester was a research project that asked students to "practice UX research methods discussed in class (e.g., community-based UX, focus groups, usability tests, cognitive walkthroughs, among others) to answer a specific research question of interest." Because all of the students in the class came from different linguistic, cultural, national, and disciplinary backgrounds, students approached these projects through different orientations, and they selected UX research methods that connected to their specific interests. As demonstrated by the student narratives that follow, students' orientations to UX were enhanced by an awareness of transliteracy and through constant discussion about the value of intercultural communication in technical fields.

## Student Narratives

At the end of the course, students were asked to develop a UX research project that reflected both their definitions of and orientation to technology design. Students were to practice UX research methods in the project, and they were to then present their projects to the class at the end of the semester. In these presentations, students discussed the design of their projects as well as how they defined and redefined transliteracy and UX throughout the course. In these presentations, students also provided feedback related to the course structure and focus, explaining how their own interests in UX shifted as they read and discussed work across fields throughout the semester.

In keeping with the transliteracies framework, in the sections that follow, we introduce narratives written by four students in this course where they describe

their journeys in coming to understand UX through their course experiences. In addition, students also discuss their own backgrounds, interests, and positionalities in relation to our course context and to their broader community within and beyond the university. Given that the purpose of this collection is to "practice user experience as a process for developing new frameworks, such as program design, curriculum, and technologies," we incorporate space for students to reflect on their own experiences with UX as both course content and process. We believe that the narratives that follow illustrate the importance and value of introducing UX through a transliteracy approach that highlights the importance of movement across languages and media simultaneously. The narratives also showcase how the iterative design of the course, which incorporated students' interests and feedback throughout the semester, allowed students to feel more connected to UX principles and practices that in turn motivated them to see themselves as part of this growing field.

## Estefania

My name is Estefania and I am a *transfronteriza* student living in the Ciudad Juarez and El Paso border. Being from Ciudad Juarez and commuting to the United States to study all my life has really influenced the way that I identify myself and the work that I choose to do today. For the longest time, I felt torn between two opposing identities from both my home life and my academic and social life. I always felt like an outsider in the cultures which surrounded me, hanging somewhere in between Mexican and American cultures. It was only when I decided to define my own identity that I began to feel more comfortable in this culturally rich and diverse border community. Today I embrace my transfronteriza Chicanx identity in my personal life and in my work as a UX researcher.

Commuting every day and switching between cultures every single day has really made me aware of how these daily normal practices fit into UX. We cannot make products that are human-centered if we do not take into account that we have diverse audiences with various and unique needs that should be met. If we pay more attention to our users and understand where they come from and how this translates to different needs since the beginning, we will be able to create a product that can be used by many. While serving the needs of diverse communities, we will create more accessible content for all audiences.

For example, in my course project, I conducted usability tests of online graduate school applications for international students so that they can become more user friendly to these students. The graduate school application is already a complex and lengthy process, and this process is often even more complicated for international students because of the extra requirements and lack of information. Taking a closer look at application websites through a transliteracy approach, it is easy to see that there is a need for these websites to become more accessible and

easier to use for international students. My goal is to take the needs of international students and to make sure that they are being addressed by the application websites. By meeting the needs of the different users, the end product will be more accessible and user friendly for everyone.

## Mohammed

I am from Ghana, West Africa, and have varied proficiencies in six languages: English, Arabic, Hausa, Dagomba, Akan, and Ga. Culturally, I exhibit different ways of being and doing, but the most dominant ones are my Islamic culture and my Ghanaian culture.

I think UX promotes diversity and inclusivity in ways that give certain populations access to certain technologies. However, embedded within the expansion of access to some populations are ideological elements that point to issues of domination/superiority. For example, I bought my laptop in Saudi Arabia where Arabic is the dominant language. Although the laptop has both Arabic and English alphabets on the keyboard, the English letters and symbols are more prominent than the Arabic ones, and yet the target population for this laptop is people who barely speak any English. Undoubtedly, the bilingual keyboard gives access to Arabic speakers to use this laptop, but the Arabic alphabet is smaller in size than the English one, making it more difficult for Arabic users. The question is, why would the English alphabet be more prominent (or even be present) on a laptop targeted at Arabic speaking customers? I see some little tension between both languages any time I use my laptop.

My UX project focused on content strategy with particular emphasis on the (mis)representation of African communities on the websites of Non-Governmental Organizations (NGOs). Through a focused group discussion with four graduate students from four different African countries and usability testing on the websites of two NGOs, this project highlighted the user experience of first-time potential donors and discussed how non-profit organizations' misrepresentation of Africans may affect the former's attraction of donors within the African community. Although the participants were diverse culturally and technologically, one of the profound issues that was discussed across the board by the participants was the projection and homogenization of African communities as indigent populations in dire need of rescue. This homogenization was evident in the images and videos on the websites of the two NGOs that were used as a case study. Donors on the websites were mostly white, while beneficiaries were either Africans or some other non-white populations. The participants could not identify with donors portrayed on the websites, and they indicated that this could potentially affect their decision to donate. Consequently, at the end of the project, I made recommendations about technology design decisions that website developers can incorporate to reposition African communities as active contributors to and not merely beneficiaries of the oper-

ations of NGOs. This is not only ethical, but it will also help NGOs to attract more donors from African communities through online platforms.

## Corina

My hometown is El Paso, Texas, and it was not until recently that I understood the significance this small fact had in my life and hopefully my future. During my undergraduate years, I worked as a notetaker/scribe for the Center for Students with Disabilities. As a notetaker, I was assigned certain students facing different physical, sensory, or cognitive disabilities. I was then provided with a schedule of their classes (including math, science, English, and others), which I would attend on a regular basis. In spite of the high degrees of diversity embedded in this seemingly simple task, one aspect of taking notes was always unwavering and stagnant. All notes had to be taken strictly following the Cornell note-taking system, a method devised in the 1940s by Walter Pauk, an education professor at Cornell University. The notes were extremely structured, as they followed specific guidelines such as maintaining two columns for questions and synthesis and leaving five to seven lines at the bottom of the page for an overall summary. Reflecting back on this experience with a rhetorical lens and with a focus on transliteracy, I can clearly see a clashing of ideologies, technology design, identities, as well as a lack of user-centered design or user experience embedded within this note-taking method.

It is unlikely that Pauk's perception of a student when developing Cornell notes in the 1940s was a Hispanic eighteen-year-old student who is visually impaired but appreciates progressive metal and lives in the border town of El Paso in the 2000s. Not to mention the complicated power dynamic of having a twenty-year-old Latina student possibly majoring in Journalism with a different set of values and experiences shaping her definition of "good notes" take those notes and then make a copy and place them in a folder with the student's name in an office to avoid all contact or feedback. Despite the mission of the center to provide students with an equal opportunity to complete their educational goals, these methods for providing accessibility did not problematize common notions of usability based on normalizing behaviors that also positioned technology as a unidirectional process or tool.

Many of these past experiences understanding the important and often suppressed role identity plays in technology design encouraged me to take a risk in my UX and technology course at my current university. In this course, I presented on the article titled, "Beyond Compliance: Participatory Translation Safety Communication for Latino Construction Workers," by Carlos Evia and Ashley Patriarca (2012). The study focuses on the challenges and responsibilities that come with developing cross-cultural communication strategies to ensure Hispanic construction workers' safety. The authors mention that for one of the workshops for construction workers, lotería, a game like BINGO commonly played in

Mexican households, was chosen as a learning activity. Since, from a participatory approach, games "are a way to create a common language, to discuss the existing reality, to investigate future visions" (Ehn & Sjorgen quoted in Evia and Patriarca, 2012, p. 354), the authors mention the lotería cards were successful in communicating technical information to Spanish-speaking audiences in part due to the deep roots the game holds with the Hispanic community. The idea presented in the article made me question the activity I would be presenting for class and gave me a sense of responsibility. This responsibility encouraged me to view lotería no longer as a game but as a pedagogical tool in technical communication, especially in an academic institution with a predominantly Hispanic population.

Lotería as a technology design strategy pushes towards multimedia pedagogical practices and moves past a technical and objective view of technology towards a culturally situated practice. Lotería ceases to be defined simply as a Mexican game for entertainment and helps students analyze the ways in which culturally-sustaining games can invoke community memory and performance. Therefore, I reviewed some of the readings for the class and chose some of the key concepts and terms and developed a class set of cards to play lotería in class. I created game boards that listed common concepts in the course, such as "UX," "usability," "affinity diagramming," "social justice," and "translation." During my presentation, each of my classmates had a gameboard with these words listed in a randomized order. To play the game, I read definitions in a randomized order, while my classmates looked on their gameboard to see if the definitions I read aloud correlated with the key terms on their game boards. Every time I read a definition that matched a key term on their boards, my classmates would put an "X" on their boards in the corresponding spot (similar to the rules of BINGO). The first person to get five "Xs" in a row would yell "lotería!" to signal that they had won the round. Through this game, my classmates had to know the definitions of all the keywords listed on their boards, in order to know when they should mark a spot with an "X." For many of my peers, the memory of having played lotería before became evident in their enthusiasm and engagement with the activity. It is necessary for students, technical communicators, and scholars to reflect on the ethical and social responsibilities embedded in language use and pedagogical choices allowing for practices that promote students' cultural expertise, diversity, and agency.

## Jennifer

I am a full-time high school dual credit English teacher and full-time Rhetoric and Writing Ph.D. student.

Public school classrooms are designed for an able-bodied, English-speaking audience, as are the tools and technology provided to assist teachers. I have been gifted with a variety of students, all of whom come with their own idiosyncrasies, proclivities, and abilities. My border school is Spanish-speaking dominant and,

as a gringa from Idaho, I always need to be cognizant of cultural differences and do my best to teach variety in language instead of colonizing my pupils with Standard English. This year, I had the honor of teaching a deaf student. After twenty minutes of our first class, I realized that her experience of my classroom would be vastly different from the experience of her peers.

Laura's user experience class taught me to initiate participation design that goes beyond allowing students to pick their own seats. As part of my research for my UX class project, I sat down with ASL [American Sign Language] interpreters at my school, my student, and a set of paper shapes that represented desks, projectors, the students, interpreters, and everything else that manifests in the classroom. We had a conversation about where everything was located in class throughout the course of a day and discussed how we could rearrange the classroom so that the student had a more in-depth experience of the class and so that the ASL interpreter was more comfortable and felt like part of the learning experience instead of an accessory. My student delineated places that she could not see me or had trouble keeping track of me (I'm an animated teacher) and the interpreter at the same time. She was able to, using the paper shapes, show me paths I could take around the classroom that would keep her involved because in every class experience there are the inside jokes that help the class bond and the side conversations that clarify and contribute to understanding content material.

We talked about the tools of the classroom and what technologies help build knowledge. ASL's grammar is different from English; thus, reading for her did not necessarily mean quick comprehension of written texts. Utilizing the principles of UX, we were able to design a classroom experience that included my student and taught me that the material world we live and learn in is imbued with ideologies that caters [sic] to the dominant norm. Utilizing UX helped me not only uncover unconscious assumptions about students that do great damage, but it also provided the tools to build a more inclusive classroom.

## Implications

A transliteracy orientation to UX encouraged students to make connections between race, nationality, culture, language, and the technology of design. As the student narratives demonstrate, it is not enough for UX to consider diverse users; it has to take the next step of understanding users' sense of who they are in order to address their needs in a more targeted way. The narratives show that UX through a transliteracies framework encourages UX researchers to look more closely at the inequities that manifest in products and services. This is exemplified by Mohammed's narrative on the English subordinated laptop when its intended users are speakers of Arabic, the donor-recipient calculus on the non-governmental agency website that depicts Africans homogeneously and as indigents, and the Cornell notetaking system described by Corina that was designed with a specific end-user in mind. Designing products this way may be a result of our

interpretations of dominant theories of intercultural communication that typically flatten cultures of entire continents like Europe, and, in this case, Africa without accounting for the multiple peoples, their values, ideologies, and the circumstances in which the product will be used. The transliteracies framework to UX was useful in identifying and describing the relevant contexts within which the research took place as part of the findings.

Typically, UX research occurs in focused group discussions, interviews, surveys, etc., which are one-off events that commodify or extract (Cardinal et al., 2020) participants' insights, which are then interpreted by researchers as codes and lenses through which one can understand communities. But those short-term exchanges do not tell the entire story of a people. A transliteracy framework allows the researcher to contextualize a people beyond those one-off exchanges. As the narratives illustrate, pairing UX methods with various community identities (e.g., students with various dis/abilities, African communities, Latinx communities) yielded projects that speak to rather than about (or worse, around) communities. UX-inspired assignments such as journey mapping, the Notebook of Relations, and affinity diagramming activities allowed students to speak back to what they were reading while applying these readings to their own interests, experiences, and research. As we continue developing courses that thread UX and transliteracy, we hope to continue embracing this iterative course design while also maintaining an emphasis on interdisciplinarity and intercultural communication.

Because transliteracies are integrative of a wide range of media, when coupled with UX—which draws from scientific, technological, and artistic sources—a transliteracy framework allows students to see all media (see lotería above) as valuable in understanding the everyday lives of people and to critically examine it (media) for its perceived benefits (see Mohammed's and Corina's narratives). And as transliteracies accommodate a wide range of media, students were able to orient their research skills to practices that would otherwise be zones of exclusion for communities moving fluidly among platforms, borders, and sites.

UX and transliteracy help us learn insights about people, what they value, how they relate, why they accept or disregard certain things, and how/why they make unspoken things known, visible in a sort of grounded approach to learning. Jennifer's discussion of working with a deaf student, for example, exemplifies a perfect pairing of UX with transliteracy by taking the student's needs into account and refiguring an inclusive classroom for student and interpreter. We often forget that academia is a privileged space for those unaffiliated with its practices. And while it is true that academic institutions introduce learners to and expand their knowledge of the academy, it is also true that learners come to us with knowledges that they may deem unworthy of institutions, but which, in fact, offer crucial foundations for and entry points into what we have to teach them. This approach helps students tap into what they know, allowing them to see that as integral to what they are learning.

A transliteracies framework in UX can lead to empathy beyond walking in others' shoes to yield cognitive and emotional insights into the communication needs of others. As a framework, it allows students to envision themselves as technology designers who can build infrastructure that can lead to positive change. For example, students were able to uncover technological needs that would not have been easily voiced in surveys, focus groups, or through other more traditional UX methods. Through transliteracy and UX, students were able to extrapolate meaning from both concepts to reimagine content management, to make purposeful connections among what might otherwise be disparate sub-disciplines, and to manifest their own expertise even when and where they were not aware they had it.

Operating both within the paradigm of scholarship, through close reading and analysis, and outside of it, students were able to chart new directions for UX in agentic and critical ways. We envision such forays both for the students and the communities they represent as helping to bring the academy and society closer. Furthermore, the iterative design of the course provided opportunities for students to see themselves as not only participants, but also as designers of the course who worked together with the instructor to reshape course content fluidly across projects, topics, and readings. A transliteracies framework in UX also assures that advocacy for users is done by both scholars and users. Rather than limit user responses to select quotes, a transliteracy framework values all user media, including audio or video stories, as legitimate sources of knowledge that together paint a panoramic picture of communities, and change minds and attitudes.

## Conclusion

We understand that the discussion we present in this chapter is limited to a small sample of students in a very specific location. Further, we realize that the course we discuss does not necessarily follow conventional themes, methods, or practices in more traditional UX courses that may be situated in traditional technical communication programs. Instead, what we present in this chapter is an illustration of an experimental UX course that took place with a group of students who did not have a background or training in technical communication or UX but who did embody many of the principles in transliteracy—mainly, a keen awareness of the connections between media and culture, an ability to move fluidly across cultural and technological boundaries to accomplish rhetorical tasks, and an understanding that tools and technologies are imbued with cultural ideologies. Through this course, we learned that incorporating UX practices in TPC programs can provide students with additional skills and experiences in learning cross-cultural and intercultural communication while also leading to the development of TPC programs that are user-centered and accessible. We saw constantly engaged students who held themselves accountable through transliteracy practices and in their "points of connection," thus manifesting the very attributes we want to impart.

The confidence accrued through course discussions and analysis of readings allowed students to reflect on the course content and to propose changes that were more aligned with what they were learning. Leveraging students' transliteracies helps bridge the gap between what students know and what content they need to learn. Granted, allowing for these kinds of shifts goes against some of our practices of planning the course ahead of time, but isn't the essence of UX iterative improvement based on user needs (Gonzales et al., 2017)?

Transliteracy in UX cultivates a kind of empathic understanding that spurs the imagination. It helps practitioners become attuned to the perspectives and intentions of communities they wish to impact. And in some sense, this pairing erases the binaries that are inherent in the very essence of UX and intercultural communication. Bringing UX and transliteracy together makes a compelling case for designing technologies and experiences that are attuned to people's sensibilities and way of being. Although we realize that the examples, narratives, and experiences that we share in this chapter are very localized to a specific course and context, we believe that the pairing of UX and transliteracy, as well as the attention to students' backgrounds and interests in designing UX curricula, can be incorporated into other programs and contexts seeking to introduce UX. The clear takeaway for UX and TPC is that combining transliteracy with iterative course design practices drawing from UX can bring empathy, efficiency, and emotional engagement by intentionally co-creating experiences with students to be better immersed in students' everyday lives.

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