

22. Pedagogy

Tracy Bridgeford

UNIVERSITY OF NEBRASKA AT OMAHA

Merriam-Webster's online dictionary definition of *pedagogy* provides perhaps the best context for understanding this term in technical communication. That is, it is the “art, science, or profession of teaching.” Classrooms, more than workspaces, connect scholars and practitioners of technical communication in ways that led James Dubinsky (2004) to describe the field as a “pedagogical discipline” (p. 3). Indeed, regardless of milieu, both academic and industrial professionals debate the purpose and content of technical communication curricula more than they do other contexts of action, perhaps because classrooms so readily blend the scholarly with the pragmatic. The tensions among these stakeholders have often defined and sometimes divided the community and its discourse, resulting in a dichotomous pedagogical corpus and lexicon. The field's exchanges on such topics might be broadly categorized as focusing either on practice and production or on conceptual frameworks and their implications. Although this characterization is not precisely chronological in its manifestation, it is true that much of the work prior to 1980 was more production-oriented than theoretical, and work after 1980 is increasingly complex in its scope, depth, and conceptual rigor.

Prior to the widespread adoption of desktop-publishing technologies in the early 1980s, technical writers (and thus technical communication classrooms) emphasized the construction of coherent documents that represent commonplace industrial *genres* (e.g., reports, instructions, and manuals) primarily through the crafting of stylistically clear, concise texts that privileged expert *knowledge* over reader needs. Dwight W. Stevenson's (1981) *Courses, Components, and Exercises in Technical Communication* captures the industrial practicality of this moment. The evolution of such scholarship resulted in the publication of collections such as Paul Anderson, R. John Brockman, and Carolyn Miller's (1983) *New Essays in Technical and Scientific Communication*, Lynn Beene and Peter White's (1988) *Solving Problems in Technical Writing*, Bertie E. Fearing and Keats Sparrow's (1989) *Technical Writing: Theory and Practice*, Carol M. Barnum and Saul Carliner's (1991) *Techniques for Technical Communicators*, and Thomas T. Barker's (1991) *Perspectives on Software Documentation*.

Focus on document production, including page layout and the *visual* elements of *design*, increased throughout the 1980s. During the past 40 years, significant attention has been devoted to the intersection of technical communication pedagogy and *information* production technologies and strategies. Teachers of technical communication were challenged to transform classroom practices to include page design and image preparation in ways that established relationships

between text and visual aspects of *documentation* (Bernhardt, 1986; Kostelnick & Roberts, 1999; Kramer & Bernhardt, 1996; Moore & Fitz, 1993; Schriver, 1997). Teaching visual content discussions followed in the 2000s, with scholars describing image-oriented pedagogies that included visual thinking and information design (Brumberger, 2005, 2007) and the *rhetorical-ethical* issues that accompany such a focus (Barton & Barton, 1993; Dragga & Voss, 2001). This relationship led to visual design textbooks (Kostelnick & Roberts, 2011), pedagogical collections (Brumberger & Northcut, 2013), and instruction on formatting texts and creating information graphics (Dragga, 2001; Kitalong, 2018).

It was not until web browsers adopted visual layouts for hypertext in 1992 that hypertext design, markup languages, and specialized design software crept into standard pedagogical practice. Perhaps because this shift did not gather momentum until the mid- to late-1990s, much of the discussion of design, technologies, and strategies blends the act of creation with complementary issues and challenges. Collections by Patricia Sullivan and Jannie Dautermann (1996), Stuart A. Selber (1997), Carol Lipson and Michael Day (2005), and Rachel Spilka (2010) span a range of topical intersections, including visual *literacy* and information design, programmatic implementation of technologies, interaction and *collaboration*, ethical and legal responsibilities, power, access, and identity. This rich and deep conversation has inspired the following conversations:

- Explorations of power and politics in hypertext (Johnson-Eilola, 1997)
- Copyright and fair use (Herrington, 1998, 2010)
- Ethical action (Salvo, 2002)
- Preparedness to teach in online pedagogical spaces (Cargile Cook & Grant-Davie, 2005, 2013; Melonçon, 2007)
- The implications of moving online (Gurak & Duin, 2004)
- *Social media* (Potts, 2014)
- Rhetoric and community in online spaces and documents (Howard, 1996; Porter, 1998; Pullman, 2016)
- Diverse topical and strategic literacies required of technical communicators (McCarthy et al., 2011; Selber, 2004)

In parallel developments, industrial practice also expanded the implementation of *content management* systems. With this decentralized, modular approach to developing and publishing content came multiple strategic emphases: single sourcing (Albers, 2003; Eble, 2003; Robidoux, 2008), *structured* authoring and information architecture (Evia et al., 2015; Salvo, 2004, 2010), and content strategy (Andersen, 2008, 2014; Clark, 2018; Evia, 2019; Getto et al., 2020; Hart-Davidson et al., 2007; Potts & Gonzales, 2020). In a most recent collection, *Teaching Content Management in Technical and Professional Communication*, Tracy Bridgeford (2020) addresses what she calls a “pedagogical exigency” by bringing together a variety of approaches for teaching the various areas and competencies associated with content management.

Meanwhile, the technical communication (TC) discipline also engaged in constructing more sophisticated frameworks for gathering technologically enabled design practices, resulting in the turn to experience architecture (Potts & Salvo, 2016). Experience architecture (XA) itself represents the confluence of a number of conversations in technical communication over the past 30 years. Not only does it draw upon the scholarly exchange about technologies and design strategies introduced previously, XA represents the culmination of work in usability studies (Chong, 2016; Salvo & Ren, 2007; Mirel & Spilka, 2002; Redish, 2011; Sauer, 2018), user-centered and participatory design (Johnson, 1998; Spinuzzi, 2005), accessible and inclusive design (Frascara, 2015; Oswal & Melonçon, 2014), *user experience* design (Geisler, 2016), *intercultural communication* pedagogies (St.Amant, 2018; Thatcher & St.Amant, 2011), and workplace roles (Batova & Andersen, 2017).

In addition to technical communication teachers' ever-present awareness of changing industrial needs and expectations, the developments in classroom content and practices highlighted so far have been complemented by a parallel evolution of the shaping of pedagogy through theoretical concepts. Pedagogical influences driven by conceptual "turns" (rhetorical, social, cultural, and *social justice*) have both changed and challenged the discipline's pedagogical habits and practices by introducing new ways of thinking about technical communication, workplace and classroom spaces, and scholarly methodologies. These turns, in turn, awakened other ways of positioning technical communication, the technical communicator, and the technical communication student. Rhetoric empowered us to explore writing in action and how we attend to the *style*, *audience*, and purpose in document creation; cultural studies offered perspectives of cultural contexts in ways that helped us understand how communities work; and social theory helped us focus on language and how it shapes reality and social justice, demonstrating ways to bring out new paths, new practices, and destabilizations.

Carolyn Miller's (1979) landmark article, "A Humanistic Rationale for Technical Writing," is credited with sparking what has become acknowledged as technical communication's rhetorical turn. The rhetorical turn represents a move to relocate (or at least challenge) the epistemological framework of technical communication, reclaiming technical discourse from *science* and engineering (disciplines that had not yet begun to acknowledge the communal construction of knowledge). By engaging in a rhetorical examination of technical documents, authority, and ethical values, scholars recast scientific and technical knowledge (and with it writing) as negotiated, constructed, and therefore evolving. The rhetorical turn continues to thrive (Smith, 1997), and from it emerge foci such as the implications of civic engagement (Dubinsky & Carpenter, 2004; Huckins, 1997), *public* intellectualism and service learning (Bowden & Scott, 2003; Sapp & Crabtree, 2002), innovation and creativity (Bridgeford et al., 2004), and *ethics* (Dombrowski, 2000; Dragga, 1997; Katz, 1992, 1993; Sullivan, 1990).

Additionally, pedagogical discussions in the 1980s and into the 1990s deepened and complicated theory-practice collaborations. Fearing and Sparrow (1989) brought to the community a theory-practice focus that shaped the pedagogical approaches during this time, some of which still define classroom practices today, such as Carolyn Miller's (1989) definition of technical communication as conduct, which gave us a new understanding of what we teach and how we teach it. Katherine Staples and Cezar M. Ornatowski (1997) reflected their understanding of technical communication as "founded in theory and oriented toward practice" (p. xii). Dubinsky (2004) collected the major articles that identified the critical issues for the technical communication classroom in ways that encouraged reflection in practice. By complicating the theory-practice classroom, pedagogy became more compelling, enriching our repertoire.

Overlapping with the rhetorical turn, a prevailing theory in academic contexts—social construction—permeates all modern conversations about pedagogy. This theoretical perspective posits that social action is not an individual act; rather, it is a communal emphasis that grows out of the culture and language from which it originates. Influenced by a social theory perspective, technical communication scholars and teachers moved from thinking about pedagogy as a forms-based product approach to a socially constructed process approach through notions of *knowledge* and its construction, discourse conventions, *collaboration*, and community (Blyler & Thralls, 1993; Thralls & Blyler, 1993). Most notable, Nancy Roundy Blyler and Charlotte Thrall's (1993) article "The Social Perspective and Pedagogy in Technical Communication," as well as their edited collection, *Professional Communication: The Social Perspective*, meaningfully outline the pedagogical tenets and approaches of social theory and pedagogy (social construction, community, ideology, and the paralogic hermeneutics). By refocusing pedagogy on the contexts and actions affecting technical communication, scholars helped students see communication as contextualized, affecting the *style*, writing, *editing*, and *design* of technical documentation and content. Scholars across the spectrum drew from the social perspective's theoretical reach, addressing notions of ideology, gender, culture, and politics. From approaches advocating *feminism*, to diversity and inclusion, to social justice, and to globalization and intercultural perspectives of technical communication, social theory expanded the possibilities of technical communication pedagogy and its practice.

The cultural turn during the 1990s and 2000s moved the field to a poststructuralist stance, empowering scholars to look at pedagogy beyond the way language shapes action, considering constructions of knowledge and power and how they play out in institutional contexts. This led to deeper meditations about the purpose of technical communication pedagogy. Two articles in particular broadened our pedagogical scope: Through an articulation lens, Jennifer Slack et al. (1993) argued for positioning technical communicators more within a context of power and authority as authors, and Johndan Johnson-Eilola (1996) opened the door to considering the role of technical communicators as symbolic analysts.

Cultural studies theory enabled scholars to consider institution, knowledge, legitimation, and power and their effect on the culture of technical communication. As cultural agents, institutions contribute to the genre and style conventions that reinforce cultural norms and practices (Longo, 1998, 2000; Miller, 1984; Spinuzzi, 2003). During the late 1990s, Bernadette Longo provided a “cultural studies” approach to teaching technical communication that supported the ways discourse contributed to institutional relationships. In 2006, J. Blake Scott and Bernadette Longo and colleagues published *Critical Power Tools: Technical Communication and Cultural Studies*, moving technical communication teachers and students “from cultural critique to ethical civic action” (p. 196). This approach to teaching technical communication is concerned with the actions of a virtuous, ethical student (and future professional) who considers the different ideologies, identities, and legitimations of knowledge when creating technical documentation.

The foreseeable future of pedagogy challenges us to demonstrate that we can remain human centered in the face of social change, asking anew “what it means to call our field ‘humanistic’” (Jones, 2016, p. 345). Emerging designs shift pedagogy more consciously toward social justice approaches that aim to bring forth aspects of technical communication that have previously been less explicitly acknowledged. In this way, our historical narratives about pedagogy are “disrupted,” which, in turn, allows us to resee them from different perspectives (Jones et al., 2016). Such disruption reveals issues relevant to pedagogy such as diversity (Jones et al., 2014; Savage & Mattson, 2011), race and ethnicity (Banks, 2010; Savage & Matveeva, 2011; Williams & Pimentel, 2012, 2014), *translation* and localization (Agboka, 2013; Maylath & St. Amant, 2019), decolonization of our pedagogies (Agboka, 2014; Haas, 2012), and narrative or storytelling as a pedagogical tool that helps students contribute to practice and build empathy (Jones & Walton, 2018; Moore, 2013)—all areas that influence what and how we teach technical communication. In a collection focused specifically on social justice pedagogies, Angela M. Haas and Michelle F. Eble (2018) broke significant ground by highlighting social justice with *Key Theoretical Frameworks: Teaching Technical Communication in the Twenty-First Century*, a collection that parallels nicely with Tracy Bridgford’s (2018) collection of the same year that describes theory-driven practical approaches. This pedagogical reach builds on all past turns in what Walton et al. (2019) call the social justice turn.

As this short *history* shows, technical communication has always had a dichotomous relationship with its pedagogical lexicon. We have always endeavored to both prepare students to perform well in the workplace and to question the status quo. This tension is what drives invention and innovation in pedagogy, moving us away from a focus on writing only (the product) to a perspective of writing in context (the communicative situation). During the last four decades, we have moved from rhetorical discussions about humanistic and ethical to critical and cultural studies and social justice approaches, remaining committed to teaching *craft* as it updates with each turn. But as much

of this history is told in a semi-chronological way, the truth is that multiple turns happen in overlapping ways, influencing and impacting each other. Each turn shows, perhaps, a different face of our humanistic genealogy. The future of pedagogy challenges us to demonstrate that we can remain human centered in the face of social change.

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