

Guest Editors' Introduction to the Special Issue

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Introduction

For decades, “design” has been a cornerstone interest for technical and professional communication (TPC) practitioners, scholars, and program administrators who are concerned about the process and product of information structuring. By “structuring,” we mean the ways in which contents are sourced, created, arranged, edited, augmented, remixed, and delivered for specific audiences and purposes. These activities require skills for performing and knowledge for determining effective practices to achieve set goals—or, what scholars today call, “literacies.” TPC scholars like Kelli Cargile Cook (2002), Lee-Ann Kastman Breuch (2002), Stuart Selber (2004), Rachel Spilka (2009), Eva Brumberger, Claire Lauer, and Kathryn Northcut (2013), Marjorie Rush Hovde and Corinne Renguette (2017), and Dirk Remley (2020) have pointed us to various issues regarding modern literacy considerations and suggested several professional development strategies. Little has been said, however, regarding design literacy in TPC. While theories and studies have been published on doing design, focus has been given mainly to visual competencies (e.g., Bourelle, Bourelle, & Jones, 2015; Brumberger, 2007; Kostelnick, 1996, 2020; Portewig, 2004). But design is more than the visual. As such, we take on the challenge of expanding design as a core component of technical and professional communication—and by extension, user experience (UX) and usability studies, information and content strategy, instructional design, and specialized com-

munication (i.e., scientific, medical, legal, etc.)—by connecting it with TPC programs, pedagogies, and practices. We do so by following the leadership of those who have set this kind of work in motion (Carliner, 2001; Gonzales & Turner, 2017; Redish & Barnum, 2011; Zachry & Spyridakis, 2016).

Now more than ever, due to the increased dependency on information communication technologies, we are presented with opportunities and concerns regarding the application of design, and particularly “design thinking” (illustrated in Figure 1), as a manifestation of user-centric philosophy and methodology for problem-solving in TPC contexts. As we highlight below, design thinking is a complex yet suitable approach to our pedagogies and practices. Nevertheless, for TPC programs, questions remain with regard to design and design thinking’s affordances as well as limitations for TPC programming and professional development. For these reasons and more, we are thrilled to co-edit this special issue of *Programmatic Perspectives*. After meeting in person for the first time and exchanging ideas at the 2022 CPTSC annual conference in Colorado Springs, we both were sure there would be interests and concerns about an emphasis on design in TPC programming and pedagogies. We wanted to learn more about the different methods and strategies TPC professionals employed to tackle local problems. Hence this special issue.

Interrogating the “D” Word: Motivation for this Special Issue

By now, we have mentioned design—the D-word—a few times. For readers who are new or already familiar with it, we situate design here within the TPC landscape. The “design turn” TPC has surfaced as a disciplinary interest in the last two decades or so as scholars and educators investigated the emergence and applications of design-centric models for the purposes of communication in technical and professional contexts. TPC programs have begun to include design-driven courses, assignments, and learning objectives showing the importance of a designerly way of thinking (Melonçon & Henschel, 2013, pp. 52–53; Tham, 2021). Adjacent to TPC, theorists including Richard Buchanan (1985), David Kaufer and Brian Butler (1996), and David Fleming (1998) situated design within the practice of communication and rhetoric, helping scholars like Charles Kostelnick (1989), Richard Marback (2009), Jim Purdy (2014), Carrie Leverenz (2014), and Scott Wible (2020) to articulate the viability of design and design thinking in writing studies and TPC pedagogy. Design adds a tangible layer of deliberation to the product vs. process paradigm shift that influenced a majority of our scholarly and programmatic discussions in the 1980s. Design brings

to our scholarship conversations about materiality, multimodality, and usability, among others. Focusing neither just on design nor thinking, however, design thinking is a framework most popularized in business management and engineering that integrates user- and human-centered design philosophies, iterative and participatory design approaches, and socially responsive innovation to address “wicked problems” (Rittel & Webber, 1973; Wickman, 2014). The most prominent model for this framework is the oft-cited Stanford d.school (n.d.) schema that includes five recursive phases in designing solutions: empathize, define, ideate, prototype, and test.

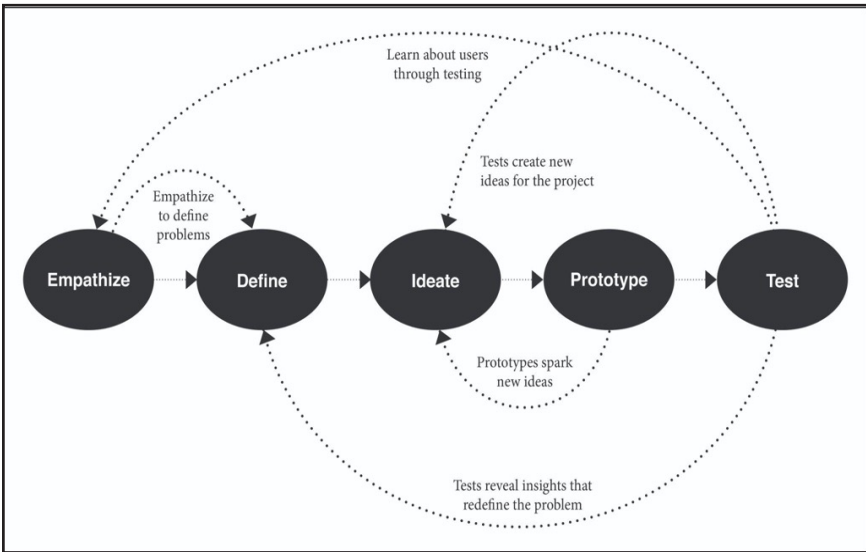


Figure 1. The d.school design thinking model, adapted by the authors.

The growing interest and deployment of design thinking methodologies in TPC programs today—thanks in part to the rise of user experience studies in technical communication (Kessler et al., 2021; Zachry & Spyridakis, 2016)—indicate a need for retrospection on our teaching and application of design frameworks in programmatic contexts so that we remain socially and ethically conscious about our practice. However, pedagogical and empirical investigations of design thinking in TPC programs have only recently begun. Ann Hill Duin et al. (2017) studied the affordances of the radical collaboration attribute in design thinking that showed benefits for graduate research collectives. At the undergraduate level, Jennifer Bay, Richard Johnson-Sheehan, and Devon Cook (2018) infused design thinking processes in teaching TPC

students how to think like an entrepreneur with innovative solutions for wicked problems:

We must teach our students how to have empathy for users, peers, and stakeholders, just as we must have empathy for the needs of our students. We must define educational problems from our students' points of view, not our own, and we need to ideate those problems by reframing them and incorporating new technology. We need to prototype new assignments and new activities and then do testing to see which ones work. (p. 193)

Bay et al.'s (2018) model provided exigence for other scholar-teachers, such as Mason Pellegrini (2021), who argued that pedagogical experimentations with design thinking need to happen in conjunction with workplace studies in order to understand the transfer from classroom to professional practice. In a special issue of *Journal of Business and Technical Communication*, Rebecca Pope-Ruark, Jason Tham, Joe Moses, and Trey Conner (2019) included several more cases of teaching design thinking in TPC that exemplify its programmatic potential. Nevertheless, as the world of TPC and its programmatic efforts change along with the current health pandemic and arising needs in higher education, scholars are well-situated to examine the pedagogies, practices, and perspectives of/on design thinking at pressing times.

No doubt, there is a growing body of scholarship in design and design thinking models in TPC and writing pedagogy, but not a lot has been considered for programmatic development or administration. We need research and reports of design-driven efforts at the programmatic level to help the field grow in that direction. As Bay et al. (2018) motivated scholars to introduce design thinking to TPC service courses, we encourage projects that apply design thinking in the broader TPC programmatic landscape, including majors, minors, certificates, and graduate programs. As well, we are interested in studies and findings about design thinking integration in program development and innovation, program transitions, recruitment and retention, and administration and assessment.

Furthermore, critical studies on design thinking are needed because design scholarship has been traditionally biased toward narratives that were largely informed by Eurocentric understandings of the world and Anglo-American values (Tham, 2022). Design thinking is often dubbed a utilitarian method for problem solving, risking itself to being merely an avowal of advocacy. Thus, as scholars, educators, and practitioners, we should examine the ways in which design methods and design thinking are taught and enacted in our programs, and how

such enactments are affecting the principles of TPC and beyond.

Overview of the Issue

This special issue contains three original research articles, four commentaries, two FOCUS entries, and three program showcases.

Research Articles

Christine Masters-Wheeler, Jennifer Bay, and Patricia Sullivan explore the role of AI within TPC, presenting AI models as indispensable memory aids and tools for managing the vast complexity of information available to users. They view AI as an extension of the concept of externalized memory, complementing the act of writing. The authors advocate for incorporating AI models into technical communication courses, positing design thinking as a fitting approach to facilitate this integration. Because of design thinking's reflective and empathetic framework, it offers a natural and effective method for teaching students how to utilize AI in a rhetorical, ethical, and iterative manner. By infusing AI models into the design thinking process, students gain insights into user needs while also identifying potential shortcomings of the technology, facilitating consideration of various perspectives and cultural backgrounds.

Ashley Rea, Amelia Chesley, Erin Twal, and Tianxin Zhang present findings from a mixed-methods study on implementing a participatory design approach within a writing and UX lab context. By engaging with the participatory design approach in the UX segment of the writing lab, research participants experienced increased agency and involvement that ultimately lead to a deeper understanding of how diverse stakeholders with differing needs can collaboratively ideate human-centered design solutions. Participant deliverables demonstrated an increased prioritization of accessibility, usability, equity, and inclusivity for end users. The authors' data, in conjunction with their ongoing student-centered participatory UX research, serves as a compelling call for other programs to consider adopting this approach in their own labs. Implementing participatory design can establish a strong foundation for a robust and sustainable writing lab, fostering an environment conducive to creativity and user-focused innovation.

Using a community-based learning approach to curriculum development, Nora Rivera reports on the affordances of design thinking in engaging with Indigenous communities and teaching cultural awareness to TPC students. Rivera's study uses empathy and testimonios as a methodology for integrating Indigenous values with TPC curriculum.

Rivera's project is a display of radical collaboration and ethical praxes at the intersections of programming and community-engaged scholarship.

Commentaries

Michael Healy and Jessi Thomsen explore the value of design thinking in TPC classes, emphasizing its ability to empower students to embrace risk and uncertainty. By fostering this shift in mindset, they argue design thinking enables students to pursue innovative interventions instead of fixating on finding the "right" solution, which, in turn, allows them to make the leap from ideation to production without the fear of failure. They further assert that design thinking's human-centered approach enhances students' rhetorical awareness, enabling them to identify and address wicked problems from multiple perspectives. Consequently, they are better equipped to seek meaningful partnerships with relevant stakeholders to tackle intricate challenges using unconventional approaches.

Drawing from empathy as the foundational value of design thinking, Emma Kostopolus shows where and how empathy matters in creating an online TPC curriculum. Through critiques about institutional constraints and discussions of faculty labor and equity issues, Kostopolus suggests a framework for inclusive programming through design thinking principles.

Although *Programmatic Perspectives* has not previously published many articles related to writing center administration, we recognized an opportunity to widen the journal's reach through Vittoria Rubino's commentary on design thinking's application in writing centers. Rubino describes the writing center as a generative, interactional space where authors learn to compose. By means of design thinking, writing centers could further align the writing consultant's work with developing authors, Rubino argues. Rubino's article offers a practical framework that writing centers can practice human-centered principles in writing consultancy.

FOCUS

The FOCUS section of this special issue centers on the utilization of technology to enhance accessibility and inclusivity in communication within TPC classrooms and programs, particularly for our increasingly diverse users.

In his classroom focused article, David Ornelas Jr. delves into the application of Google Jamboard in the TPC classroom while investigating its alignment with research on the pedagogical implications

of design thinking. Ornelas contends that Jamboard's visual-oriented platform, when coupled with the principles of design thinking, cultivates an exceptional environment for visual learning in the digital realm. Given the ongoing repercussions of COVID-19, the significance of exploring alternatives for digital visual learning is underscored. Ornelas emphasizes that embracing innovative tools like Jamboard can aid educators in adapting to the challenges posed by remote and hybrid learning. By leveraging the powerful combination of Jamboard and design thinking, educators can create engaging and effective visual learning experiences, enhancing students' understanding and retention of course material.

Addressing the communication challenges encountered by TPC programs in their pursuit of internationalization, Kirk St. Amant discusses the use of aphorisms as a means to succinctly encapsulate fundamental ideas for global audiences. This article equips administrators with aphorisms that can facilitate the pivotal discussions integral to the internationalization of TPC programs. The provided examples can serve as a valuable checklist for administrators to reference at various stages of the internationalization process, enhancing their interactions with stakeholders and better equipping students for thriving in today's increasingly globalized society.

Program Showcases

Across the three program showcases in this issue, design thinking was taken up as means for administering writing programs, revising curriculum, and supporting student learning. Scott Wible identified ways in which design thinking methods like empathy mapping, point-of-view statements, and appreciative inquiry methodology afforded writing program development at the University of Maryland. Casey McArdle, Liza Potts, and Rebecca Tegtmeyer shared how design thinking enabled a humanistic approach toward the development and further revision of the Experience Architecture program at Michigan State University. Finally, at Florida International University, Luke Thominet, Vytautas Malesh, Michael Sohan, Vanessa Sohan, and Paul Feigenbaum reflected on their collective experience in completing a design thinking course and applying their learning to redesign and prototype a writing program.

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