

Association of Teachers of Technical Writing
Twentieth Annual Conference — Portland, Oregon
March 15, 2017

Celebrating 20—Retrospections and New Directions in Technical Communication

We are pleased to share this list of concurrent and poster sessions in advance of publishing the conference program in March 2017. For more information about the conference, please visit the [ATTW conference web site](#).

Updated 2017–0325; see the last page for a list of changes.

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Concurrent session A: 9:00–10:15am

Session A1, Broadway

A1: Celebrating 20 Years of the ATTW Conference: A Roundtable

Michelle Eble, East Carolina University, session chair

Ann M. Blakeslee, Eastern Michigan University

Sam Dragga, Texas Tech University

Cheryl Geisler, Simon Fraser University

Bill Hart-Davidson, Michigan State University

Carolyn R. Miller, North Carolina State University

~~Carolyn Rude, Virginia Tech~~

Michele Simmons, Miami University

Session A2, Weidler

A2: Rhetoric of Technical Communication as Inclusion Advocacy

Allegra W. Smith, Purdue University, session chair

Public Inclusion 2.0: Regulations.gov and the Value of Computational Analysis in Technical Communication

Daniel Card, UW-Milwaukee

Technical communication (TC) and allied scholars have a long-standing interest in the effective and ethical incorporation of public stakeholders in science policymaking (Waddell, 1995; Katz and Miller;

1996; Grabill and Simmons, 1998; Simmons, 2008; Blythe, Grabill, Riley, 2008; Teston & Graham, 2012). Examining questions of expertise, agency, and resistance, these scholars note the difficulty with which non-expert stakeholders can meaningfully speak and act within spaces traditionally dominated by experts. However, with the implementation and rising use of regulations.gov, public inclusion has shifted venues. Launched in 2003, regulations.gov features regulatory proposals from a range of government agencies including the Environmental Protection Agency (EPA), United States Department of Agriculture (USDA), and the National Aeronautics and Space Administration (NASA). It further provides access to millions of public comments from a variety of stakeholders. There, citizens can sign up for email alerts from selected agencies, search and/or download regulatory notices and supporting materials, and submit comments on regulatory proposals and decisions. Ostensibly, the website aims to empower citizens by making the regulatory process more transparent and participatory. According to regulations.gov, public participation is “an essential function of good governance” and “enhances the quality of law and its realization through regulations” (“About Us,” 2015). However, it is not clear regulations.gov achieves these stated outcomes. Drawing on Grabill and Simmons’ “critical rhetoric of risk communication” (1998), I examine the Animal Plant Health Inspection Service’s (APHIS) recent effort to solicit public input on Monsanto’s petition for determination of “nonregulated” status for herbicide resistant soybeans and cotton (Docket ID: APHIS-2013-0043), an effort that garnered nearly 70,000 public comments. In so doing, I not only extend TC’s public inclusion inquiry into a new domain but also argue for the value of computational analyses in TC scholarship looking forward.

Accessing the Future: Institutionalizing Accessibility through Technical Communication Core Values

Sherena Huntsman, Utah State University

Accessibility remains a central topic of pedagogical concerns of instructional design. While working with the university accessibility policy committee, I am aware of the need for the Technical Communication Department (TCD) to lead the implementation of accessibility standards. Using the work of Michelle Eble and Lynne Lewis Gaillet, this presentation argues that the TCD is uniquely positioned to promote ethical practices surrounding digital instructional documents. TCD’s unique core values, which merges a specific skill-set with a focus on humanistic values, creates an authentic bridge between the pragmatic concerns of instructors and the equitable inclusion of all students. Lisa Meloncon’s work expands our consideration of audience to include all user bodies. The TCD should promote the standard inclusion of multiple technological forms diverse bodies use to negotiate instructional environments absent incorrect perceptions of hierarchies. The future of technical communication includes a diverse identity of the technical communicator, which, of course, begins at the institutional level.

Using a technical communication understanding of ethical inclusion, this presentation will discuss the process of an interdisciplinary policy committee writing an accessibility policy to articulate the standards guiding instructors’ use of digital course material. Instructor attitude regarding accountability for accessibility will be discussed as well as the procedures investigated to alter perspectives through interdisciplinary modeling. The purpose and benefits associated with accessibility of digital materials

for all students assists in our understanding accommodation not as remedying of deficit but as a normal part of instructional design and production. As technical communication pedagogy moves from a past misconception of a singular identity of student to a future that welcomes a more complex understanding of a diverse student identity, it becomes vital to normalize accessibility procedures to include all technology used to access digital course material. “

Masculine Programming and Meritocracy as Technological Exclusion in Open-Source Development

Gerald Jackson, University of South Carolina

This presentation, through a study the Linux open-source community, argues that practices of gender exclusion circulate along a continuum of performative assumptions in source code and traditional discourse networks. Following Jones, Moore, and Walton’s (2016) call for an antenarrative to the history of technical communication, one that “emboldens the field’s objectives to unabashedly embrace social justice and inclusivity as part of its core,” this presentation illustrates technical communication’s obligations as a critical enterprise in spaces of esoteric knowledge production by developing an alternative narrative to the histories of “success” in open-source development. Through comparative analysis of source code, commentary, articles, and comment threads, I argue that the overwhelming gender disparity in the Linux community is part and parcel with a programming epistemology rooted in concepts rendered in a hegemonic masculinity of mastery and control. Following a discussion of performative gender in code, I draw connections between code performance and the discourse of developers in these communities to trace how concepts of mastery and meritocracy form, circulate, and constitute a masculinized body of knowledge that manifests as source code. Mastery and meritocracy are, in these communities, valorized as hyper-individualized expressions of expertise and competence, but mask competing forms of expertise behind formations of collaboration structured around problem-solving and goal-attainment. To support this line of inquiry, I reference both Johndan Johnson-Eilola’s (2005) notion of symbolic production, Lunsford and Ede’s (1990) discussion of masculine and feminist collaboration in research, Adrian MacKenzie’s (2005) study of performative code, and Judith Butler’s (1993) theories of gender performativity to demonstrate the link between a programming culture that implicitly and explicitly excludes women and their professional knowledge-making practices. Following this, I argue that technical communication scholars and educators can, through interdisciplinary education initiatives and methodologies, begin to critically engage with the cultural processes of digital technology.

Accommodating the Needs of ADHD Students in the Professional and Technical Communication Classroom

Samuel James Dunn, Purdue University

It is estimated that 2-8% of college students (approximately 1 in 20) report clinically significant diagnoses of attention deficit hyperactivity disorder (ADHD). Typically, those with verifiable diagnoses of ADHD are eligible to receive certain accommodations through the university (extra time on tests, distraction-reduced test environments, peer note-takers, etc.); however, these accommodations are often not readily applicable to the work required of students in professional and technical

communication courses. This is due to the fact that students with ADHD often face difficulties in these courses that are not born of external distractions, but rather are related directly to the content and requirements of the courses themselves. The assignments in professional and technical communication courses require excellent time management and organization skills of our students, which are two of the most frequently-cited academic struggles reported by students with ADHD. Additionally, the particular emphasis in these courses on multimodal, digital, and visual composition media, coupled with the fact that ADHD is often comorbid with internet addiction, makes success difficult at the level of the composition technologies we rely on. Finally, studies based in theories of learning intelligences show that students with ADHD often exhibit intelligences (“kinesthetic,” “naturalist” and “spatial”) which are not emphasized or privileged in higher education or in our courses (specifically “linguistic” and “logical-mathematical”). These issues have gone largely ignored in the field of professional and technical communication. As such, in this presentation I will attempt to begin filling that gap by describing the difficulties that we face and drawing on studies from the fields of cognitive and education psychology to propose methods of better accommodating the needs of our neurologically divergent students. Specifically, I will discuss ways of incorporating cognitive, cognitive-behavioral, and neural-based psychosocial interventions into our professional and technical communication curricula and pedagogies.

Session A3, Halsey

A3: Examining Ethical Dilemmas in Technical Communication Research through Positionality, Privilege, and Diversity

Breeanne Matheson, Utah State University, session chair

Core values of technical and professional communication (TPC) are grounded in ethics (Dombrowski, 2000), including examinations of social justice, privilege, and marginalization. However, in practice we (personally and, as a field, collectively) like to talk about social justice but often struggle with acknowledging and coming to terms with our own privilege. Ethical questions that prompt such introspection include: How do we avoid capitalizing on the pain of other people? How can social justice researchers avoid replicating the power structures they seek to deconstruct? Our panel seeks to explore and provide a framework of awareness for technical communication research by focusing on what Jones, Moore, and Walton (2016) call the three Ps: positionality, privilege, and power. With their framework and the reflective questions they ask, this panel seeks to disrupt our own narratives to conduct more inclusive research.

Transferring Research Design from the United States to India: Focusing on Positionality

Emily January Petersen, Brigham Young University

After conducting qualitative research about U.S. women’s experiences in TPC, Speaker 1 learned of a thriving TPC community of women in India. In July 2016, Speaker 1 and Speaker 2 interviewed over 40 women in India to ask how they experience issues raised by gender at work. However, questions about ethical research and research design emerged while conducting interviews. Ethical research must

take positionality into consideration, as “aspects of identity—such as race and gender—are not essential qualities but are identity markers that are” relational, historical, dynamic, and particular (Jones, Moore, & Walton, p. 220). When researching outside one’s own context, it is necessary “to consider self-reflexively how our own training and perspectives may [un]intentionally recreate the status quo” (Rose, p. 4). Both U.S. and Indian women were similar by gender and profession; however, we struggled to contextualize the research, leading to some confusion in India rather than smooth data collection. Speaker 1 will present the ethical dilemmas raised through positionality when transferring research design meant for a U.S. context to populations in the Global South. This presentation will inform the audience of the need to examine positionality in cross-cultural research.

Reducing the Privilege Footprint: Conducting Ethical Field Research

Breeanne Matheson, Utah State University

As the field of TPC seeks to understand our impact on the social structure of the world around us, Haas (2012) warned that historically, our identity as a field has caused us to perpetuate marginalization of oppressed people, noting that “technical communication . . . has a history of ignoring the ways in which our work is saturated with white male culture—which has real effects related to privilege and oppression on the lives and work of designers, writers, editors, and audiences of technical communication” (p. 8). To this end, researchers must acknowledge the way that “people occupy varying positions and degrees of privilege based, in large part, on sociopolitical constructs like gender, sexuality, ableness, and so on” (Jones, Moore, & Walton 2016).

Speaker 2’s presentation explores the tension between expanding our scholarly lenses toward traditionally marginalized communities and the marginalizing privilege that researchers often carry. Looking through the lens of a recent fieldwork project studying female technical communicators in India, Speaker 2 asks how our research methods have the potential to marginalize even as we attempt to emancipate with an eye for addressing the intersectional and often overlooked players in a research site and offers suggestions for navigating cross-cultural research ethically and responsibly.

~~We’re Here, but Where’s Queer? Toward a Queered Pedagogy of Sexual Literacy~~

~~Wilfredo Flores, Texas Tech University~~

~~Technical communication has explored critical theory to expand and rethink established knowledge, methodologies, and pedagogies but has avoided considering the radical potentials of queer theory and even questioned its potential as Sauer (2006) does in her review of Scott’s book (2003). Such work is especially pertinent in a country whose treatment of queers comprise shifting social mores, contentious legislation, and hateful sentiment. Therefore, technical communicators must tackle the question, “How are we trained to handle issues pertaining to queer people?” The answer to this question begins in pedagogy. Current research in critical technical communication pedagogy calls for an ethical, interrogative criticality that seeks to answer a diversity of voices with concomitant alternatives (Kienzler, 2001), a service learning oriented pedagogy as rhetorically informed civic engagement (Sapp & Crabtree, 2009), considerations of race within a decolonial pedagogy that seeks to dismantle~~

or suppress dominant discourses and power structures (Hass, 2012), and indigenous frameworks for ethical intercultural technical communicative work, in addition to numerous other approaches. However, queer theory offers technical communication instructors the tools with which to interrogate issues of sexuality and the ways discourse work maintains a normative sexuality, erotics, and physicality, which arguably intersect with any issue in the aforementioned pedagogies. Thus, current research into technical communication pedagogy must move toward a queered ethics of sexuality. Drawing from Alexander's (2008) ideas about sexual literacy, the presentation will provide with generative suggestions for developing pedagogies informed by an ethics of sexuality that can apply to the workplaces in which technical communicators operate and the ways this work affects queer people. Specifically, the presentation will draw from the Alexander's notion that sexuality itself is a literacy developed dialectically and that knowledge of such developments—infused with queer thought and theory—can guide best practices.

Analyzation of HBCU Faculty's Pivotal Role in Diversifying Technical Communications

Temptaous T. Mckoy, East Carolina University

This presentation looks at the foundations, development, and historical work on Technical and Professional Communication programs at the nation's Historically Black Colleges and Universities (HBCUs). I, myself an HBCU undergraduate level HBCU graduate (who is currently a PhD student at a non-HBCU) focus here specifically on HBCU's located in North Carolina. In this way, I call for continued diversification of Technical and Professional Communication Studies. Currently, there is only one HBCU in the country, North Carolina A&T University, that provides a Technical and Professional Communication focus/minor. While HBCU's are a prominent (perhaps the most prominent) producer of African-American liberal arts graduates, there continues to be a disconnect between these institutions and Technical and Professional Communication Studies. Many of these schools do, however, offer technical communication courses. Though research (Savage) has looked at the idea of HBCU's role in diversifying Technical and Professional Communication Studies, it has yet to look at how HBCU faculty might design and implement their own Technical and Professional Communication programs. Additionally, at one non-HBCU North Carolina University, the PWI (primarily white institution) East Carolina University, the current Technical and Professional Communication faculty includes no faculty of color at all. This also supports the idea that Technical and Professional Communication Studies remains largely out of reach to people of color on multiple levels (whether at HBCU's or beyond). Conversely, HBCU faculty are primarily made up of African Americans and other people of color but these institutions. This observation leads to a key question: Moving forward, how do we develop technical communication programs at the HBCUs where faculty who specialize in technical communications may not exist? This presentation will present findings from a survey of faculty members at North Carolina HBCUs, which will document the faculty member's technical communication specialty (if any), their reliability upon the institution to adequately develop a technical communication program with current resources, and the lasting effects on the field

of technical communication through the implementation of faculty of color with specialization in technical and professional communication.

Session A4, Sellwood

A4: Technical Communication Expertise & Program Infrastructure

Mark A. Hannah, Arizona State University, session chair

Mapping the Actors: Certificate Building as Network-Building

Ehren Pflugfelder, Oregon State University

While debates in technical communication concerning curriculum design, assessment, and departmental positioning typically focus on majors, minors, and graduate degree programs, the undergraduate certificate has begun to receive more attention. For example, surveys of certificate program specialization, departmental location, curricula, and assessment have emerged in recent years (Nugent, 2010; 2013; Yeats & Thompson, 2010; Meloncon, 2012). Much of this research identifies how certificate programs draw from the pedagogical goals of stand-alone degree programs, but their lack of standardization, localization, and curricular diversity often create challenges for program designers (Nugent, 2013). While research on stand-alone program core competencies (see Hayhoe, 2002; Rainey et al, 2005; Hart-Davidson, 2007; Johnson-Eilola and Selber, 2013) is assumed to correspond to certificate program outcomes, a certificate's reduced course load and larger population of students with stand-alone degrees in science and engineering requires altered coursework and different assessment measures. This presentation tells the story of one undergraduate certificate through the method of actor-network diagramming. Building from narrative discussions of program development (Sapp, 2006; Griswold, 2010; Rentz, Debs & Melancon, 2010; Maylath, Grabill & Gurak, 2010), this speaker discusses the emergence of one program's curricula and assessment measures through diagrams that showcase relevant actors, as they influence one another at different stages in the process of program design. Actor-network diagrams help chart a range of influences on new program development and are especially helpful in the emergence of a certificates, because they often cater to broader populations than degree programs. Ultimately, this method presents a visual narrative of program development, illustrates the materialization of assessment measures, and showcases the emergence of what ANT call "translation" work – the process that allows particular actors within a network, groupings of actors, and the relationships between actors to be represented in a fashion that reduces the complexities of those relationships (Callon, 1981).

Developing a Program Infrastructure for E-Portfolio Support: Possible Directions for the Field

Blake Scott, University of Central Florida

Laurie A. Pinkert, University of Central Florida

Numerous technical and professional writing programs have long required students to develop e-portfolios, primarily as demonstrations of qualifications for external audiences such as employers or

external advisory board members (Meloncon & Schreiber). Despite recurring disciplinary emphasis on e-portfolios as a potential job search tool, the field has little research about how area employers use e-portfolios as little research is available beyond a 2013 AAC&U survey and a job recruiter focus group at Notre Dame (Meloncon). Grounded in one program's systematic attempts to address these limitations, this session will highlight new directions for building a program-level infrastructure for student e-portfolio development. Former program director Blake Scott will discuss how his program has leveraged a university-wide (QEP) initiative to emphasize students' integrative learning across a range of contexts in their e-portfolios, sharing specific student and faculty strategies and resources (including online guides, curricular mapping, assignment sharing) for supporting e-portfolio planning and development across the curriculum. Then, current program director Laurie A. Pinkert will discuss our program's responses to a survey and two focus groups of employers (one including a wide range of employers and one including specific employers with strong ties to our department) about their expectations and preferred uses of e-portfolios in the applicant screening and hiring process. The presenters will conclude by calling for further research on employer perceptions and for field-level sharing of program strategies and resources.

“What is TC Expertise?” Examining and Documenting Expressions of Expertise in TC Scholarly Publications (1996-2016)

Mark A. Hannah, Arizona State University

The question of what skills, capacities, and practices make up TC expertise is a persistent topic in the disciplinary conversation. This question is especially important today, as work contexts evolve rapidly and demand extensions and reapplications of our expertise. As we reflect on where we've been and imagine where we're going, it's important to examine and document the genre of “expertise expressions” in TC scholarship and develop an understanding of how that genre has evolved. Armed with this understanding, we can assess whether and how the discipline's expressions of expertise are attuned to the evolving communication demands of contemporary workplaces. Furthermore, from a professionalization and visibility perspective, this understanding can help us assess whether and how we have articulated a “legacy expertise” shrouded in disciplinary language that is potentially unknowable and difficult to translate for academic and industry partners. This presentation will report on a mixed-methods content analysis of “expertise expressions” in *TCQ*, *TC*, *JBTC*, *JTWC*, and *IEEE* from 1996-2016. To locate relevant literature, I identified 300 articles that used one or more of the following terms in their titles: expertise, skills, competencies, literacies, capacities, value-added, knowledge, applied, instrumental, and work. To examine and document the genre of “expertise expressions,” I performed a content analysis of those articles using the following categories to assess the evolving nature and scope of such expressions: what topics, research methods, and skill sets are discussed; what types of speech acts are used; are the expressions epideictic, deliberative or forensic; are the expressions theoretical or applied; and how long are the expressions. The findings of the content analysis will provide session attendees insights about (1) what constituted/constitutes TC expertise; (2) how their expressions of expertise align with the disciplinary genre, and (3) how to revise curriculum to innovate on students' cultivation and expression of expertise.

Questioning Core Values: Technical Communication and Competency-Based Education

Sara Doan, University of Wisconsin-Milwaukee

Paralleling the 20th Century shift in higher education from emphasizing the liberal arts to preprofessional values, technical communication is still mapping its territory as a field (Malone, 2011; Porter & Sullivan, 2007) and solidifying its values and core competencies (Hart-Davidson, 2001; Coppola & Elliot, 2013). The culmination of shifting to pre-professional values is Competency-Based Education (CBE); nationally, 600 institutions either offer CBE or are developing programs (Kelchen, 2015). CBE separates time-on-task from learning outcomes, allowing non-traditional students to complete competency assessments to earn college credit at their own pace. Within technical communication, CBE is now an emerging trend; my institution, University of Wisconsin - Milwaukee, was the first to offer a CBE certificate in technical communication. Technical communication's body of knowledge still embodies tensions between instrumental and higher-level practices and pedagogy (Salvo & Rosinski, 2010; Meloncon, 2012; Hart & Baehr, 2013). Current practitioners are encouraged to earn professional certification in specific technologies and skillsets (STC, 2016). One way of meeting these professionalization needs is through providing CBE for nontraditional students; however, its focus on specific competencies can privilege some core values of our field while ignoring others. In this presentation, I discuss a new series of questions for our field, raised by CBE in technical communication:

- In what ways can CBE build on the online pedagogy best practices established by scholars like St. Amant (2007), Meloncon (2007), and Cargile Cook & Grant-Davie (2013)?
- What possibilities does CBE open for increasing crossover between technical communication pedagogy and workplace practices through asking students to complete competency assessments like formal reports and user testing that often align with their own organizational contexts (Reamer, 2012; Bloch, 2011)?
- Through what means can CBE programs teach not only instrumental, expedient values of technical communication, but also encourage students to reason ethically, consider users' needs (Hart-Davidson, 2012), and enact other phronesis (Sullivan & Porter, 1993) in their workplace practices?

Session A5, Ross Island

A5: Negotiating the Tensions of Technical Communication Through Historical Inquiry

T. Kenny Fountain, Case Western Reserve University, session chair

“How do we make history go when it seems to be going away?” (Pollock, 1998. p. 16) Early historical studies of technical and professional communication (TPC) emphasized the discipline's emergence in relation to science, engineering, and business (Tebeaux 1997; Kynell & Moran 1999; Kynell 2000; Longo 2000). Hoping to uncover a more complete picture of the past, this research demonstrated how

TPC works hand-in-hand with science and technology, functioning as the means through which scientific and technological ideas and processes are constructed and communicated. But our history encompasses more than science, engineering, and business. Savage (2003) warns that “without a mature understanding of our history, it is likely that most of the members of the field will perceive technical communication as necessarily tied to the corporate or organizational setting” (p. 3-4). Without historical, in-depth studies that show how TPC has played a significant role in a wide range of fields, our understanding will be acontextualized and diminished. This panel seeks to reenergize historical inquiry within the field, a former staple of TPC scholarship. Specifically, we offer three historical case studies from 1375-1725, which demonstrate the diversity of our past, elucidate our modern practices, and provide a foundation for our future identity. Our case studies offer evidence that the early history of TPC is not only intimately associated with the time and place of its production, but also carries with it theoretical orientations and conceptual concerns still present today. Drawn from medieval to enlightenment medical practices, these cases focus on rhetorical elements of TPC texts and discourses that make visible tensions and conflicts that shaped medical disputes in those eras and continue to impact biomedicine today.

Erasing Tensions: Innovative Arrangement in Early Modern Medical Texts

Lisa Meloncon, University of Cincinnati

In 1391, Henry Daniel wrote one of the first vernacular medical treatises in English intended for an audience of “everyday people.” From that time forward, medical theories of the day freely circulated in manuscript compendiums across England. This tradition of distributing medical knowledge continued when William Caxton printed the first medical text in English in 1491. By grounding this presentation in scholarship from historians of the book, I trace the evolution of vernacular medical texts from the latter stages of the medieval era’s manuscript culture (ca. 1375) to the early days of print (ca. 1450-1540). Specifically, this case study illustrates how an innovative application of the rhetorical canon of arrangement made visible certain theories of medicine in early modern popular medical texts. Through the work of compilers and “authors,” early print shops used a radically different arrangement than their medieval counterparts in order to eliminate contradictions and establish “scientific” knowledge.

Reconciling Tensions: Visual & Verbal Praeteritio in 16th C. Anatomical Texts

T. Kenny Fountain, Case Western Reserve University

In 1534, Andreas Vesalius changed the study of anatomy and the practice of medicine with the publication of *De humani corporis fabrica*, a seven-volume tome which was at once an anatomical atlas, dissection manual, glossary of terms, description of the body, and polemic on the necessity of cadaveric anatomy. Vesalius used knowledge he gained from first-hand dissections to further an ongoing critique of 16th-century medicine, which relied on the often-incorrect anatomical ideas of the Roman physician Galen. Both a critique and commentary on Galenic medicine, the *Fabrica* is marked by an elaborate, ambivalent rhetoric that manages simultaneously to display and subtly mask the originality of Vesalius’ ideas, by positioning his work firmly within the Galenic tradition he criticizes.

Through analysis of the *Fabrica's* verbal and visual rhetoric, I illustrate how Vesalius negotiates this tension between novelty and tradition through the incorporation of praeteritio and a Roman conception of epideixis.

Founding Tensions: Cultural Topoi in Colonial American Debates about Smallpox

Barbara Heifferon, Louisiana State University

In 1721, the first recorded smallpox inoculation in America, a successful attempt to prevent the disease in 300 Bostonians, was a controversial medical initiative that generated contentious, even violent, public debates that inevitably stopped this life-saving technique. In fact, the adoption of inoculation as a standard practice was delayed for decades in part because the multiple and surprising arguments against it. Through a close rhetorical analysis, I examine two cultural topoi that fundamentally structured these debates and continue to influence medical deliberations today: anti-intellectualism and religious fundamentalism. Anti-intellectualism was highlighted in a famous parody, “The Academic Dialogues,” published in Bostonian newspapers. Departing from the combative rhetoric of anti-inoculation texts, these authors used humor to express the antagonism that many Bostonians felt toward the Harvard elite, particularly the chief initiator of the technique: the minister Cotton Mather. Ironically, religious fundamentalism, which ruled the hearts and minds of the Puritan colony, was the topoi most often deployed not by the ministers, but by the physicians who opposed inoculation.

Session A6, Morrison

A6: Ethics, Empathy, and Action: Strategies and Cautionary Tales From Teaching Social Justice in Technical Communication Classrooms

Emma J. Rose, University of Washington Tacoma, session chair

The core value and legacy of technical communication is its humanistic rationale (Miller, 1979) which has taken a significant turn to explicitly focus on social justice with considerations of race (Haas, 2012), gender (Frost, 2016), civic engagement (Bowden, 2004; Moore, 2013), community engagement (Walton, Zraly, & Mugengana, 2015), and methodology (Agboka, 2014) among others. These approaches are sometimes more easily written than enacted, and the success of these projects often relies on tacit, unspoken negotiations. In this panel, the speakers present cases from teaching and research that bring the tradition of technical communication’s humanistic and ethical stances into conversation with new practices and technologies that students encounter in their lives and careers. To engage themes of social justice and differentiated distributions of power, we weave together themes of ethics, empathy and action. Attendees will learn strategies to enact in their own practice when engaging students in critical studies and ethical action.

Hacking Bias: Making discrimination in technical systems visible

Emma J. Rose, University of Washington Tacoma

In this presentation, speaker #1 presents “Hacking Bias,” an assignment designed for an undergraduate technical communication course. Despite its negative implications, the term hacking is used productively in this context to interrogate systems that helps to reveal bias and consider what actions can be taken to change them. Recent attention to the design of technical systems highlights how information and communication technologies enable discrimination and bias, for example how racial bias is enabled in the online room-sharing tool Airbnb (Todisco, 2015) and various problematic algorithms (boyd, Levy, & Marwick, 2014). These discriminatory cases make for a productive site to engage students in a way that complicates technology (Johnson, 1998), to interrogate the notion of technological determinism (Winner, 1980), and to further the opportunity for critical engagement (Salvo, 2002). The assignment combines a critical interrogation of technology design with students’ interest in developing skills for social media writing and learning prototyping tools.

“I Don’t Want to Be Associated with #BlackLivesMatter:” Notes from a Hybrid Community-based Assignment

Kristen Moore, Texas Tech University

For social justice-minded scholars, the introduction of community-based projects can augment the teaching potentials of the classroom. As many scholars argue, inviting students to confront the challenges of local organizations attunes them [or it can] to the potential for technical communication to make changes at the organizational and community level. But community-based projects--especially those with a social justice bent--can create problems for teachers and students alike (Walton et al., 2015), and these problems are underexplored in the field of technical communication. This presentation explores the opportunities and challenges speaker #2 encountered when she secured Campaign Zero, the policy arm of #BlackLivesMatter, as a class client. Specifically, the presentation will share the kinds of actions taken when wanting to maintain the ethics of the project but also wanting to empathetically consider the concerns students had about being associated with the violence and politics they connect with #BlackLivesMatter.

Cross-Cultural Pedagogy & Professional Communication

Rebecca Walton, Utah State University

A primary goal of cross-cultural pedagogy is to help students develop intercultural competence, which Yu (2012) describes according to three interrelated aspects: sensitivity, awareness, and skills. In this presentation, speaker #3 draws connections between sensitivity and ethics, awareness and empathy, skills and action in helping students to develop intercultural competence. Drawing from an upper division undergraduate course on cross-cultural professional communication, this presentation articulates strategies for building students’ intercultural competence through a service-learning partnership with a local refugee center. This presentation will detail the kinds of assignments used to develop students’ sensitivity to their community partner alongside skills they can use to capably negotiate multiple sites of intercultural competence. Specifically, attendees will learn more about the

classroom and community awareness necessary to guide students through cross-cultural assignments in community-based projects.

Curricular Perspectives: Empathy and Emotion in the TPC Classroom

Natasha Jones, University of Central Florida

Empathy is a key component of understanding and engaging in social justice work. Unfortunately, empathy is rarely addressed in the pedagogical sense in technical and professional communication classrooms. To this end, speaker #4 has begun to develop curriculum that privileges empathy as a key component of the technical and professional communication classroom. For this talk, speaker #4 will share information about her curriculum development, which relies heavily on hooks' (1994) attention to how students and instructors grapple with emotion within the classroom and Freire's (1996) pedagogical perspectives that posit that praxis (reflection and critical action) promotes a more fully humanistic and liberatory approach to social-justice-oriented instruction.

Session A7, Hawthorne

A7: Technical Communication Praxis in a Globalized World

Sara West, University of Arkansas, session chair

A Call to Action: Intercultural Communication In Intro to Technical Communication

Mary D. De Nora, Texas Tech University

The effects of globalization are creating growing emergent transnational inter-dependencies in economic, cultural, environmental, social, and political relations driven by the interactions through the exchange of technology, images, ideas, money, and goods (Appadurai, 1996; Burbules & Torres, 2000). While globalization has meant an increasing exposure to other cultures, this exposure does not always lead to intercultural communication competence (ICC). Many undergraduate and graduate students do not have the requisite ICC to interact effectively and work productively in a multicultural or global society. However, students need exposure to ICC pedagogy (Hunsinger, 2006), including an interculturally relevant education (Thatcher & St. Amant, 2011). Because technical communicators will need to write for culturally-complex audiences, technical and professional writing programs should consider reassessing programmatic goals, outcomes, curriculum, and educator training and preparation practices. To seek effective ways to address these growing concerns, the researcher investigated whether technical communication programs (TC) include ICC considerations within the introductory technical writing course by examining syllabi, assignments, and textbook content. The research pool was drawn from the list compiled and described in Meloncon & Henschel's (2013) research, which looked at the current state of technical and professional undergraduate programs. Data collection was restricted to degree granting programs. Inquiries were made at sixty-five programs, from which fifty-five syllabi were collected. Research focused on determining the "if, what, and how" related to ICC through looking at course outcomes, assignments, and other artifacts such as departmental websites and syllabi and textbooks. Data collected was coded and artifacts were examined for how they met with

Bennett's six stages (2004) toward intercultural communication competence and Deardorff's (2006) adapted model. Milton J. Bennett's (2004) Developmental Model of Intercultural Sensitivity served as a lens through which to examine and evaluate the artifacts. The researcher has developed some initial recommendations, as well as a call to action for TC programs and instructors.

Smarter, Culturally Sound Travels: Localizing the Global Positioning System in Unenfranchised Sites

Godwin Agboka, University of Houston-Downtown

Localization research and its relevance in technology adoption and adaptation is well established within technical communication scholarship (Agboka, 2013; Batova & Clark, 2015; Gonzales & Zantjer, 2015; Sun, 2006, 2012; Thayer & Kolko, 2004; Warren, 2002). However, there's more to be done in terms of ways in which global technologies, such as the Global Positioning System (GPS), adopted for use in some unenfranchised sites address local users' needs. More importantly, there's little scholarship that highlights the legitimacy of users' "expertise" in technology redesign—especially in the contexts of obvious challenges such as lack of a complex understanding of those technologies and poor infrastructure to facilitate their use in those contexts.

Generally, the GPS is considered to be universal. In the age of smartphones, anyone can navigate an unfamiliar territory, get from one location to another, and/or avoid traffic. However, the universality of this technology is overestimated. In some contexts, such as those with slums and shanty towns, the map can point to the existence of a road, but it cannot provide any more information about the quality of the road, the type of road, or whether the road leads to the destination or someone's home. To be sure, many streets in some African cities have no names; many roads are of poor quality; and, in some cases, there is little difference between a road and an actual human dwelling. But, users in these places are not just content with whether a road exists; they need information about their travels. Consequently, frustrated and desperate travelers are taking advantage of the ubiquity of smartphones to solve this uniquely local quandary by redesigning the GPS technology to do more.

My presentation shares the preliminary results of a study of how the GPS device is localized in a context with poor roads and infrastructure. More importantly, it will foreground the legitimacy of audiences' "expertise" by highlighting how they adapt a largely "useless" and unknown technology for the local, peculiar purposes.

Listening with Our Students: Storytelling and Visualization as Decolonial Praxis in Technical Writing Pedagogies

Emily Legg, Miami University Ohio
Adam Strantz, Miami University Ohio

As professional and technical writing programs grow within universities, our definitions of what technical writing is in the 21st century is rapidly changing due to new technologies and emerging global contexts. This presentation offers two approaches to de-centering our programs and our classrooms as a way to reevaluate existing pedagogies to meet diverse student populations with myriad skills and needs that reflect these shifts in the field. We look to indigenous methodologies that seek "all

our relations” as epistemological groundwork (Smith, 1999; Wilson, 2009) in order to decolonize our programs. By listening to our students with diverse skills, cultures, and interests, we may build our programs towards a professional field that seeks new connections, locally and globally. In conversation with current decolonial work in technical communication (Haas, 2012), we employ storytelling as a methodological praxis in curriculum building. Storytelling sustains a participatory culture, and we see broad implications of this practice as a lived and embodied model to also sustain participatory learning in decentered classrooms. We have implemented specific storytelling pedagogical methods including running focus groups (Chilisa, 2011), visualizing crowdsourced big data (Yau, 2011), and establishing reflective practices (Sullivan and Porter, 1997) and share these methods with attendees.

Through these acts of storytelling, students can successfully relate their expertise gained through lived experience and cultural situatedness when confronted with different contexts, both inside and outside of the classroom. From here, we can further develop programs and curriculum built on these knowledge-making relationships beginning with our students. By looking to indigenous practices and epistemologies, this presentation contributes to the field by providing a theoretical framework and working models for attendees to understand how our field’s diverse and storied practices both create knowledge and act as the ecological forces that sustain our communities—in our discipline, within our fields, and in our classrooms.

User-Centered Design and Normative Practices: The Brexit Vote as a Technical Communication Failure

Laurence Jose, Grand Valley State University

“When the news about the Brexit vote broke on June 23rd 2016, the majority of the European leaders welcomed the results with a mix of shock and disappointment. While there are various reasons for the Brexit vote, many took this as an illustration of the fact that the European Union (E.U.) had lost its humanistic appeal and was instead perceived as a burdensome bureaucratic entity whose only function was to issue normative regulations with little regard for local practices. In July 2016, Jean-Claude Juncker, the president of the E.U., stated: “Les Européens n’aiment pas l’Europe” (“Europeans don’t like Europe,” Marianne). Through this admission, Juncker made a strong statement about the gap between what was once perceived as a people-driven endeavor and the current perception of the E.U. as an expert-driven project. Similarly, Tony Blair called for more pedagogy and for making the E.U.’s rationale more transparent so that the regulations that made sense to the experts in Brussels would once again become meaningful to their users. In other words, the Brexit vote became for many an illustration of a user-centered design that lost its focus.

To illustrate the political ramifications of user-centered design, the presentation analyzes and contrasts the official language used on the E.U website and the legislative procedures with the evolution of the rhetoric surrounding the European project as exemplified in major European newspapers in the past 15 years. Drawing from the latest developments in usability studies and plain language, this presentation highlights the affordances of technical communication for interpreting current political events and defining practices that account for the tensions between the local and the global. Ultimately, the

presentation foregrounds the civic function of the field and its potential for confronting the challenges of the 21st century.

Multnomah

Morning Poster Session: 10:15—10:45am

The Inclusion of Cognitive Ability Metrics in Ehealth Usability Evaluations Among the Brain Injury Population

Ginnifer Mastarone, VA Portland Health Care System

The presence of organizational online health information portals continues to increase. Two core values of technical communication are to facilitate the understanding of technical health information (Rude, 2009) as well as to empower individuals to use this information. This is reflected in our literature via Plain Language, accessibility, and usability (Dowds et al., 2011; McDonald et al., 2011; Newby & Groom, 2010). Persons with brain injury (BI) have expressed interest in leveraging ehealth information for health management. However, factors that impede the use of ehealth portals include cognitive impairment, low health literacy, and usability problems. Few usability evaluations are completed with persons with cognitive disability, and these evaluations do not include cognitive ability assessments. This poster approaches these gaps through a usability evaluation case study that included the Montreal Cognitive Assessment (MoCA) (Nasreddine, 2003).

This research study aimed to determine the benefits of including cognitive ability assessments in usability evaluations for BI Survivors and family caregivers. A second aim was to examine the impact of cognitive ability on usability metrics and ehealth literacy outcomes.

24 BI Survivors and 13 family caregivers completed a 1-1.5 hour long usability evaluation of an online brain injury health information portal. Additionally, during the intake process, all participants completed the MoCA. Ehealth literacy outcomes (e.g. knowledge, decision-making, media literacy) and usability metrics (e.g. task success rate, structural feature satisfaction, usefulness) were measured via semi-structured questionnaires across three usability tasks. Data was examined via descriptive statistics, small sample inferential statistics, and correlational analyses.

This case study demonstrates that cognitive ability can be measured efficiently during usability evaluations using validated assessments. Average time to complete the MoCA was 15 minutes. Results indicate that the MoCA contributed to more nuanced usability results. In particular, the MoCA subscales correlated with variables of interest. Significant differences between BI Survivors and family caregivers were observed.

Building a Community of Technical Communicators: On-Campus Student Organizations and Service Learning Partnerships

Jeffrey Bacha, University of Alabama at Birmingham

Incorporating client-based, service learning projects into a professional and technical communication course has a long scholarly tradition (Huckin, 1997; Blakeslee, 2001; Dubinsky, 2010; Nielsen, 2016;).

Professional and technical communication scholars have argued such projects offer students the opportunity to write “real” documents for “real” audiences. However, as important as those experiences are to the tradition of professional and technical communication pedagogy, one question seldom asked in the literature is: How do you keep students engaged in such activities once a course is over? In this poster presentation, I will address that question by illustrating how I have incorporated service-learning opportunities into a university recognized student organization I started where I teach.

Specifically, I describe partnerships between the Professional Writing Club and local organizations. These partnerships offer three key advantages. First, like the course projects, they offer students a chance to work on projects that mimic the type of work technical and professional communicators might confront in the workplace. Second, the partnerships have allowed students to continue using a number of industry standard technologies they first encountered during their course work. Third, the partnerships have provided students an opportunity to negotiate directly with a client to develop shared outcomes and project-specific deadlines; because the partnerships take place outside of a course, the students gain even more experience negotiating directly with the client, without as much of the instructor’s assistance. Finally, the partnerships I describe allow sustainability. Because the service learning partnerships are club-based and not classroom-based, the partnerships have provided yearlong, or yearly, engagement opportunities for the students.

What Do Technical Communicators Need to Know About Research? New Directions for a Graduate Methods Course

Abigail Bakke and Jennifer Veltsos, Minnesota State University, Mankato

Technical communicators must draw on a variety of research methods to solve workplace problems. Nonetheless, Spilka (2009) discovered that undergraduate programs are providing insufficient instruction on research methods to prepare students for their careers. This lack of training “promotes reliance on unsystematic approaches to solving workplace problems” (Campbell, 2000, p. 225). At the graduate level, research training is more common but it often focuses on academic research. Programs designed for practitioners should address methods and problems used in industry, yet there is little scholarship on the appropriate focus for research training.

In our program, a Master’s in Technical Communication, the graduate research course faces an identity crisis: For many years, it served as “thesis preparation,” but when a capstone course option was added in 2012, the number of theses plummeted. For us, and likely for similar programs, the right balance of theory, academic, and professional practice has proven elusive.

This poster will explore the following questions:

What role does the research course serve in a graduate curriculum?

What content should be included to prepare practitioners for workplace research?

In this case study, we look back on the program’s history through interviews with senior faculty to understand how the program, the students, and the course have changed in the last decade. We also survey alumni on their experiences with the course and their research on the job. The results

of this research will provide new directions for our program and help other graduate programs update or revise their own research courses.

Survey Results on the Status of the Multi-major Professional Writing Course in U.S. Institutions of Higher Education

Sarah Read, DePaul University
Michael Michaud, Rhode Island College

This poster presents results from our study, “Surveying the Status of the Multi-major Professional Writing Course in U.S. Institutions of Higher Education,” which investigates the question, “What is the status of the multi-major professional writing (MMPW) course?” Our primary research method in conducting this study was a national online survey of self-selected professional writing course instructors from across all Carnegie institutional types. In total, 235 respondents started our survey, with 81 respondents dropping out before the end and 154 completing it (a 65.5% completion rate). The questions were built around descriptive and subjective factors that comprise the “status” of the course. Descriptive factors included who teaches the course, who takes the course, what kinds of resources are used to teach the course (textbooks, technology), how is the course institutionally situated, and what kind of investment is currently going into the course (instructor training and classroom resources). Subjective factors included the confidence that instructors have in the effectiveness of the course. The term effectiveness includes aspects such as perceived student satisfaction, perceived levels of student learning, perceived levels of meeting student expectations, perceived levels of the course meeting course objectives, perceived levels of resource availability and support for instructors and perceived effectiveness of the course in meeting its larger curricular goals for students and programs.

Our poster will summarize our findings and make arguments about the status of the MMPW course that the findings support. We will draw on the descriptive data to make an argument about what we discovered to be a persistent and entrenched conservatism in the teaching of the course. The subjective data will motivate a discussion about the implications of respondents’ varying levels of confidence in the course, especially in regards to the preparedness of the course’s instructor corps.

A Rhetorical Approach to Engineering Judgment

Jonathan Weedon, University of California, Santa Barbara

ABET has proposed new changes to the EAC Criteria 3 that will take effect in 2017. Among many changes and rearrangements is the introduction of the term “engineering judgment” as one of the competencies students must develop to prepare them for professional engineering. However, engineering judgment is not defined in the criteria, and while it is a ubiquitous concept in the philosophy of engineering, philosophy of design, and engineering education, there remains little empirical investigation into what counts as engineering judgment in practice.. This poster details a study to describe engineering judgment from the perspective of technical communication. The research questions guiding the study are: what does engineering judgment look like in practice? And what frameworks capture its complexity? A possibility to be explored is the tying of current philosophical definitions of engineering judgment to what Michael Leff (1999) called “rhetorical judgment” that

“engages qualitative considerations that balance the particulars of occasion and circumstance against the more general rubrics that inform our thinking.” The philosophical and rhetorical approaches to judgment will be extended beyond their humanistic and cognitive lenses through postphenomenological perspectives on the mediational nature of human-technology relations. The data for the study comes from a video-ethnography of a student engineering group and findings will suggest an expanded purview for technical communication in STEM education and a framework for a new research direction in understanding technoscientific judgment.

Selling Technical Communication Programs: Analyzing A Decade of Program Identity and Addressivity in Print Ads

Felicia Chong, Oakland University

The first master’s degree in technical and scientific writing in the United States was established at Rensselaer Polytechnic Institute in 1958 (Connors, 1982). In the last 50 decades, technical communication programs have grown exponentially both nationally and internationally; however, student recruitment is still a challenge faced by many program administrators (Meloncon, 2010). Surprisingly, few studies in technical communication scholarship assess our recruitment strategies and their effectiveness. For example, the literature we found mainly focuses on recruiting minorities or underserved groups (Savage & Mattson, 2011; Jones, Savage & Yu, 2014).

Although digital media is purported to be the most effective mode of communication for student marketing and recruitment, print advertisements are still heavily used by universities to attract students (Ruffalo Noel-Levitz, 2016). The Council for Programs in Technical and Scientific Communication (CPTSC) conference programs, for example, frequently feature student recruitment advertisements. Therefore, in this study, we reviewed CPTSC conference programs and proceedings from 2006 to 2016 and analyzed 58 print advertisements to investigate how 33 technical and professional communication programs represented themselves and the rhetorical strategies that they employed to recruit students. Drawing from Thayer, Evans, McBride, Queen and Spyridakis’s (2007) method of content analysis, we chose recruitment advertisements as unit of analysis due to their effectiveness as permanent record and accessibility, as advocated by Sisodia and Chowdhary (2012). In addition, we used Bakhtin’s (1992) theory of addressivity and dialogic to identify target audience.

In this poster presentation, we will answer these questions based on our findings:

- What kind of program identity do we project in our advertisements?
- Who are the advertisements addressing? Do the advertisements address people who may not know who we are or what we do?
- What are the emerging trends in print advertisement recruitment strategies, and how have they evolved in the last decade?

The Perfect Swarm: Adhocracies in the Technical and Professional Writing Classroom

Chris McCracken, University of Wisconsin, La Crosse

Twenty years ago, in “Relocating the Value of Work: Technical Communication in a Post-Industrial Age,” Johndan Johnson-Eilola argued that “technical communicators need to illustrate both to themselves and to the rest of the world that technology is easy to come by, but understanding and strategic use are both rare and valuable” (1996, p. 257). Strategic use of information communication technologies (ICTs), which involves responding to shifts in how we structure our work, remains a consistent concern of technical writers and technical writing teachers. Recently, in *All Edge*, Clay Spinuzzi (2015) observes that, as ICTs continue afford people greater mobility and flexibility, organizational structures may continue to shift away from hierarchical bureaucratic structures toward more networked adhocracies. The organizing principle guiding these adhocracies, Spinuzzi argues, is “projectification,” whereby actors “swarm” around a project and disperse once it is completed (p. 32).

Spinuzzi’s prognosis raises some important questions for technical and workplace writing teachers: How can we teach strategic swarming? Our technical and professional writing classrooms often function like institutional adhocracies—students from various disciplines coalesce briefly around the shared project of the course and disperse when it’s over—so how might we make the most of that fact? And how can we teach them to swarm a little better?

My poster presentation will report on my successes and failures over the past few years in my attempts to bring the concept of adhocracy to bear on my upper-level undergraduate technical and workplace writing classes. I will include a brief overview of the concept and an argument for why it belongs in our curricula, and I will provide lesson plans, assignments, and student feedback on their development as strategic users of ICTs in an increasingly adhocratic world.

Solving the “Wicked Problem”: Exploring “Design Thinking” in Technical Communication Classroom

Yunye Yu, Georgia State University

Johnson-Eilola and Selber (2013) argues that technical communication is a problem-solving activity that requires thorough analysis of a situation before responding or taking actions. Such an argument is in line with Buchanan’s notion of design being a process of solving the “wicked problem” (1992). As design and technical communication share many traits in common, the principles in one discipline would be applicable and useful in the other as well. Technical communication field has a tradition to study design and users, but we could further benefit from design thinking—a line of theories, methods and tools that have evolved beyond the design studio and applied to a broad range of social contexts, providing practical guidance for designers and non-designers (Brown, 2008; Kelley, 2001; Leidtka & Ogilvie, 2011).

In this presentation, the speaker thoroughly examines four characteristics of design thinking: “the wicked problem” (Buchanan, 1992), the use of practical methods such as observation and interview, the implementation of visualization and prototyping, and the “dual process model of cognition” (Glen,

Suciu, & Baughn, 2014). The presenter further proposes a framework for curriculum development in technical communication that covers assignment design, methodological approach to users' need, apprenticeship, and course assessment. The discussion includes, but not limited to teaching software and programming languages as basic tools, incorporating interview and ethnography as methodological approaches to understand user's needs in global contexts, developing assignments to engage students in group work which simulates the authentic working environment, and organizing field trips to workplace to provide first-hand experience for practitioners. The presenter also argues that design thinking should be evaluated as an additional dimension of technical communication competency.

This presentation brings innovative thinking, insights, research, and criticism from a related field to our discipline, hoping to integrate technology innovation, user experience, interactive design, and programming into technical communication.

Biometric Technology, Elections and [International] Technical Communication: Reimagining Legacies in New Contexts and Domains

Isidore Dorpenyo, George Mason

This presentation interrogates the question: how have Technical Communication scholars reimagined the legacies of technical communication in new contexts and domains and with new technologies and techniques? In response, I narrate my investigation into the biometric technology adopted by Ghana for its 2012 presidential and parliamentary elections. Biometric technology has become an integral part of our globalized, interconnected world; it is “used by government agencies and private industry to verify a person's identity, secure the nation's borders,…” (Vacca, 2007, p. 3) and it has become nearly impossible to travel from one country to another without a biometric passport.

In spite of its powerfulness, biometric technology has not been a subject of discussion in the field of technical and scientific communication. No scholarship takes up the issue of biometric technology in electoral processes. For this reason, a study of the use of biometric in electoral processes is timely and relevant for several reasons: first, it helps to study the various ways elections have been subjected to the logic of technology; second, it provides an exigence to articulate the historical, political, social, rhetorical and cultural entanglements surrounding the communication of a technology in a non-Western context. More so, such a study establishes a relationship among technical communication, technology, elections and democracy.

To demonstrate how technical communicators can initiate a conversation about biometric and elections, I analyze the user manual which accompanied the biometric technology and a two minutes online video which was developed by the Electoral commission of Ghana to educate voters on the electoral process. The analyses help me to discuss social justice, localization, gender and technology, and the political nature of such technologies as the biometric device. Also, I am able to critique assumptions that “non-Western cultures use and produce with Western...technologies differently than Westerners do” (Haas, 2012, p. 281).

Teaching Transnational Rhetoric as a Framework for Successful International Communication to Technical Writing Students From Across the Disciplines

Steffen Guenzel, University of Central Florida

Most technical communication instructors agree that students should be immersed into a meaningful intercultural encounter (St.Amant, 2011) in order to better understand the many additional layers of intercultural communication. Grewal and Kaplan (2001) advance the concept of “global identity” when they “advocate a mode of study that adopts a more complicated model of transnational relations in which power structures, asymmetries, and inequalities become the conditions of possibility of new subjects” (673). As part of a the shift from a genre-based to a problem-based curriculum in a general technical writing course for non-majors, the course responds to constraints of students’ knowledge about international technical writing practices by introducing them to a more achievable framework for transnational rhetoric (Dingo and Scott, 2012, Dingo, 2012). Using case studies that cross borders along with theoretical readings, students learn to design and work with heuristics when drafting documents for U.S. and international audiences.

The poster discusses the challenges that students face and shows how the study of texts representing transnational rhetorical concepts helps students complete the complex tasks. The texts students study include excerpts from research articles defining transnational rhetoric as framework (e.g. Dingo, Riedner and Wingard, 2013), sample communications across borders, and examples to highlight economic and cultural differences. After reviewing the production and rhetorical effectiveness of student texts, the presenter argues that students become better able to construct effective documents when they study economic and cultural discourses and apply their insights in the drafting of required documents. This work empowers students to transcend the nation-borders as technical communicators more intentionally.

~~Comics Advisuality: How Teaching Comics Production Can Inform Both Visual Literacy and Advocacy (Advisuality)—A Comics Poster~~

~~Robert Watkins, Idaho State University~~

~~For programs that only offer one or two technical writing classes to students, curriculum design choices are vital. I argue that teaching students to design comics in the professional communication classroom teaches advocacy and visual literacy skills (advisuality) in order to discuss multiple theories with one assignment. This conclusion stems from qualitative analysis I performed based on empirical classroom studies.~~

~~The data stems from multiple classroom studies I orchestrated that incorporated progymnasmata (Quintilian, D’Angelo) to enable students to create and analyze instructional comics in a step-by-step process. The pedagogy initially stemmed from critical pedagogy (Freire, Shor, Cushman) and moved into advocacy/citizenship theory (Faber, Young, Ratcliffe). The materials students read included fictional and non-fictional comics that represented social advocacy written by creators with diverse backgrounds (Yang, Zinn, Colón).~~

~~Similar to the comics-based issue of Digital Humanities Quarterly released last winter, my poster will present my methodology and results through a comics-based approach. Using cartoons in technical documents (as explored by Fukuoka, Yukiko, and Spyridakis) as a basis, my poster will cover traditional poster sections but will be done with comics art, including hand-drawn avatars, concepts presented visually, text, and sequential art panels.~~

~~The poster's theory is informed by retrospection from technical communication theories championed by scholars over the past decades: such as design demystification, the use of gestalt principles, production pedagogy, and technology as tools (as championed by Northcut, Brumberger, Bernhardt, Kostelnick, Rice). The poster also looks toward new directions by exploring the use of comics production in the classroom to teach technical communication skills while shaking up the medium of posters.~~

Concurrent session B: 11:00–12:15am

Session B1, Broadway

B1: Graduate Research Awards Panel

Michele Simmons, Miami University Ohio, session chair

Panel presented by the recipients of the 2017 ATTW Graduate Research Awards. In our commitment to advancing graduate students in the field, the award's purpose is to support and advance the research of graduate students in the latter stages of their PhD programs, and spotlight their contributions to research in technical and professional communication.

Advocating for Users, Engaging Citizens: Analyzing User Experience Research and the Rhetoric of Civic Engagement in Public Sector Digital Service Design

Jeffery Gerding, Purdue University

The exigency for this research comes directly from President Barack Obama's 2016 SXSW keynote address, where he described two emergent approaches to increasing accessibility, transparency, and usefulness for governmental services. In his address Obama describes two models that have emerged as a direct response to ineffective governance and that actively seek to create "a two-way exchange" between citizens and their government. The first model is largely external of government and can be seen most clearly in the work of the civic technology movement; the second model can be found within the federal government in the work of agencies and initiatives like the digital services agency 18F and the United States Digital Service, a "startup" within the Executive Office of the President. The broader goal of this study is to understand how user experience design and human-centered design have been integrated into the development of public sector digital services and attempts to more effectively integrate citizens into governance and decision-making. My project will employ a case study research design and agile ethnographic methodology in order to closely examine the history and practices of digital services with the United States federal government. The larger focus of this project is to examine how civic engagement motivates the work of professionals in public sector digital service

design and how it has shaped the role that citizens might play in the development of governmental services.

Correctional Inclinations: Using Big Data to Trace Technical Communication in Prisons

Eric James Stephens, Clemson University

America's prison population has grown 700% since the 1970's—the same time Foucault published *Discipline and Punish*. With 25% of the world's incarcerated population, the United States has a deep problem with mass incarceration, a topic addressed heavily in sociology. My work as a technical communication scholar will add a new perspective to understanding the role of prisons in American society through the use of big data, specifically natural language processing and latent semantic analysis. This project seeks to understand the difference between what we hope to accomplish as a society and what is happening at the word-level of corrections in prison. Inmates are housed in “correctional” facilities staffed by “correctional” officers, and this raises three important questions: (1) what does “correctional” mean; (2) how is the act of “correction” manifested in technical and professional communication; and (3) to what standard of “normal” is this group being corrected? To understand these questions and their implications, my dissertation research draws on Spinuzzi's (2008) *Network* by studying inmate handbooks with an external measurement tool of recidivism statistics provided by the Bureau of Justice

Developing Digital Literacies: Engaging Technical Communication at an Urban Community Technology Center

Rachel Tofteland-Trampe, University of Minnesota, Twin Cities

My dissertation work focuses on how underrepresented information and communication technology (ICT) users are developing their digital literacies at an urban community technology center (CTC) and how CTC tutors are serving as local technical communication experts. Utilizing an ethnographic approach for data collection and grounded theory methodology (Charmaz, 2006; Glaser & Strauss 1999/67; Strauss & Corbin, 1990) for analysis, I have explored the technical communication texts and practices present in that setting. In this presentation, I provide insights about ICT usability issues and how interactions with CTC tutors fulfilled crucial roles for learners. Users often lack crucial cultural knowledge about ICTs and physical experience using them. Without this knowledge and technical information, inexperienced users are unable to utilize well-intentioned tutorials aimed at them, and users are unable to apply for jobs online, open an email account, or conduct online searches to locate important information or services. I see opportunities to expand technical communication scholarship and address persistent digital inequalities by incorporating more perspectives from underrepresented users with less-privileged ICT access and my work represents one attempt at doing so.

Session B2, Weidler

B2: Content Strategy: Local and Global Perspectives

Huiling Ding, North Carolina State University, session chair

As organizations are producing more content than ever to satisfy shorter development cycles, multiple product configurations, and information needs of users around the globe, they increasingly need a unifying approach that allows for governing various types of re-usable, structured content from various organizational units through its entire lifecycle: a content strategy. Reviewing recent industry and academic publications on content strategy, Clark (2016) calls for more empirical, usability, and pedagogical studies to help technical communicators better engage and integrate with content strategy. This panel attempts to fill in this knowledge gap by presenting empirical, theoretical, and pedagogical studies on content strategy at local, national, and global levels to shed more light on different ways technical communicators can better understand and contribute to content strategy research and practice.

Practitioners' Perspectives of Content Strategy and Technical Communication in China

Xiaoli li, University of Dayton
Jianhua Dong, Microsoft China

Technical communication is a fledgling academic and occupational field in China. No previous studies have examined how practitioners perceive the connections between content strategy and technical communication, a gap that this talk fills in through exploratory studies of corpus analysis of online discussions about content strategy and interviews with technical communication managers, content strategists, and information architects in large Chinese companies such as Huawei, Lenovo, Alibaba, and Microsoft China. Some of the issues examined here include job titles, responsibilities, industries, professional and academic backgrounds, and lengths of involvement of those working on content strategy in China. Other issues that will be examined include current understandings of content strategy, perceptions of its impacts on organization, and common practices used to tackle content strategy tasks.

Using Peer Apprenticeship to Teach Graduate Students Global Content Strategy Skills

Huiling Ding, North Carolina State University

This talk explores possible approaches to and challenges of teaching graduate students global content strategy using a project-based approach. The presenter draws from her experiences working with eight student groups to tackle content strategy for American and Chinese university websites. To prepare students for such work requires the acquisition of essential skills, e.g, audience analysis, user experience, social media strategies, search engine optimization, Google Analytics, web design, and Global English. It is critical to incorporate, encourage, and enable peer apprenticeship by putting students with different skillsets into teams and asking students to take leadership in teaching vital knowledge about the key areas listed above. It is also an absolute must to collaborate closely with clients, to understand technological barriers and constraints students will have to cope with, and to create realistic and achievable goals.

The Industry/Academy Collaborative Research Initiative and the Global Content Strategy Project: Lessons Learned

Tatiana Batova, Arizona State University
Rebekka Andersen, University of California Davis

Sustainable, mutually beneficial academy-industry research collaborations continue to be an important goal for the field, one that some suggest must be achieved if the field is to gain increased recognition and legitimacy (Mirel & Spilka, 2002; Rude, 2015; Tebeaux, 2003). The presenters argue that global content strategy is an area that is particularly fitted for such research collaborations. In this presentation, the presenters describe their participation in an academy-industry research project that focused on global content strategy. The project included a crowdfunded study of multilingual quality in component content management environments that was sponsored through The Industry/Academy Collaborative Research Initiative, spearheaded by a group of four academics working in partnership with the Center for Information-Development Management. The presenters outline the origins and goals of the Research Initiative and then describe the milestones and challenges of carrying out the project, e.g., making a business case and negotiating study methodology. Lessons learned can help the field create more sustainable, mutually rewarding industry/academy research collaborations that would provide valuable theoretical knowledge and best practices methodologies for content strategy researchers, educators, and practitioners.

Content Strategy and Custom-Solutions-Oriented Content Management Systems

Baotong Gu, Georgia State University
George Pullman, Georgia State University

Content management is the future of internet based corporate communications, and content strategy, as the cornerstone of any content management endeavor, needs to be designed with a systematic approach, careful thinking, and flexibility in order to accommodate the changing and varied needs of corporate content development. The day of the website is long gone and social networking, while critical, is ultimately ephemeral. Thus content creation, curation, and management form the backbone of corporate communications. The corporate Content Management System should be robust, extensible, durable, with an appropriate level of security, and with analytics. This talk discusses the critical aspects in the design and execution of adaptive and responsive content management systems. The presenters argue that a custom solution is really the only viable tool for any corporation and that Technical Writers of the future should have the technical skills to create and manage such tools. From a content strategy perspective, Technical Writers need to understand document type definitions and faceted classification well in order to better understand how each document object relates to all others and hands on experience designing a CMS offers deep learning along these lines.

B3: Digital Methods for Social Justice Technical Communication Research

Carolyn R. Miller, North Carolina State University, session chair

Over the last decade, the field of technical communication has encouraged and sustained an emphasis toward diversity and social justice (Haas, 2012; Jones, Savage, Yu, 2014; Williams & Pimentel, 2012; Yajima and Satoshi Toyosaki, 2015). Working toward social justice requires that we “think well outside of traditional frameworks,” expanding the methods, platforms, and practices that we use to develop and disseminate our work (Jones, Savage, and Yu, 2014, p. 134). In this panel, speakers will showcase methods of digital research for and motivated by social justice. In celebrating 20 years of ATTW and considering emerging trends, this panel answers Jones, Savage, and Yu’s (2014) call for expanding technical communication research frameworks by highlighting intercultural and multicultural dimensions of our methodologies and methods. By featuring research committed to methodological concerns including teaching, assessment, and research, attendees will take away tools that can help scholars continue supporting important efforts toward diversity and social justice.

Digital Video-Supported 3D Interviewing

Ann Shivers-McNair, University of Washington

Speaker 1 will describe digital video-supported 3D interviewing, a technique designed to account for acts of making at multiple levels: the research apparatus itself, communication, bodies, differences. First, the speaker will describe the approach, which aims to provide accountability for the culturally situated practices by which knowledge is made and to make both inclusions and exclusions visible as a means of intervening. Next, the speaker will demonstrate the technique with data from a workplace ethnography of a makerspace, where issues of access and inclusivity are central concerns. The speaker will conclude by suggesting further possibilities for 3D interviewing to support inclusive research and practice in technical communication.

Data Visualization Approaches Used for Social-Justice Oriented Quantitative Research

Heather Turner, Michigan State University

Speaker 2 will provide a brief overview of data visualization approaches used for quantitative research across fields of communication and digital humanities. Then, speaker 2 will share her dissertation research on social justice methods in technical communication as an example of the difficulties of using popular data tools to visualize qualitative work. Building off these problems, speaker 2 will offer different approaches and tools to visualize qualitative data in collaborative, culturally competent ways in technical communication.

Borderlands Hip Hop Rhetorics as a methodology for cross-cultural multimodal research

Victor Del Hierro, Michigan State University

Speaker 3 will discuss Borderlands Hip Hop Rhetorics as a methodology for cross-cultural multimodal research. Focusing on the localization practices in Hip Hop, this speaker will talk about how we might incorporate theories of migration to respectfully and rigorously move across digital and physical sites of research. In turn, as a globalized culture, Hip Hop offers important points of inquiry for technical communication practitioners to work across and understand diverse populations as they navigate the relationship between local and global discourses.

Issues of Social Justice in the Assessment of a FYW Program in a Land Grant University

Matthew J. Gomes, Michigan State University

Speaker 4 will describe his experiences inquiring into issues of social justice in the assessment of a FYW program at a large land grant university. While many writing assessment scholars advocate for fairness (Elliott, 2016) justice (Poe & Inoue, 2016), and anti-racist classrooms (Inoue, 2015), and non-discriminatory as desirable outcomes of writing assessments, such outcomes can be difficult to achieve on large campuses with uncoordinated and diverse assessment criteria. This presentation demonstrates how the speaker has used digital visualization of large programmatic data to identify and represent the ethnic, racial, and curricular consequences of assessment practices. Ultimately the speaker argues visualization can play a critical role in advocating for socially-just curricular reform.

Lesbian-Feminist Collective Collaboration as a Queer Critical Research Practice Through Their Work on The Gender Project

Casey Miles, Michigan State University

Speaker 5 will discuss lesbian-feminist collective collaboration as a queer critical research practice through their work on The Gender Project, a series of short documentaries about gender and sexuality.

Session B4, Sellwood

B4: Re-examining Teaching in Technical Writing Classrooms

Joshua Welsh, Central Washington University, session chair

A Model for Promoting Textual Reflection in Writing Classrooms with Computer-Aided Rhetorical Matchmaking

Necia Werner and Danielle Wetzel, Carnegie Mellon University

This project outlines a collaboration between English and Statistics to develop and implement technology-enhanced learning (TEL) aids that, when combined, can help students more quickly—and literally—“see” central rhetorical and linguistic elements that comprise writing genres. Specifically, our project entails the use of a tool for doing corpus-rhetorical analysis, developed and refined over the last 20 years, which has previously demonstrated its strength as a research tool to sort textual corpora into

identifiable genres (for example, identifying statistically significant patterns that differentiate Shakespeare's histories, comedies, and tragedies), as well as its potential as an educational tool in a graduate-level writing course for design students.

This talk describes what we learned from extending this tool for rhetorical and statistical analysis to core writing courses. We provide a walkthrough of how the tool was used to analyze corpora from the genre set of assignments, and how it helped us visualize and communicate the skills that bridge our first-year and technical writing service courses. Additionally, we describe a new set of TEL tools, developed for student and teacher usability, to help students see for themselves how their composing decisions compare with their classmates along dimensions pertinent to the assignment genres. Among these new developments is a statistical tool to analyze and compare student drafts along these genre dimensions, and correspondingly, provide output to help instructors “match” students for discussion and peer review purposes.

This project contributes to our understanding of how to help students see and reflect on compositional decisions that combine linguistic and rhetorical strategy. However, the project also furthers a research-based curriculum articulation and alignment for foundational writing instruction at the university level. Our project offers a means for giving students new ways to notice text surface alongside genre, and to combine situation with language in their compositional decision making.

Sustainable Collaborations: Training Teams in Psychological Safety

Lisa Dusenberry, Armstrong State University

Joy Robinson, University of Alabama in Huntsville

Psychological safety (PS) is described as “a team climate characterized by interpersonal trust and mutual respect in which people are comfortable being themselves” (Edmondson, 1999, p. 354). Recently a synthesis of research (Gilson et al., 2014) indicated that along with team empowerment, cohesion, commitment, and identity, psychological safety was a key predictor of team success. To be effective, members need a “safety net” to protect them from the inherent risks associated with collaborative work, including the risks of “losing face.” Understanding how PS functions for collaboration will be instrumental to teams in the workplace and in the academy. Innovations in pedagogy that address PS and improve collaboration will help to better prepare students for the workplace. Technical Communication professionals, who are often tasked with working in groups, will also benefit directly from improved collaboration.

Few studies explore how PS develops, but instead how it is maintained. For example, Google's research indicates that being “sensitive to how their colleagues feel” supports the atmosphere of openness required for PS (Duhigg, 2016, p. 12). A recent case study on PS (Robinson, Dusenberry, & Lawrence, 2016) showed that PS can contribute to the success of a small single gendered group. The co-presenters argue that teams provided with the proper PS training can be more successful than those without.

We posited that education about PS is the key; therefore, we created short modules addressing PS that can be implemented in the classroom. These modules address 1) sharing of self 2) sharing importance

3) being oneself, and 4) norming. We expect that this training will result in increased satisfaction, improved cohesion, and better deliverable quality. The study, across three universities, will use this training applied to various student groups. In the presentation, we discuss the research, the experimental procedure, and the PS training developed.

Re-Imagining our Legacy of Praxis: Online Course Pedagogy for Real-World Contexts

Laura C. Brandenburg, Wayland Baptist University

In the now classic 1989 article, Miller advocates a change in technical communication pedagogy by converging skills- or knowledge-based learning (i.e. *techne*) with application: *praxis*. Pedagogical scholarship in our field since then has argued for the relevance of *praxis* in our classrooms. In face-to-face classrooms, we often see service learning integrated for students to gain experience. However, as our classrooms move to virtual spaces, we must continue to ask how we can provide students with practical application for assignments.

My presentation will focus on how we can make our assignments in online technical communication courses directly relevant to the workplace environment. With IRB approval, I surveyed former students, most of whom are nontraditional and work full time, from five sections of an online technical communication course to determine which assignments are most relevant for students' workplace settings and which (if any) assignments were used from the class for the workplace context (e.g. instructions for customers, procedures for the office, proposal to the supervisor). My findings suggest that nearly half—and sometimes more than half—of the students in the course apply the documents to their workplace, or potential workplace in the case of application materials. The highest ranking assignment for relevance is the cover letter and resume, followed closely by the instructions/procedures genre.

It's widely agreed in our field that *praxis* assignments make discussions of audience, purpose, and context more valuable. In addition, because students feel invested in their projects, they do submit or apply the documents to the real-world context, sometimes with success. Specifically, I will focus on case studies of students whose documents were well-received by the intended reader(s), and I will offer strategies that professors can incorporate in their virtual classrooms to re-imagine to the legacy of *praxis* for our online classes.

Beyond the Screen: Simulation in Technical Writing Pedagogy

Lillian Campbell, Marquette University

Recent writing scholarship emphasizes the deeply situated nature of professional writing and thus, the challenge of teaching it in classroom contexts (Dias & Pare, 2000). In response, some instructors have sought to link the classroom to the “real-world” through internships or service learning, while others aim to create classrooms that mimic professional contexts. Computerized simulations have offered one compelling model for incorporating authentic workplace writing tasks into the technical communication classroom. This presentation will begin by overviewing recent virtual professional writing simulations (Balzotti & Rawlins, 2016; Matteo, 2007; Russell & Fisher, 2009). However, I will

then call for our field to think “beyond the screen” in imagining the role of simulation in technical writing pedagogy.

By over-emphasizing the virtual aspects of simulations, we enable companies to develop writing simulations that are taken up in disciplinary or online courses with little attention to context or ethics. Toolwire’s recent development of “workplace communication” modules that address topics like meeting skills, presentation skills, teamwork, interviewing, and diversity offer an example of this trend. After discussing the risks of virtual simulations, I will offer counter-examples of live-action “critical simulations” (Crocco 2015) like Theater of the Oppressed (Godbee & Diab, 2016) and Reacting to the Past (Stroessner 2009). These models ask us to think about the unique affordances of embodied simulations that occur in physical classroom spaces. Finally, I will turn to a context that our field rarely considers where simulation is frequently used to teach communication practices alongside technical skills – nursing pedagogy. I will discuss key findings from a year of ethnographic research on nursing clinical simulations to demonstrate how live-action simulation can teach technical writing in ways that emphasize situated and ethical practice.

Session B5, Ross Island

B5: The Robots are Coming . . . to Technical Communication

William Hart-Davidson, Michigan State University, session chair

In August 2016, Facebook terminated their human newsfeed editorial staff and replaced them with an algorithm (Newitz, 2016). This algorithm returns stories to users based trending discussions found on user Facebook feeds. Results have been mixed. A news story about Megyn Kelly featured false information and unattributed sources. With less drama, Twitter launched its own algorithmic-driven trending service, which delivers tweets that users may have missed when away from the app (Swanner, 2016). As more and more content services employ robots to manufacture, curate, and deliver their messages, technical communicators are now obliged to calibrate, collaborate, and compete with non-human writers and editors. In response to this exigency, this panel will discuss three different robot-building projects undertaken by technical communication teachers and scholars. Each relies on theories and methods widely applied in technical communication. Two of these work primarily in science writing genres, while the third works in instructional text (e.g. user assistance or help documentation). They are, in every way, tech comm robots. These projects use machine learning algorithms built into a web application environment to automatically classify rhetorical moves in (unseen) text (see Swales and Najjar, 1987). The output from these applications ranges from simple analysis to synthesis of new texts according to how each is designed to be used. All three applications are designed to augment rather than replace human performance. They work thusly because we are interested in helping people - students and professionals - learn and grow as writers. Not everybody building these kinds of algorithmic tools shares this interest, however. In this panel, we will discuss both the how and why of building assistive rhetorical technology using our disciplinary expertise in technical and professional writing. Our aim is to engage our colleagues in thinking about our future as technical communication

teachers, scholars, and practitioners in a world populated by both human and non-human rhetorical agents.

Creating a Rhetorical Robot to Extend Rhetorical Expertise

Ryan Omizo, University of Rhode Island

Speaker one will detail a completed project, discussing the development of a facilitation tool that began with paper forms created with traditional qualitative research techniques familiar to technical and professional communication scholars. The project - now published and available to the public for use - assists with moderation of online discussions and was developed specifically to help informal learning facilitators in science museums interact with their visitors online. Speaker one will then discuss the rationale for transforming the facilitation toolkit into an automated web application including the creation of a revised coding scheme for the machine learning algorithm. Speaker one will conclude with a demonstration of the application that explains the design decisions behind each of the data visualizations in the user interface.

Use What You Choose (Machine Learning Application)

Minh-Tam Nguyen, Michigan State University

Speaker two will outline the development of a prototype machine learning application named Use What You Choose. The purpose of this app is to mine Amazon product review data sourced from McAuley and Leskovec (2013) and classify sentences in these reviews as presenting technically instructive and non-instructive messages. The instructional content category contains tips on product use, product hacks, and warnings of potential issues. Non-instructional content would include narrative statements about the purchase experience or the motivation for purchasing the production. This project explores a key concept in technical communication: genre hybridity in open communication systems such as Amazon reviews, which have few rules governing required content (Selber, 2010). Speaker 2 will discuss how machine learning algorithms informed by genre analysis can systematize unstructured data such as Amazon reviews to uncover significant trends in user behavior and rhetorical actions and open new possibilities of reuse and automated assistance.

Can We Live Together With Robots?

William Hart-Davidson, Michigan State University

Speaker three will present a third example of automated rhetorical analysis - this one useful for students learning to communicate in scientific genres - that has also been peer-reviewed and published. There are two primary goals for the third presentation. The first is to engage an audience of our professional peers in thinking about the theoretical and practical design of tools that meld our expertise as writing teachers with opportunities created by the availability of large, text corpora and open-source machine learning technologies. The second is to examine the ethical dimension of such projects, asking **why** we should do this kind of work. Four motivating reasons will be examined: 1) to extend rhetorical expertise to those who may benefit from it but who may lack explicit rhetorical training, 2) to extend the capacity of humans to do certain kinds of rhetorical tasks due to challenges of scale, seeking

the affordances of speed 3) to extend our knowledge of rhetoric using thought experiments, executed in computer code, to test conjectures, pursue answers to questions, and explore possibilities, and 4) to participate in work that mobilizes our disciplinary knowledge in ways that we may or may not approve of, preserving our right to intervene and lead.

Session B6, Morrison

B6: Ethics as a Core Value in Technical Communication: Reimagining Virtue Ethics

Jennifer Mallette, Boise State University, session chair

Ethics is a core value to the field of technical communication. Most will acknowledge that even a basic memo, as Katz (1992) memorably demonstrated, can serve unethical purposes. However, even with Dombrowski's (1999) and Markel's (2000) foundational work and a special issue on ethics in TCQ (Dragga, 2001), ethics courses are still "not highly represented" in TPC curricula (Meloncon & Henschel, 2013). We more often find vague calls to think about ethics than we do attention to particular ethical frameworks, such as utilitarianism or deontology. This panel discusses one neglected ethical framework and its applications to TPC research and teaching: the virtue ethics tradition. Rooted in an understanding of ethics as habitual and invested in the body—rather than as fixed, reasoned-based principles—virtue ethics considers how dispositions such as patience, generosity, and truthfulness can be developed in individuals toward communal goals of well-being, such as happiness, wisdom, and excellence. Aristotle called this work *eudaimonia*, which is often translated as human flourishing.

Defining and Contextualizing Virtue Ethics for TPC

Jared Colton, Utah State University

Katz's (1992) argument was that many of the formal values that comprise good memo writing, namely technical accuracy, objectivity, and logicity—embodied under what he called an "ethic of expediency"—were employed to serve the ends of the Holocaust. He concluded that "when expediency becomes an end in itself . . . ethical problems arise" and that to prevent such problems from occurring, technical communication and rhetoric scholars "should teach the whole panoply of ethics in deliberative discourse" (p. 272). In response to Katz's timeless call, and in keeping with his argument that a value in expediency emerges in Aristotle's *Rhetoric*, this speaker will suggest turning to a virtue ethics framework as a starting place for better considering ethics in technical communication.

Anticipating the following panelists' presentations, this speaker will discuss three key moments in the history of virtue ethics: (1) Aristotle's formulation of the framework, (2) its 20th century re-emergence, and (3) contemporary revisions to virtue ethics. Audience members will gain an understanding of virtue ethics' strengths and limitations in relation to other ethical frameworks employed by TPC research, including utilitarianism, care, postmodernism, and deontology.

Re-envisioning Virtue Ethics and Climate Policy through Ecological Feminist Theory

Lauren Cagle, University of Kentucky

Using the example of policy documents developed by a governmental climate policy consortium, this speaker examines the application of an ecological feminist re-envisioning of virtue ethics to environmental technical communication. Ecological feminist ethics, developed by Chris Cuomo (1998), aims to inform the complex decision-making required to manage human and non-human actions and interactions in order to protect the interests of both. Cuomo expands Aristotle's virtue ethics by making room for non-humans in our vision of what constitutes communal well-being, yielding a more inclusive understanding of eudaimonia. This speaker argues that this ethical framework can shape policy that is explicit about the ethical relationships it posits among human and natural systems and that works towards the flourishing of interrelated, embodied humans and non-humans (rather than independent, purely rational actors). By focusing on systemic flourishing, this speaker suggests that Cuomo's re-envisioning of virtue ethics can help us respond to TPC scholars' critiques of environmental policy rhetoric as exclusive of both human and non-human concerns (Killingsworth & Palmer, 1992; Rude, 1997).

Dispositional Ethics in Social Media Closed Captioning

Steve Holmes, George Mason University

This speaker employs the work of Shannon Vallor (2016), a contemporary feminist social media virtue ethicist, to examine the ethics of captioning practices in the social media platform Viki (2010). Viki offers an international user base the ability to watch and subtitle global television programming and films in over two hundred languages. While few would consider these volunteer activities anything but an ethical good in solidarity with the deaf community, a closer look at Viki's various discourse communities reveals a competing range of ethical purposes: high school assignment completion, cross cultural sharing, gamified incentivization, and heated debate about which genres (drama versus comedy) are more important to caption than others. This speaker applies Vallor's dispositional ethics—through what she calls the “communication virtues” for social media—to understand the multiple ethical motives and habits driving closed captioning practices on the Viki platform. This application extends the work of TPC scholars invested in disability studies and accessibility (Dolmage, 2014; Zdenek, 2015) and offers directions for future research on the ethics of user behavior in digital spaces.

Ethics of Data Presentation in Science Commercialization & Medical Rhetoric

Scott Mogull, Texas State University

Since the 1980s, commercialization has increasingly become a major goal of many medical researchers, which is in contrast to the general pursuit of knowledge that historically was the mission of scientific and medical research (Holloway, 2015). Concerns of information secrecy and selective communication in science commercialization, which leads to a state of ignorance outside of the organization, have been raised (Boggio, Ballabeni, & Hemenway, 2016; Evans, 2010; Fernandez Pinto,

2015). Due to the secrecy and distortion of information in science commercialization, scholars are concerned that future scientific progress will be impeded (David, 2005; Evans, 2010; McCain, 1991). Although concerns of science commercialization have been raised, the fields of technical communication, medical rhetoric, and science and technology studies lack a detailed example that illustrates the scope of the problem and explore solutions. In this presentation, attendees will be presented with a comprehensive case study that illustrates previous concerns but also shows that countermeasures to compensate for industry exploitation may only be of limited effect. In case of Treximet, a therapeutic drug to treat migraines headaches, the original clinical study data showed the drug was an effective first choice for treatment in females but not males. Yet, in both the package insert and a scientific journal article, the pharmaceutical company (or company-sponsored authors) pooled clinical trial data from both female and male participants showing data through a rhetorically crafted lens that would lead physicians and scientists to the false conclusion that Treximet was more effective for “all patients” than either component of Treximet (sumatriptan and naproxen sodium) or placebo. Notably, the rhetorical lens through which the same data was communicated led to qualitatively different conclusions. As illustrated in this case study, scientific information in science commercialization is secondary and subject to obfuscation and distortion so that the information communicated outside of an organization aligns with the primary goal of selling a product. This secrecy and bias misleads physicians in prescribing effective treatment and scientific researchers in researching more advanced treatments. Furthermore, overly simple conclusions of data in science commercialization lacks the intricacies and nuances, as well as the opposing views, that are hallmarks of scientific discourse. The scientific community has responded to pharmaceutical exploitation of the scientific literature through regulation of scientific publication that requires submission of preclinical study design to publically available databases. Such countermeasures may be of limited effect as the Treximet data has been available in the U.S. FDA website, which may present an argument for increased attention to the study of data presentation in science and medicine in technical communication ethics courses.

Session B7, Hawthorne

B7: Contextualizing Technical Writing in STEM and Beyond: Curricular Design and Assessment Methodologies for Student Learning

Elisabeth Kramer-Simpson, New Mexico Institute of Mining and Technology, session chair

Technical Writing as a service course exists at many universities, yet this somewhat general course benefits from tailoring to fit the institutional context. Barker and Matveeva (2006) call for attention to the context surrounding the teaching of the service course, including the student population. In this panel, we discuss teaching STEM students, exploring the impact of this contextual factor on the course sequence, curricular design and assessment practices of our 300-level Technical Writing. Winsor (1990) shows Engineering writing as a collaborative process motivated by “writers’ respect for fact-based action” (p.60). To better prepare our students for this context, we design curricular activities to develop

student collaboration. We also acknowledge the data-rich way that engineers and STEM students approach writing, and try to provide data-rich assessment practices. This panel uses pedagogical techniques for addressing an audience of STEM students to develop larger discussions for fostering student learning within the context of teaching Technical Writing.

Pedagogical and Assessment Challenges and Rewards of Fitting a Junior-Level Required Technical Communication (TC) Course

Jesse Priest, New Mexico Institute of Mining and Technology

Speaker 1 will discuss the pedagogical and assessment challenges and rewards of fitting a junior-level required Technical Communication (TC) course in with STEM students' larger academic contexts. In order to do so, Speaker 1 argues for the benefits of making clear connections both to students' First-Year Writing courses as well as how the expertise developed in TC can help students in the work they do as STEM students. These connections may include explicitly discussing different academic genres students are currently using in their other courses in our TC class or having them create and publish material for use within their residence halls or departments, among others. Drawing on genre practices (Herrington & Moran, 2005), disciplinary knowledge transfer (Bazerman, 2011; Hyland, 2011), and samples of student work, Speaker 1 discusses the process of developing both curricular design and assessment methodologies in one assignment sequence designed to streamline inter-disciplinary learning for students in ways that helps them think of technical communication and their larger academic contexts-- STEM or otherwise-- as interdependent parts of a holistic learning experience.

Reflection on Student Groups and Quality and Structure of Assignments

Janet Kieffer, New Mexico Institute of Mining and Technology

Speaker 2 describes pedagogy in terms of the quality and structure of assignments and how students are grouped. We encourage students to use some of their junior- or senior-level research, which can range from a design project like a drone to genetic research. Although we start out with basic professional communication, we expect students to use information and data from their junior and senior design projects (if their majors require these), or material from projects they may be working on in their fields of study. Most faculty choose collaborative assignments. We group students together by their majors or related majors. A class might have Electrical Engineering students working with students in Computer Science; students in Biology might be working collaboratively with students in Environmental Science. We emphasize, too, that although they might not be employed as technical writers, they will surely be expected to contribute toward technical writing in some respect, usually collaboratively. Speaker 2 discusses the pedagogical benefits of working on projects collaboratively, which introduces students to the kinds of disciplinary activities they will experience in their internships or after they graduate.

Assessment Practices and Classroom Activities for Technical Writing

Elisabeth Kramer-Simpson, New Mexico Institute of Mining and Technology

Speaker 3 addresses the way that assessment practices, as with the curricular arc and the classroom activities for Technical Writing, are modified to best reach STEM-focused students. As a 300-level class at our institution, not only is the Technical Writing service course building on the first-year

writing sequence, it is helping students reach a high level of specification in their disciplinary writing. Feedback to STEM students is thorough, and technical. Speaker 3 discusses ways that point values on criterion-based rubrics communicate the level of revisions needed on assignments in the Technical Writing classroom. Speaker three also emphasizes that rubrics need to be paired with comprehensible textual comments. Taylor (2011) emphasizes that the rationale for teacher comments needs to be understood in addition to the content of the comment, and Speaker 3 identifies ways that multiple data-points in assessment can communicate this rationale. In this presentation Speaker 3 describes ways that students use both point values and written feedback to chart their progress on assignments ranging from a recommendation report to resumes. Speaker 3 will show how this adaptation of Technical Writing assessment for a STEM audience of students has led to strong teacher-student communication.

Concurrent session C: 2:00–3:15pm

Session C1, Broadway

C1: Past, present, and future of key discussions

Sam Dragma, Texas Tech University, session chair

Past and Future of Genre Studies in Technical Communication

Carolyn R. Miller and Stephen Carradini, North Carolina State University

Genre theory has provided a basis for much research and instructional design in technical and professional communication over the past 20 years. As sociocognitive categories that orient social action, genres represent not only practical ways of getting things done but also ways to critically evaluate cultures and communities. This presentation will examine the genres valued within the field of technical and professional communication during this time as revealed by an analysis of articles published in the four most prominent journals in the field (*TCQ*, *JBTC*, *JTWC*, *IEEE-TPC*) from 1996 to 2016. Although Dayton and Bernhardt's (2004) survey of ATTW members indicated that genres and genre theory were among the topics of below average interest for future issues of *TCQ*, these data show that the rate of publication on genre held steady at an average of nearly 12 articles per year during this period. Genres of interest have included annual reports, environmental reports, employee termination documentation, presentence investigation reports, patents, scientific research articles, software documentation, and a variety of genres related to health care; increasingly, attention has also turned to digitally mediated genres such as blogs, websites, infographics, web resumes, and others.

The results of this analysis will inform a discussion of disciplinary conceptions of genre, organized around four categories based on the relationships between genres and the communities that develop and sustain them: marketed genres, administered genres, institutional genres, and vernacular genres. In each category, the relationships among institutions, producers, audiences, and recurrent exigences differ, as well as the ways that a genre “fits” its recurrent situation. Future trends in technical communication will reposition the field with respect to these categories and will make three issues central to future research: multidisciplinary, multimodality, and methodology.

Interface Exhaustion after Twenty Years Teaching Web Design: Some Implications for Technical Writing Classrooms

Geoffrey Sauer, Iowa State University

“I have taught undergraduate and graduate courses in web design for exactly twenty years, as part of my departments’ technical communication curricula. Unsurprisingly, my students have a different relationship with web technologies than they had in 1997, and very different goals learning to produce web content. In this paper, I will discuss some of the challenges which tech comm scholars who’ve written in the past two decades teaching web-based document production cited, then will discuss emerging challenges I see for the near future of technical communication education about producing web and mobile content.

This paper will review some of the important solutions scholarly literature in tech comm has recommended in the past twenty years, and discuss how those partly enabled challenges we’ll face in the near future. In doing so, it will identify issues instructors in our field should (re)consider in the next decade, when integrating HTML/XML/CSS/JS-related curricula into our courses.

Past issues addressed:

- Teaching standards compliance
- Developing usability/accessibility testing methods
- Inventing user-centered/user experience design
- Teaching software students may not have on their personal computers
- Teaching students how to collaborate on project-based multimodal documents
- Producing web content for translation/localization

Emerging issues addressed:

- The complexity of coding responsive web designs (which adapt to different devices)
- Teaching when universities often don’t today provide student home page webservers
- How to teach students to assess and use open source software, frameworks, and environments
- How to teach students to consider and assess online web services which may provide useful features, but come with numerous issues

The State of Pedagogy in Technical Communication

Tracy Bridgeford, University of Nebraska at Omaha

“In 2004, Technical Communication Quarterly published two special issues on the State of Technical Communication. None of the 12 articles reported on the state of pedagogy in technical communication. I find this omission concerning because if we are, as Jim Dubinsky (2004) stated, a “pedagogical discipline,” then its current state deserves consideration.

Modern pedagogical approaches owe their existence, I think, to Carolyn Miller (1979), who instantiated the first movement in our pedagogical story, when she argued that technical writing should be taught as enculturation. She arguably made possible the direction of the pedagogical approaches we know today. These approaches moved from a forms-based pedagogy to social constructionist, summarized extensively in Thralls and Blyler (1993). Various versions of constructionist pedagogies have included service learning, communities of practice, and feminist.

Another two movements influencing the state of pedagogy are visual communication and intercultural communication. With growing concern in the global economy, the importance of intercultural communication has been apparent at least since 1995 with Hofstede's, *International Technical Communication*. Likewise, concern for visual literacy has increased as communication situations rely more and more on visual communication. Despite any challenges, these pedagogical approaches share one overriding characteristic: they are often represented by a specialized course or unit. But, as the argument goes, these areas should be integrated into all aspects of technical communication classes (Brumberger & Northcut, 2013, and Thatcher & St. Amant, 2011).

Finally, distance education moved into the spotlight with a special issue of *Technical Communication Quarterly* (1999). Early discussions focused primarily on how a course might look on the Web while current approaches have turned toward how learning and teaching occur in online environments (Cargile Cook, 2005, Hewett & Powers, 2007, and Meloncon, 2007).

This presentation will trace these movements and assess the state of pedagogy in Technical Communication today.

Writing Historical Nonfiction: A Neglected Art of the Technical Communicator

Robert R. Johnson, Michigan Technological University

Retrospections and New Directions in Technical Communication implies historiography and calls for historiographical arts. But the art of writing history is seldom explored in the fields of technical and scientific communication. Fortunately, this conference theme invites us to interrogate what it means to write histories from our various disciplinary standpoints.

History allows us to reflect and to point us forward. However, writing history is not merely the “writing up” of collected facts, nor is it solely the rendering of stories. Rather, it is a collection of well-managed writing arts that engage readers in a manner that technical communicators know well. As the prominent American literary historian Bernard DeVoto expressed to his friend and colleague Garrett Mattingly in 1938, “the reader is in there working with you, too. In narrative [history] fewest is best and you don’t have to tell everything, for if anyone is with you at all, he is half a yard ahead of you...you’re probably giving him more than he needs.” What better definition for technical communication historiography?

In my presentation I will explore what constitutes the arts of historical nonfiction pertinent to technical and scientific communication in two particular veins. First, I will show through selected examples how several disciplines that embrace historical writing—the history of technology and science, literary

history, fictional and nonfictional narrative— can be brought together to form a pastiche of compelling historiographical arts (see for example John Staudenmaier 1979, Robert Johnson 2012, Ginger Strand 2015, Wallace Stegner 1980, Stephen Greenblatt 2013, Anthony Doerr 2014). Second, I will argue that a central component of historical narrative—readers— provides a pallet for presenting narratives to public audiences where our voices can potentially have broad effects.

The “take away” will be heuristics and theories for teachers, students, and scholars of technical communication.

Session C2, Weidler

C2: Designing for Better Technological Futures: Intersections of Design and Technical Communication

Mark Zachry, University of Minnesota, session chair

Reconsidering the Connections between Technical Communication and Human Computer Interaction

Mark Zachry, University of Washington

The fields of technical communication and human computer interaction have intersected in varied ways over the last 20 years. These intersections have included theorizations of human-computer relationships, interface technologies, and design for users. Both senior figures (Ramey, Johnson, Redish) and new voices (Salvo, Potts, Sun) from our field have contributed to advancing our knowledge in the space over that time space.

In this presentation, I will survey these intersections, offering an examination of where the two fields have overlapped in terms of their intellectual roots and where they diverge. This study will offer a means of understanding how work in these fields separately and sometimes together provides a means for understanding humans, the proliferation of digitized technologies, and the social, organizational, and political interactions they enable. With examples of humanistic and post-humanist thinking from the two fields, the study will examine competing notions of what counts as a human today and the potential implications of these notions for how we study users, augmentation, experience, creativity, agency, control, and values.

The presentation will offer both an historical perspective on the relationship of these two fields and a forward-looking agenda for emerging research work in technical communication focused on technological futures. The audience will have an opportunity to explore how concepts from the two fields can productively be brought together to identify opportunities and address challenges that our field is positioned to participate in.

Cultivating a Design Mindset: Toward Design-Intensive Technical Communication

Quan Zhou, Metropolitan State University

Design as a discipline has historically been perceived as the sole domain for those with artistic talent. Design was narrowly focused on the execution of tangible documents and interfaces. Nevertheless, amidst the tremendous change of information technology, documents and interfaces are ever more interactive and dynamic. Products behave increasingly like humans. Technical communicators are given titles such as “architect,” “designer,” and “strategist” to create complex dialogs between machines and their users. Documents and interfaces are not the sum of its content and “look and feel,” but an integrated, holistic experience. Design isn’t separate from writing and communication. Design is communication. Steve Jobs famously said that “Design is not just what it looks like and feels like. Design is how it works” (Walker, 2003). To technical communication as a discipline, design is what we have been doing but must now systematically recognize and give greater emphasis on. I argue that orienting technical communication around design not only brings us new domains of knowledge and skills, but also effectively prepare our learners for the design-intensive knowledge economy. This presentation discusses a “design-intensive” technical communication education approach. In general, we cultivate talent whose use design thinking as innovative problem-solving. We regard design as a process of researching, prototyping, executing and evaluating. I discuss what knowledge threads, methodologies, and skills will shape this approach. I also discuss what design pedagogies are effective. In addition, I focus on five intersections of knowledge that provide the well-roundedness of tomorrow’s technical communication designers.

Articulating Discursive Affordances as Value Propositions for Global Innovation

Huatong Sun, University of Washington Tacoma

This talk examines the global competition of four mobile chat apps and discusses how different discursive affordances were articulated to meet local cultural needs and to co-create value-proposition in emergent markets.

The four apps, which have led the development of mobile SNS (Social Network Services) globally, include WhatsApp (U.S.), KaKaoTalk (South Korea), WeChat (China), and LINE (Japan) —listed in the order as released between 2010 and 2011. They are similar in their technical cores of combining SMS (Short Messaging Service) and SNS, but present peculiar features characterized by local sociotechnical conditions from where they originated. For example, WhatsApp represented the Western design style of simplicity focusing on the chatting function to connect people, while the other three pursued a more holistic approach of the Eastern design to connect the online and the offline worlds with functionalities such as bill paying, sending monetary gifts, calling taxis, ordering meals, and reading and publishing content—all in addition to chatting. Drawing on archival research and multi-sited international fieldwork findings, this talk reviews the developments of four designs and compares the experiences of 25 local users from four sites internationally.

The discussion centers on the concept of discursive affordance (Sun & Hart-Davidson, 2014) with two goals. First, it explores how the variations of technology design and use, as local uptakes of a global technology assemblage, articulated discursive affordances about networked sociality out of their different ideologies. Second, it seeks to answer how the discursive affordances influenced the adoption of those apps and co-created value propositions with local stakeholders (London, Pogue, & Spinuzzi, 2015) as they competed for global ascendancy through the process of global technology innovation and diffusion.

In conclusion, the talk continues the discussion Doheny-Farina (1992) started decades ago on the essential role of technical communicators for technology innovation. It argues that technical communication and design should be regarded as core competency for global innovation, entrepreneurship communication, and technology commercialization from the beginning of the design process.

Meaningful Freedoms: User-Centered Rhetorical Theory For The 21st Century

Hilary Sarat-St. Peter, Columbia College Chicago

User-centeredness is a core value of technical communication scholarship, practice, and pedagogy. However, the problem with the user-centered approach is its assumption that the user's extant situation offers a stable basis for design (Johnson, 1998). In our present milieu of fast-paced changes to technology and work, situations involving users are in constant flux. Thus, technologies and documents designed for specific situations may prove unsustainable in the long run. This presentation re-imagines user-centered rhetorical theory for the 21st century, drawing on the capabilities approach to economic development (Sen, 1999; Nussbaum, 2011; Alkire, 2015). Briefly, capabilities are the choices and freedoms that people enjoy, can feasibly exercise, and "have reason to value" (Sen, 1999, p. 25). To the field of technical communication, the capabilities approach offers a means of conceptualizing what users are able to do given adequate resources and support. To economics, user-centered rhetorical theory offers insight into the key role that technical communication plays in developing capabilities related to technology use.

The presentation begins by asking, "What is the best way to empower the end users of technology?" I then overview two decades of user-centered scholarship relevant to this question (Kimball, 2006; Ding, 2009; Sun, 2012; Agboka, 2013) highlighting the difficulty of extrapolating best practices from localized cases and situations. The body of the presentation introduces one normative assertion: that the best way to empower users is to expand their capabilities, or substantive choices related to technology. I ground this assertion in the capabilities approach (Sen; Deaton; Alkire) and user-centered rhetorical theory (Johnson). Arguing that technical communicators play an important role in the provision of choice, I highlight specific rhetorical strategies that might help users understand and evaluate their choices. I conclude the talk by positioning technical communicators – both professional and informal -- as catalysts of global socio-economic development.

C3: Directions for Engagement and Innovation in Technical Communication

Richard Johnson-Sheehan, Purdue University, session chair

Drawing on Spinuzzi's (2015) notion of emerging adhocracies that handle technical communication as an activity, this panel explores entrepreneurial and civic endeavors inside and outside the classroom. Like STEM workplaces, the field of technical communication is at a pivot point that will dramatically change our approaches, methods, and techniques as researchers and educators. Aligning with the "new directions" aspect of the conference, our panel addresses this shift in the field and offers ideas for how we as educators and practitioners can accommodate communicative changes.

Thinking Like an Entrepreneur: New Directions for Technical Communication in the Age of Innovation

Richard Johnson-Sheehan, Purdue University

This paper will present results and conclusions from my engagement and on-site research with the Foundry, a small business incubator that helps innovators turn their product ideas into companies. According to the Foundry's mission, "It is a place to transform innovators into entrepreneurs by providing advice on entity formation, ideation, market analysis, and business model development." My onsite research (field observations, interviews, and surveys) with Foundry participants reveals that technical communication is realigning around the core concepts of innovation and entrepreneurship. In *All Edge*, Clay Spinuzzi describes these ongoing trends, and my research confirms many of his findings. But, I'm also discovering a much deeper shift toward innovation and entrepreneurship in STEM workplaces and education. Like STEM workplaces, technical communication needs to adopt innovation-centered core values, which include creativity, leadership, strategic planning, continuous networking, 360 branding, self-reliance, resilience, and multimodality. Genres of technical communication are rapidly evolving to facilitate innovation and entrepreneurship as key activities in the STEM workplace. Based on my empirical results, technical communication courses need to teach students how to "think like an entrepreneur." I will offer some recommendations along these lines. Our field needs to evolve with the STEM workplace, or we risk being left behind.

From Transaction to Coordinated Transformation: Pedagogies of Deep Engagement in Technical Communication

Carrie Grant, Purdue University

As workplace demand increases the need for innovative problem solving and flexible communication practices, professional writing programs are compelled to push curricular boundaries to adapt. This presentation discusses using project-based engagement and experiential pedagogies as a means of helping students prepare for these new dynamics. I'll illustrate an example engagement project with a campus rape crisis center, which tasked students with proposing and developing programs for the fledgling new center. Given flexible assignment requirements, students were challenged to work their

way through real constraints to produce rigorous, usable results. Such a framework for professional writing courses provides an opportunity to extend from a transactional model of technical communication to one emphasizing coordination and transformation work, which Bill Hart-Davidson (2013) and others have identified as the new purview of technical communicators. Following Kimme Hea and Wendler Shaw's (2016) findings on community partners' stakes in engagement, I'll discuss the critical role that instructors must play as mentors for successful collaborations. Takeaways from the session will include methods for scaffolding courses to encourage deeper engagement in both experiential and simulated project designs, plus considerations for integrating social justice partnerships in technical communication courses.

Considering Best Practices for Activist Design: Building a Technical Communication Curriculum Focused on Community Engagement

Liz Lane, Purdue University

Students bring a wide range of values and experience to the technical communication classroom that often inform the rhetorical dexterity needed for instructors to address multiple audiences, for multiple purposes, and with multiple technologies. I explore a pedagogical approach that bridges technical communication and community engagement through a sequence of assignments grounded in engagement design. I draw from Rice and Hausrath's concept of glocalization (2014) and detail two pilot assignments that link social responsibility to theory and engagement while exploring best practices for teaching activist design in an undergraduate technical writing course. These best practices grapple with the notions of blurring the lines between classroom, community, and workplace while accommodating technical communication theory in these merged areas. Additionally, I raise the following questions as guideposts for my implementation of these best practices: what drives students and instructors to pursue civic engagement issues through their coursework? What best practices can be implemented in the technical communication classroom to tie design principles, activism, and community engagement to technical communication curriculum? I conclude by offering an adaptable set of best practices for our emerging era of technical communication pedagogy, looking toward scholarship in activism, social change, and community-based design.

Attuning to “Behind-the-Scenes” Conditions: Retrospective Sensemaking, Affective Rhetoric, and Technical Communication

Brian Gogan, Western Michigan University

In *Sensemaking in Organizations* (1995), Karl Weick stresses that retrospect is crucial to the process by which humans make sense of organizations (p. 24). Weick defines “retrospective sensemaking” as a process by which organizational understanding is reached through remembering recent experiences and synthesizing meaning (p. 27). While Weick argues that retrospective sensemaking results in “the feeling of order, clarity, and rationality,” he cautions that retrospective sensemaking neither erases, nor renders transparent, the past (pp. 28-9).

This talk views the 2017 ATTW CFP as a call for retrospective sensemaking that will, in turn, theorize new directions for technical communication. Drawing upon recent experience researching the affective

rhetorical practices of practitioners, this talk attempts to make sense of the role that affect plays in technical communication.

Technical communication scholarship documents the way in which entrepreneurs work as technical communicators (Doheny-Farina 1986; 1992; London, Pogue & Spinuzzi, 2015; Spartz & Weber, 2015, “Writing”; Spinuzzi et al., 2014; 2015), and the way in which entrepreneurial ventures might inform technical communication pedagogy (Hixon & Paretto, 2014; Jakobs, et al., 2015; Spartz & Weber, 2015, “A Technical”; Weber & Spartz, 2014).

Accordingly, this talk reports results from a thirteen-item survey that queried entrepreneurs about their technical communication practices. This talk synthesizes survey responses (N=96) with work on passion/emotion in technical communication (Mara, 2008; Galbraith et al., 2014), affect/ambience in rhetorical studies (Gross, 2005; Miccichie, 2007; Davis, 2010; Rickert, 2013), and emotion/ambience in entrepreneurial studies (Cardon et al., 2012; Jennings et al., 2015).

Ultimately, this talk outlines two new directions for technical communication research, as survey responses indicate that practitioners:

1. Operate under nascent rhetorical theories that involve either the creation of emotion or an openness to an already existing affectability;
2. Constantly attune their moods to adjust to the “behind-the-scenes” or ambient conditions of their environments.

Session C4, Sellwood

C4: Experience Architecture: One Possible Future for Scholarship & Curriculum

Michael Salvo, Purdue University, session chair

Experience architecture (XA) encompasses the ways in which we research, create, design, build, and test technologies with a focus on the people who interact with them. Industry refers to this work as user experience (UX), and computer science as human-computer interaction (HCI). In technical communication classrooms, we address similar concepts in information design (ID) and usability studies. This panel introduces key concepts, methods, and sites of Experience Architecture, presenting the details for new discourse incorporating core competencies of technical communication—what we call Experience Architecture, or XA. At this 20th anniversary of ATTW, we offer emergent formulations of the field’s discourse and curricula.

Beckon, Encounter, Experience: The Danger of Control and the Promise of Encounters

Patricia Sullivan, Purdue University

This presentation focuses on users suggesting ways in which encounters often hidden from view can inform and extend architectural decisions. Designers of built spaces imagine users as they work.

Jonathan Hill claims that architecture posits one of three views of users' roles in architecture --passive, reactive, or creative--with passive predominating. This might be discouraging for experience architects if we also did not know that users can produce phenomenal work in tight spaces that allow only minimal agency. It is delicate work, but fortunately it also is underway. Reading previous research is rhetorical work that provides early information about users. While it does not replace encounters, it can yield guidance for those who seek deeper, richer encounters that are critical to sustainable user architecture not totally aimed at work. I am interested in how these stories get constructed, as they are rhetorically assembled for readership, and how that might reshape encounter in ways that make it more palatable but perhaps less incisive. It is particularly important to articulate how reading ethnographic encounters stand in for the encounters themselves and can have powerful input on design. The takeaway faces two directions--toward building user understanding and toward making decisions about studies to be undertaken.

Analyzing Activity for Experience Design

Cheryl Geisler, Simon Fraser University

Activities are culturally recognizable sequences of actions, mediated by artifacts; and, in turn, transform culture. This presentation outlines and illustrates the role that analyzing activities plays in experience architecture. For many, the methodology associated with experience architecture is usability, which contributes to incremental design where the goal is improvement. It is less useful to the experience designer seeking a new or breakthrough design. Field data is the cornerstone of any effort to understand user activities "in the wild." Observations are time-stamped, noting sequence of action and artifact. Then, using techniques of temporal analysis, these notes are analyzed revealing underlying structures. This structure becomes the basis for new design. These two analytic techniques help experience architects understand underlying structure of the very cultural activity they aim to transform with design. Unlike usability methods, they focus on the activity in the wild, enabling designers to imagine new directions for design rather than simple incremental change.

Feminist Rhetorics & Interaction Design: Facilitating Socially Responsible Design

Jennifer Sano-Franchini, Virginia Tech University

Feminist rhetorics and Experience Architecture are connected by women's contributions to design, including information design as articulated in computers and composition and technical and professional communication scholarship; technology studies; and human computer interaction (HCI). The connections are inter-animating, articulating mutual contributions made across technology and rhetoric: articulating technorhetoric as a feminist discourse. For instance, what does a feminist critique of work in User Experience look like? The presentation describes a course in feminist design where this inter-animation and co-creation is featured, finally reporting the collaborative prototyping projects that have resulted from a senior-level technical and professional writing course situated at the intersection of feminist rhetorics and experience architecture.

Designing Digital Activism: Rhetorical tool as agent of social change

Douglas M. Walls, North Carolina State University

This presentation encourages scholars to make projects that become agents of social change with impacts outside the university by realigning rhetorical activity through the development of new digital platforms. Such artifacts disrupt and challenge established rhetorical action. We ground our conversation in the development of *Fair & Square*, an activist application that leverages consumers' choices to utilize businesses that support fair labor practices. Through the app consumers can become low-barrier activists by electing to support restaurants, grocery stores, or markets based on sourcing their foodstuffs and treatment of farm workers who sourced them. *Fair & Square* is a digital artifact that focuses on aligning social interactions and equitable relationships as elements of an ethical information design.

Respondent

Liza Potts, Michigan State University

Session C5, Ross Island

C5: Critical Competencies in Technical and Professional Communication: Strategic Directions

Xiaoli Li, University of Dayton, session chair

Competencies in technical and professional communication (TPC) have been discussed in terms of workplace expectations, academic program requirements, and professional certification (Hart-Davidson, 2001; Rainey et al., 2005; Whiteside, 2003; Coppola, 2012). While this work has provided much needed direction about the content of degree granting programs, presenters in this panel propose a broader look at competencies within and across an institution as a strategic next step. In this panel, using University of Minnesota, an R1 institution, as an example, panelists ask this question: How do TPC program competencies fit more broadly with institutional writing or communication initiatives? Panelists introduce vertical and horizontal curriculum design and examine TPC competencies at a single R1 institution, including TPC and First-Year Writing, TPC and Writing-in-the-Disciplines, and TPC and alumni experiences.

Vertical, Horizontal, and Institutional Curriculum

Lee-Ann Kastman Breuch, University of Minnesota

Speaker One reviews past scholarship on technical and professional communication (TPC) competencies (Hart-Davidson, 2001; Rainey et al., 2005; Whiteside, 2003; Coppola, 2012) and argues that a possible strategic direction is to more broadly examine these competencies. Applying the ideas of “vertical curriculum” (Downs & Wardle, 2007) and “horizontal curriculum” (Mendenhall, 2013), and transfer (Brent, 2011), Speaker One suggests that TPC extends across departments or programs in an institutional setting, and that this extension requires further examination. Using the context of University of Minnesota, where several writing and communication initiatives exist, Speaker One asks how TPC programs fit in the broader context, intersecting with initiatives such as first-year writing,

writing-across-the-curriculum, and alumni work experiences. Speaker One argues that “horizontal curriculum,” or reach across disciplinary departments (Mendenhall, 2013), is equally as important as vertical curriculum in developing TPC programs and a strong presence in a university environment.

Mapping the Gaps and Overlaps in First-Year and Technical Writing Programs

Nathan William Bollig, University of Minnesota

Speaker Two explores the question: how do first-year writing (FYW) learning competencies map onto technical and professional communication (TPC) core competencies? Writing program administration competencies for FYW (CWPA, 2014) and scholarship on the core competencies of TPC (Hart-Davidson, 2001; Rainey, et al., 2005) are useful for regularizing student learning, designing curriculum, and meeting program-specific writing requirements. However, Anderson, et al. (2012) argue that creating a national set of college writing competencies is a project too large for one group of scholars to complete. As a starting place and response to Anderson, et al., Speaker Two compares and contrasts FYW and TPC competency artifacts (course syllabi, learning objectives, and competency areas) to better understand the University of Minnesota’s writing programs. In turn, Speaker Two suggests that gaps and overlaps in writing program competencies reveal opportunities for mutual development. For example, recognizing gaps in genre and overlaps in rhetorical knowledge could result in improvements to the portability and accessibility of FYW and TPC competencies.

Across WEC in STEM and Technical and Professional Communication Courses

Saveena Veeramoothoo, University of Minnesota

Scholars have looked closely at the competencies that TPC students are taught (Cargile Cook, 2002; Thomas & McShane, 2007; Henschel & Meloncon, 2014) but these students often come from other departments. In this presentation, Speaker Three focuses on Science, Technology, Engineering, and Mathematics (STEM) disciplines; this choice proceeds from STEM’s strong historical connection to technical communication (Connors, 1982; Longo, 2000). Since WEC programs are highly localized (Russell 1994), Speaker Three focuses on STEM departments at the University of Minnesota that have successfully engaged with its Writing Enriched Curriculum (WEC) program. As a starting point, Speaker Three analyzes the competencies from five STEM programs articulated in “Writing Plans” that outline writing expectations for undergraduate students. Each program’s Writing Plan competencies are then compared and contrasted with the institution’s general TPC courses. Preliminary findings suggest that there are both overlaps and distinctions in the competencies expected from these various programs.

From Program to Practice

Jeremy Rosselot-Merritt, University of Minnesota, Twin Cities

Speaker Four explores theoretical and practical competencies emphasized in programs in technical and professional communication (TPC) and how those competencies transfer to the work that technical and professional communicators do in industry. Outlining evolving perspectives on what are considered critical competencies taught in TPC programs from the mid-1980s to the present day (see Adams,

1993; Blakeslee, 2001; Henschel & Meloncon, 2014), Speaker Four reviews research on how effectively those competencies have transferred to industry (see Whiteside, 2003; Bekins & Williams, 2006; Blythe, Lauer, & Curran, 2014). Consideration will be given to competencies such as usability and audience analysis. Have the emphasized competencies and theoretical perspectives aligned with the requirements of graduates' work in industry? Drawing on interviews of graduates of TPC programs at the University of Minnesota, Speaker Four provides insight into competencies learned by those graduates and places those competencies in the context of the graduates' current work.

Session C6, Hawthorne

C6: An Extracurriculum of PW: Caring for/with Locales in Program Design

Carroll Ferguson Nardone, Sam Houston State University, session chair

In her study of technical communication in China, Ding (2009) called communication designers to examine the impact of “local historical, political, and cultural contexts” and to acknowledge and listen to those contexts in order to meet local needs and account for local practices. Scholars such as Sun (2012), Yu (2012), McCool (2006), Leon (2016) and Pigg (2016) have also pointed to the inability of generic professional writing curricula to account for users' embeddedness in “local places and use contexts.” Drawing from experiences that resonate with these scholars, we offer a panel that reflects on our efforts to reimagine professional communication/writing curriculum across distinct geographic, economic, and institutional locales. Specifically, we argue that professional writing (PW) programs/curricula might be more responsive to civic, programmatic, and institutional demands (e.g., influx of international students; changing landscape of higher education; needs for intercultural communication) by shifting toward a more granular focus on the writing practices, assets, needs, and expectations that our students, community partners, and their unique locales have for PW. Indeed, shifting towards a PW that is sensitive to an extracurriculum of PW (Gere, 1994; e.g. oyster farms; firehouses; niche restaurants) enhances the theoretical agility of communication design and the long-term sustainability and resiliency of the field.

Knowledge/Work: Designing PW for/within a Culture of Tradition and History

Tim Amidon, Colorado State University
Randy Callahan, Poudre Fire Authority

Reimagining Technical Communication in Local Contexts: A Case Study

Lehua Ledbetter, University of Rhode Island

What's Past is Present: Toward a “Localized” Definition of Technical Communication in A New England State

Jeremiah Dye, University of Rhode Island

Session C7, Morrison

C7: Finding Your Vocation and Professional Identity as an Emerging Scholar in Technical Communication

Keith Grant-Davie, Utah State University, session chair

This workshop is based on an article by Keith Grant-Davie (Utah State U.), Breeanne Matheson (Utah State U.), and Eric James Stephens (Clemson U.) entitled, “Helping Doctoral Students Establish Long-Term Identities as Technical Communication Scholars.” The article is due to appear in the April 2017 issue of the *Journal of Technical Writing and Communication*—a special issue on preparing graduate students for research. The workshop offers emerging technical communication scholars an opportunity to articulate their professional identities, reflecting on their past studies and looking forward to their future trajectory as researchers in the field. Our article argues that this is an essential step not only in competing on the academic job market but also in preparing for coherent academic careers that transcend individual research projects and can be readily explained to colleagues and administrators—people who are outside technical communication but who evaluate early-career scholars’ work. Participants in the workshop will leave with a greater understanding of how they can present themselves and their research as part of their long-term professional identities. Given the limited time, this 90-minute workshop will focus on just two of the four activities that our article proposes: 1) Discovering a vocation within technical communication. By “vocation” we mean the work to which a scholar feels a particular personal calling. Scholars realize their vocation by identifying the things that have most attracted and resonated with them in their studies so far—the topics, problems, theories, questions, goals, trends, research methods, material artifacts, mediating technologies, and sites of practice in technical communication. Following Takayoshi, Tomlinson, & Castillo (2012), workshop participants will consider the “intellectual, epistemological, ideological, political, and nonacademic commitments and experiences” that help explain why some areas of the field appeal to them more than others. Participants will list these influences and then work towards describing the themes and patterns that constitute their own particular vocation within the field. 2) Articulating a research identity and agenda. Having identified their vocation, participants will be asked to articulate a research identity and agenda that address and enact that vocation. The workshop will help participants move beyond describing “what I am doing” in a particular scholarly project (such as a master’s thesis or dissertation)

and instead towards describing “what I do” in terms that both transcend individual studies and connect them coherently. To this end, participants will describe their work at three ascending levels of abstraction: a. Lowest level: specific research projects—each with a research problem and questions specific to its scope. b. Middle level: generalized research problems and questions that connect individual projects and demonstrate the projected coherence of the scholar’s work. c. Highest level: the research agenda condensed into one or two related issues and at most two or three questions. This is the nutshell or “Twitter” version of a scholar’s identity. New scholars may feel this to be uncomfortably reductive, but it provides an answer when colleagues and administrators outside the field ask them what they do and why.

Multnomah

Afternoon Poster Session: 3:15 to 3:45pm

Transportation Planning and Technical Communication: Public Participation and the Proposed Bus Rapid Transit System

Jack Hennes, Michigan State University

In 1969, community development expert Sherry Arnstein asked raised a vital question: “What is citizen participation and what is its relationship to the social imperatives of our time?” Nearly 50 years since the publication of Arnstein’s “A Ladder of Citizen Participation,” technical and professional communication scholars have only begun to explore the role of citizen participation and its relationship to urban planning processes (Moore & Elliot, 2016). This area, however, presents rich opportunities for examining the role of experts and nonexperts and reimagining how citizens can participate in development processes to shape a new future for their communities. This poster builds on existing work at the intersection of professional and technical communication and citizen participation (Waddell, 1995; Dayton, 2002; Blythe, Grabill, & Wiley, 2008; Moore, 2016) to offer how technical communication researchers are ideally situated to investigate urban planning processes. To demonstrate, this poster presents a case study of a proposed transportation planning project in the Midwest. The proposed Bus Rapid Transit (BRT) project, administered by the local transportation authority, utilizes a number of common approaches to citizen participation, such as a design charrette, a series of public forums, and multiple avenues for written comments. However, an analysis of the BRT project demonstrates that citizens were not provided with genuine opportunities for participation, public forums followed a one-way “Jeffersonian model” (Waddell, 1995) of information from experts to citizens, and comments were heavily filtered by the transportation authority, leading to public frustration with the planning process. The goal of this poster is to offer attendees a strong sense of how research in technical communication is situated to design engaging and valuable urban planning processes for citizen voices. Attendees will also consider how technical communication researchers have the agency and expertise to not only shape their own communities, but also to shape the future of their cities to be more inclusive and representative of citizens.

Market-Driven Technical Communication Curriculum Design in China

Meng Yu, Georgia State University

As the second largest economy in the world, China needs a number of professionals who are sophisticated in technical communication between China and other countries. Unfortunately, China doesn't yet have any technical communication programs or textbooks for at the college level. To build a localized technical communication curriculum is an urgent task for the educators. There have been several relevant courses offered in the general English majors, such as English for specific purposes (ESP), business English, and English for science and technology, etc. Some scholars (Duan & Gu, 2005; Yu, 2011) proposed ESP as a home to integrate technical communication into China's English major curriculum. And Ding (2011) suggested English Related to Individual Disciplines (ERID) programs as a localized and alternative form of the technical communication discipline in China. To build a localized technical communication curriculum, administrators also need to take the local job market into account. Therefore, an in-depth examination of the needs of the Chinese job market is necessary.

This presentation will examine the characteristics of relevant courses in China, as well as the needs of the job market. Based on the analysis of industrial job postings in China, the presenter will identify some common skills and competencies employers are seeking. Comparing the findings from the job market and the existing courses, the presenter will offer some suggestions in building a localized technical communication curriculum in China.

YouTube Gamers and Think Aloud Protocol: New Methods for Learning about Usability

Jamie May, Texas Tech University

Described in detail by Ericsson and Simon (1993) and discussed extensively in the literature, the objective of talk-aloud protocol is to “[have] subjects verbalize their thoughts at the time that they [emerge]” (p.60), with testers observing users interact with the product being tested and discussing their interactions with little to no prompting. While the guidelines presented for using talk-aloud protocols differ, we can create certain general guidelines to use such a test in an informal setting. This poster presentation will examine Let's Play (LP) videos available on YouTube as primary texts employing an adapted version of talk aloud protocol to provide information for usability testing. While these videos are not the same as live demonstrations in a laboratory setting, the availability of these videos make them uniquely suitable for educating students and new practitioners about this type of usability testing. After a brief discussion of talk-aloud protocols, I review available literature concerning heuristics for evaluating interfaces and games. Then, based on Nielsen's (1994) recommendation that approximately five users be observed for adequate testing, five different LP user videos of the same game will be analyzed based on those heuristics. Finally, suggestions for pedagogical practice using this method will be discussed.

Turnkey Modules for Teaching Usability: Applied Research Opportunities for Undergraduate Technical Communication Students

Elizabeth Kafka, Texas Tech University

User experience research is rapidly growing in the field of technical and professional communication (Barnum, 2011; Still & Albers, 2010), and is a key skill in which undergraduate students from the discipline should have competencies. But as user research methodologies continue to develop, incorporating them into the undergraduate technical communication classroom can be challenging due to the semester's time limits, and limited access to resources. To address these challenges, we created a turnkey module where undergraduate students in introductory technical communication courses can experience a full-scale usability study while applying core competencies in the usability research lab. This presentation will detail the protocol we developed, as well as possible applications for the vast amounts of data likely to be gathered longitudinally by participants. Attendees at this presentation will gain an understanding of how efficient turnkey study modules can be used to bring instructors and undergraduate students into a larger research project. Our turnkey module applies standard usability research methods (Barnum, 2011; Garret, 2011) to assess the user experience of higher education financial aid websites. Previous research has shown the importance of understanding financial aid procedures for student retention (e.g. Kofoed, 2013; McKinney & Novak, 2013; 2015). In this study, we bring a usability lens to these concerns. Beyond the importance of this study, it is appropriate for a turnkey module because students in the technical communication classes can participate as users. Within the confines of a class period, students use study protocol as facilitators, participants, and observers. The protocol has three main sections: a pre-study survey, a think-aloud protocol study, and a post-study survey. Through this experience, students will gain experience with the usability research lab while gathering data connected to our larger study.

Designing UI/UX Technologies for the Classroom: Eye-Tracking for Less

Alex Nielsen, Old Dominion University

Applying DIY principles to arguments regarding free and open-source solutions within academic research (Zoetewey, 2013), in 2015 the author led a small, multidisciplinary graduate student team in developing a viable eye-tracking software and hardware platform costing \$20/unit. The goal of this project was to create low-stakes, classroom-ready solutions for Technical Communication instructors seeking entry-level materials to introduce UI/UX testing tools and practices in the classroom.

Through a combination of consumer electronics modification, 3D printing, and community-sourced design, the final project prototype offers a modular, low-cost solution—easily distributable and manufacturable by the lay user—with the goal of disseminating materials to make entry-level eye-tracking research accessible to scholars and students without significant capital investment.

Anson et al. (2012) promote eye tracking as a productive methodology for research of UI practices using gaze- and fixation-tracking technology; however, the limit of this solution has always been cost and accessibility. To this end, this project concluded such technology must be made more prevalent,

accessible, and affordable in order to advance usability and accessibility studies pedagogy, UX/UI design, and technical communication as a whole (Duchowski, 2007).

For this poster project and presentation, the author will offer an overview of the limitations and affordances of eye-tracking as a technology, including the issues of economic access for students and less-funded research and teaching programs in technical communication. Building on previous, higher-cost open-source attempts (Kassner et al. 2014) the poster would display and explore the features of resources developed throughout the course of the project, including iterative prototypes of the final platform, pedagogical recommendations for the deployment and use of open-source research hardware for student orientation, and a QR code with a link to the final plans, schematics, parts lists, and software necessary for scholars and instructors to build (and modify) their own, low-cost hardware for eye tracking and UI testing.

Fixing a Moving Car: Usability Testing A Hybrid Technical Communications Course

Mark Crane, Utah Valley University

In recent years, online education has grown tremendously. The cost and physical limits of teaching in face to face settings have encouraged many administrators to offer online and hybrid courses as a possible solution. While there are many benefits to online instruction--improved access for some nontraditional or working students, geographical considerations and the shift in the instructor's role from content-provider to facilitator, there are many legitimate concerns about online instruction (Smith).

Critics have argued that creating online courses can shift control from the department to an external Distance Education program, that humanistic departments are often at odds with the worldview that informs instructional design, and that students often resist online instruction (Morris).

In this poster session I will describe the process of creating a hybrid technical communication course, the motives of various actors in this process, and attempts to mediate the tools used by students and the instructor through teaching and applying the principles of usability (Rivers et al).

Curricula Review of Industry User Experience (UX) Certifications

Kevin Van Winkle, University of Colorado-- Colorado Springs

During a recent Nielsen Norman Group's UX certification conference, the following advice (paraphrased) regarding UX instruction was given to a room of approximately 100 practitioners: "If you do decide to get a degree in UX, try to take night classes. Those are the ones usually taught by people who actually know UX, cause they're working in it during the day." The implication and its accompanying insult here is clear. However, it is true that teachers of technical communication challenged with creating courses in UX are very likely to review, emulate, or even model their own UX curricula on the numerous UX instruction and certification courses currently offered by private, non-academic organizations and taught by UX practitioners. It seems foolish not to.

In my proposed presentation, I will report the results of an exploratory study on the curricula of industry-offered UX programs, designed and taught by UX practitioners. There are numerous programs that fit this criterion, but eight stand out as the most popular and valued. I will discuss the similarities and differences between these eight programs regarding topics, methodologies, objectives, and outcomes.

For reasons ranging from industry demands to an obvious compatibility, user experience (UX) research and design has become “intertwined” with technical communication (Redish & Barnum, 2011). Consequently, some technical communication programs have begun to reexamine what they offer and/or consider what they should offer to participate in this emerging trend and to fulfill the increasing demand for UX instruction at our colleges and universities. Thus, my objective is to provide useable pedagogical guidance and recommendations for incorporating UX into technical communication courses and programs based on empirical evidence that reveals what practitioners believe to be foundational for students who will “actually” do UX research and design.

Data Governance for Gardeners: Bridging Information Systems and Technical Communication

Ali Rairigh, Indiana University-Purdue University Fort Wayne

In this poster presentation, the author examines how information systems and technical communication are integrated into project management. This poster presentation looks at particular data governance concepts that can expand what Hart-Davidson (2001) calls “the core competencies of technical communicators,” and Nardi and O’Day’s (1999) concept of workplace “gardeners.” According to Weber, Otto, and Osterle (2009) data governance “defines roles, and it assigns responsibilities for decision areas to these roles [while] establish[ing] organization-wide guidelines and standards for [Data Quality Management]. [It] assures compliance with corporate strategy and laws governing data” (2). Specifically then, in this poster presentation, audience members will learn how to integrate innovative data governance strategies into their teaching and research practices in order to better bridge the fields of information systems (including but not limited to information technology and project management) and professional and technical communication. These new approaches to research and teaching in professional and technical communication are timely and necessary for the future of the discipline.

Buzzing In, Buzzing Along: A Short-Lived, Tactical Orientation to Community-Based Writing Projects

Rik Hunter, University of Tennessee at Chattanooga

In this poster presentation, I will argue that in contrast to the negatively-perceived “hit-it and quit-it” approach noted by Cushman (2002), service-learning projects with strong professor/researcher participation afford the flexibility required to meet the specific and time-contingent needs of community partners and that these writing projects benefit from the support of institutionalized experiential-learning programs. Indeed, an effective model of public writing can emerge from the symbiotic relationship between a professor/researcher freed to focus on short-lived tactical connections

and an institutionalized experiential-learning program's assistance in managing relationships with community partners.

That is, I alternatively consider the value of Mathieu's (2005) proposal in the *The Public Turn* in Composition for a more "tactical orientation" and discuss how institutionalized, strategic sustainability and course-based, tactical projects can effectively work together to address community partners' needs and make room for the creation of bottom-up, short-lived projects. I will provide examples of experiential-learning and public writing that are localized and tactical—for example, students writing a manual as an end-product of tutoring residents at an elder-care facility to use Facebook, designing home page mockups for a cultural center with limited resources and an identity problem, and writing BuzzFeed listicles for a new university teaching and learning garden. By sharing what I have learned from these experiences as a writing instructor, my aim is to theorize and deepen our understanding of what a tactical orientation to public writing might be.

Concurrent session D: 4:00–5:15pm

Session D1, Broadway

D1: Translation and Technical Communication in Practice: Ethical, Methodological, and Community-Driven Concerns

Laura Gonzales, University of Texas at El Paso, session chair

Recent conversations highlight the expanding relationships and intersections between translation and technical communication, particularly in the design of multilingual, global-ready content (Batova & Clark, 2015; Maylath, Muñoz Martín, & Pacheco Pinto, 2015). As scholars continue making connections between these activities, some have pointed to the importance of understanding issues of language, power, and ideology in the creation and dissemination of multilingual technical content (Walton, Zrally, & Mugengana, 2015; Yajima & Toyosaki, 2015). More specifically, researchers are continuing to discuss how the movement of information across languages, tools, and technologies inherently requires negotiations between communities and cultures (Sun, 2012). Drawing on these conversations, this panel will consider the ethical, methodological, and practical implications of connecting translation and technical communication. Speakers will expand on conversations in technical communication, translation, community literacies, and the rhetoric of health and medicine to further consider the ethical creation and dissemination of multilingual communication across contexts. In this way, this panel considers new methodological and practical directions for enacting successful technical communication in the diverse, multilingual realities of our field.

Cultivating Translation Spaces in Cross-Cultural Health Care

Rachel Bloom Pojar, University of Dayton

Drawing from a qualitative study with a temporary health program in the Dominican Republic, Speaker 1 examines how U.S. and Dominican volunteers worked together as a health team. When U.S. health professionals travel to Spanish-speaking countries, medical Spanish vocabulary lists, dictionaries, and

other resources are commonplace to guide communication in clinical settings. However, practitioners and interpreters may encounter differences between the written words on these language resources and patients' ways of discussing health and illness. Speaker 1 describes how visiting practitioners responded to the dissonance between the formal and medical Spanish they learned in classes and their patients' and fellow health team members' use of Dominican Spanish. Describing the various forms of meaning-making activity across written and oral forms, various dialects of a language, and medical terminology for patients and providers, Speaker 1 advocates for cultivating “translation spaces” as an approach to create space for critical reinvention between communal and institutional discourses.

The Challenges and Benefits of Navigating Uncertainty at a Bilingual Research Site on the U.S.-Mexico Border

Beau Pihlaja and Lucia Dura, University of Texas at El Paso

Using Walton, Zraly, & Mugenana 's (2015) discussion of the role of the translator in “navigating messiness” in research, Speakers 2 & 3 will collaboratively describe the challenges and the benefits of navigating uncertainty at a bilingual research site on the U.S.-Mexico border. In line with Walton et al's call to move beyond the “what” of such research accounts, the presenters will focus on the “how” of the research, specifically related to complications related to translation in the data collection process. They will explain major decision points and relative circumstances influencing the research site selection, the unique dynamics that led to the need for a translator, the process for choosing the translator, and data collection and analysis protocols developed through this bilingual collaboration. The speakers will discuss the theoretical grounding for challenges around uncertainty, contingency, rigor, and ethics. The presentation will then conclude with questions for further research on the knowledge-making role of translators in technical communication and the role of “soft” skills such as cultural brokering in qualitative research, practice, and pedagogy.

Strategies To Embed Translation in the Training of Contemporary Technical Communicators

Isabel Baca, University of Texas at El Paso

Although connecting translation and technical communication has been standard practice in international contexts for years (Maylath, 1997; St. Amant & Olaniran, 2011; Ding, 2010), only recently are technical communication programs providing specific training in the processes and activities of translation (Maylath, Muñoz Martín, & Pacheco Pinto, 2015). In this presentation, Speaker 4 will describe how translation can be embedded in the training of contemporary technical communicators. More specifically, speaker 4 will introduce the Bilingual Professional Writing certificate at her institution, which blends training in technical communication and translation to prepare students as they work in increasingly diverse, multilingual environments. Using program assessment data and needs-based surveys conducted with local organizations serving bilingual communities on the U.S./Mexico border, Speaker 4 will explain how bilingual technical and professional writing programs can be designed to meet the needs of organizations seeking to hire professionals who can navigate technical, linguistic, and community-based demands simultaneously.

Through this data, Speaker 4 will provide program-wide models for connecting translation and technical communication in bilingual programs within the U.S.

Design and Implementation Plan for Sites of Translation, a User-Experience Research Lab

Laura Gonzales, University of Texas at El Paso

Speaker 5 will introduce the design and implementation plan for Sites of Translation, a user-experience research lab currently under development at her institution. Situated in a border city between the U.S. and Mexico, Sites of Translation facilitates the design and implementation of user-centered tools and technologies geared toward bilingual community members and organizations in the city of El Paso. Currently in design and prototyping stages, Sites of Translation is envisioned to be a non-profit center that connects bilingual University students with training in translation, technical communication, and user-experience with community partners seeking to better serve Spanish and English speaking community members in the surrounding area. During this presentation, Speaker 5 will introduce initial models and user-research for the development of Sites of Translation, seeking feedback and collaboration opportunities from other practitioners aiming to connect translation and technical communication in both academic and professional settings.

Session D2, Weidler

D2: Imagining Collective Cultural Rhetorics Practices: Constellations: A Cultural Rhetorics Publishing Space as a Case Study

Malea Powell, Michigan State University, session chair

This panel will focus on theorizing and building the infrastructure for a culturally-relevant digital scholarly publishing platform: constellations: a cultural rhetorics publishing space. It brings together one senior faculty, two junior faculty, and one graduate student to discuss the relevant considerations (deciding on systems and software, usability, visual aesthetics, etc.) needed to establish an infrastructure that underscores mentorship and supports underrepresented scholars through a digital platform. Coming from a variety of backgrounds and experiences, the speakers discuss the approaches, possibilities, limitations, and challenges for initiating a sustainable publication model based on diversity, inclusivity, mentoring, and collaboration. While particular speakers will focus on how they brought specific realms of expertise to the project, they will also model collective practice in terms of what they have learned, inviting ATTW attendees to join in collaborative conversations about digital production and publishing in inclusive spaces.

Developing Constellations: A Journey in Collaborative Scholarly Publishing Practices

Phillip Bratta, Michigan State University

Speaker 1 discusses the events leading up to developing the digital, open-access journal constellations: a cultural rhetorics publishing space. He introduces the Cultural Rhetorics Consortium, a scholarly

collective of scholars whose research and teaching is substantially engaged with cultural rhetorics as a field of study. One of its goals is to create a new model for scholarly mentoring, publishing, and leadership development. Speaker 1 expounds on and analyzes four inter-related events leading up to constellations: (1) the formation of the Cultural Rhetorics Theory Lab (CRTL) research group at Michigan State University; (2) the publication of “Our Story Begins Here,” authored by members of the lab, that laid the groundwork for cultural rhetorics theory and methodology as collective, decolonial practice; (3) the first-ever international Cultural Rhetorics Conference held at Michigan State University in October 2014; and (4) the Cultural Rhetorics Special Issue of *Enculturation*, which garnered submissions from conference participants. He works from the scholarship of Cynthia Selfe, Kim Fortun and Mike Fortun, and Bill Hart-Davidson and Jim Ridolfo, to offer a historical and digital theoretical frame for explaining the needs for a publication space like constellations. As such, this presentation also works as a call-to-action for developing more inclusive, digital publication models across the board.

Designing Deliberately Inclusive Digital Publishing Platforms: How Theory Becomes Structure in Cultural Rhetorics Practice

Malea Powell, Michigan State University

Speaker 2 outlines the cultural rhetorics theoretical frame that informs this digital scholarly publishing project, one that is anchored in the values of collective practice and how to translate the commitments of a particular collective (the Cultural Rhetorics Consortium) into common workplace processes like selecting a team, strategic planning, and creating a virtual workplace/space. Additionally, Speaker 2 asks one of the central questions of the project—what does creating a deliberately diverse and inclusive digital publishing space mean for the “regular” mechanisms of publishing like blind peer-review? How can those “regular” mechanisms get shifted from being barriers to becoming mentoring opportunities through careful attention to both the digital and human infrastructures that constitute the space? How can such a platform also deliberately make the unseen, often unrewarded labor of digital builds and editorial practice persistently visible in its attribution practices? While she offers some preliminary answers, the audience will be invited to contribute and speculate about how all of these practices would/could/should be part of our ongoing conversations in both technical & professional writing and cultural rhetorics, bridging these two important and diverse fields of study.

From Present Tense and *agnès films* to Constellations: Strategies for Transferring Digital Production Experience Across Projects

Alexandra Hidalgo, Michigan State University

In this video-based presentation, Speaker 3 draws from eight years of footage and digital archives to craft an argument about transferring knowledge from co-founding two digital publications to becoming the managing editor of the new journal constellations: a cultural rhetorics publishing space. She will use her experience co-founding and working as an editor for the peer-reviewed, digital journal *Present Tense: A Journal of Rhetoric in Society* and co-founding and being the editor-in-chief of the website *agnès films*: supporting women and feminist filmmakers to create theories of knowledge transfer from one digital project to another. Drawing from work by Kristine Blair, Susan Delagrange, and Cynthia

Selfe, as well as her own digital archives and footage, she argues that although there is a steep learning curve for digital production, especially for scholars who are already pulled in many different directions, the knowledge we gain through the production and creative thinking that goes into digital spaces can be transferred to a variety of projects that count toward tenure and promotion. She ends her presentation by providing six strategies for making digital knowledge transferrable across projects and for making arguments for the value of digital work to merit and review committees.

Messy Design: A Feminist Approach to Platform and Tools Analysis and Selection

Cindy Tekobbe, University of Alabama

Situated in feminist methodologies, Speaker 4's presentation describes the process of selecting hosting, content management, and development tools for the new journal, constellations. Guiding session participants through a visual walkthrough of her methods, Speaker 4 outlines a plan for developing selection criteria and building evaluation processes that prioritize transparency, engagement with non-hegemonic discourses, and collaborative crafting of digital spaces. Grounding her selection and evaluation methods in the work of Schell, et al, Sprague, and Royster and Kirsch, Speaker 4 argues for a "messiness approach" that rejects the industry fetishization of "elegant" design, in favor of a holistic, organic process. User-centric design asks us to imagine a monolithic ideal user with a single, optimized workflow from which we construct the most efficient platform. But, a culturally-aware project that celebrates difference and centralizes collaboration is not monolithic and efficient, but deliberately messy and contested. This "messy" process represents an epistemological shift from the platonic ideal of user-centric design, toward a conceptualization of feminist design that is reflective, people-representative, and narrative-centric. Participants are invited to consider their own processes and projects, and join the conversation about the potential for empowering a wider ranges of voices, notions, and identities through feminist design approaches.

Session D3, Halsey

D3: New Directions in Engagement Pedagogy: Bridging Gaps Between Stakeholders via Digital Tools and Techniques

Ruby Kirk Nancy, East Carolina University, session chair

Community engagement and social justice work has had a long history in professional and technical writing (Kimme Hea, 2005; Scott, 2008; Simmons & Grabill, 2007). As teachers and practitioners, we look for techniques that can translate between professional and pedagogical contexts, especially those which highlight shared ethical, social, and practical concerns which emerge in both realms. This panel looks at innovative methods and techniques for incorporating community stakeholders into PW/Tech Comm courses, while relying on popular technologies that are already familiar to community partners, students and other public stakeholders. By orienting data collection and engagement pedagogy toward commonly-used technologies, we can broaden our participant base, position students and community partners as experts, and ultimately create more sustainable community partnerships. This panel highlights various technological platforms and research techniques that are accessible to participants

and that add to the possibilities for local stakeholder input and student agency in research and engagement.

Crowd as Community: Re-shaping Professional Writing Engagement in New Digital Contexts

Amelia Chesley, Purdue University

Speaker 1 examines common community engagement models in technical and professional writing classrooms and pushes beyond these to negotiate service-learning and engagement with crowdsourced digital communities. Service learning assignments often take the form of client-based projects involving provisional or imagined partnerships with professional or civic organizations. However, the client-based model is not the only way to involve students in public, real-world forms of communication; as Miles Kimball (2016) points out, more and more professional and technical writing work is happening in contexts beyond centralized institutions.

Speaker 1 compares the traditions of client-based service learning with more decentralized, volunteer engagement by using LibriVox.org as a springboard for new models of student engagement. Crowdsourced, digital, transmedia composition spaces like LibriVox can be generative sites of research, analysis, and production. Drawing from what students and instructor learn by engaging with LibriVox.org and other digital communities as part of an upper-level professional writing course, this presentation provides the audience with new applications of TC/PW pedagogy to digital environments. Speaker 1 argues for and suggests ways of measuring the pedagogical value of such spaces, and demonstrates strategies for navigating the opportunities and risks of asking students to engage with these communities.

Ubiquitous Computing in Student & Participant-Driven Research: Photovoice as Emergent Technique

Trinity Overmyer, Purdue University

Speaker 2 explores the Photovoice technique as a relatively new approach to professional and technical writing. At its core, photovoice is a way for participants to drive research and collect data by taking pictures with their mobile devices and then using their own and other participants' caches of photos to make meaning out of their experiences. Photovoice capitalizes on ubiquitous mobile technologies that do not require technical expertise. The technique's accessibility opens space for emancipatory and participatory action work (Sullivan 2016), and enables complex data collection without the high investments of time and expertise for participants. Additionally, the photos are more than just data--they represent the collaboration between researcher(s) and participants in collecting and analyzing complex narrative experiences. In addition to its value interrogating power dynamics implicit in research, this method is intuitive, allowing students to both conduct and participate in research. This presentation looks at the history of the technique and includes a breakdown of specific ways it's deployed in the architecture of various studies, and how photovoice can be used in classrooms and community action research. By mapping the technique across fields and research goals, the presentation aims to expand its use for PW research and pedagogy.

Utilizing Photovoice On the Ground: Relationships between Students, Instructors, and Community Partners

Erin Brock Carlson, Purdue University

Speaker 3 discusses the initial findings of a year-long photovoice study that examines the work of students, instructors, and community partners immersed in service-learning projects in technical and professional communication courses at Purdue University. Over the course of a semester, participants record their community projects through narrative reflections and pictures of their day-to-day experiences working on these projects. Participants then attend focus groups where they reflect on their experiences based on their photos and writings. By utilizing mobile technology, participants drive the course of the study, challenging a static academic-community partnership model and aligning the goals of all stakeholders to grow responsive, reciprocal relationships. Preliminary findings suggest that each group's approaches begin to resemble one another as the semester progresses; further, participants engage in a wide range of problem-solving strategies, including drawing on the expertise of other groups and utilizing theoretical concepts in real-world situations. By utilizing a participatory research method across different groups, this project ultimately argues for a greater focus to be placed on the processes of stakeholders involved in community work, offering new methods that can bring about lasting and meaningful community work. Such an approach encourages sustainable models of engagement in technical and professional writing courses.

Extreme Ease, Unlimited Options: Programming Assistive Communication Technology for Children

Mary Jean Clinkenbeard, University of Wisconsin-Milwaukee

This presentation examines the affordances and constraints of GoTalk NOW—a high-tech augmentative and alternative communication (AAC) system—in facilitating children's communication and language development. AAC systems like GoTalk NOW allow children with conditions that limit their verbal speech production to speak through an electronic voice. These systems operate by making electronic pages of icons, words, symbols, images, and alphabet characters available for children to navigate in order to construct utterances that can be spoken by a computerized voice. As AAC systems are expected to be accessible to children with differing linguistic and cognitive abilities, GoTalk NOW offers caregivers the means to create and organize pages linked with words and phrases based on a specific child's needs.

My data include five components: video-recorded interviews with a mother whose child uses GoTalk NOW; a video-recorded programming training session; video-recorded mother-child interaction sessions; photos of the pages programmed by the mother; and the GoTalk NOW User's Guide. I analyze these data to explore how the mother's developing understanding of this system impacted her organization and page creation practices over the course of several months. In addition, I examine how the technological features of GoTalk NOW—its configuration of linguistic output, user interface organization, and programming—create tensions between extreme ease of use and overwhelming options in organization. Although AAC systems that can be programmed and adapted to individual children's needs are valuable, I argue that systems' lacking organizational templates and structure may

generate unintended challenges for caregivers with limited knowledge of best practices for facilitating children's interaction via AAC. These challenges highlight the need for better technical communication among AAC developers, speech language professionals, and families in order to support caregivers' programming needs.

Session D4, Sellwood

D4: Analysis of Technical Communication in Various Contexts

Ann Hill Duin, University of Minnesota, session chair

Motivational Elements in World War II Civil Defense Handbooks: A Response to “Total War”

Kaye Adkins, Missouri Western State University

During World War II, the Office of Civilian Defense (OCD) in the United States was challenged to convince Americans, separated from enemies by two oceans, that the procedures and policies issued by the OCD and other government agencies were to be taken seriously, that they were vital to the war effort. The OCD needed to motivate citizens—an entire country—to adopt the practices outlined in the manuals and handbooks produced by the agency.

In their article “The effects of motivational elements in user instructions, Loorbach, Steehouder, and Taal observe that “research into [motivational] aspects of technical documents is still in its infancy and deserves more attention.” These motivation elements include the use of anecdotes, metaphors, nontechnical language, and making the reader the hero of a narrative of accomplishment. This paper examines the techniques used by the World War II OCD to motivate Americans to learn the new civil defense procedures.

The OCD handbooks and manuals include many of the elements identified by Loorbach and other researchers. Especially notable is the way these materials make the reader a hero in the story of the war effort, giving civilian efforts equal weight to those of soldiers on the battlefield. But these materials include unique motivational elements that proceed from their rhetorical situation. These include appeals to patriotism and community, but also to explanations of “total war,” a new kind of warfare that was not bounded by proximity and not confined to battlefields. By looking to the past, an examination of the motivational elements in the OCD documents can help us understand how to adapt those elements to specific modern situations, even as they are applied broadly in materials created for large, general audiences.

Tech Com for Life? Religion as a Technology Mediated by Social Imaginaries, User Narratives, and Embodied Praxis

Danielle Saad, Alvernia University; Texas Tech University

“Religion is a technology with rituals and traditions that govern the deployment of humans in their relationships and the way societies are organized (Dobrin, 2004). As such, religious texts and traditions can be understood as technical communication. In addition, technical writing can include religious

writing when we add dissolving the distinction between sacred and profane to Katherine Durack's (2004) suggestion that gender-inclusive definitions of technical writing should “challenge the dualistic thinking that severs public and private, household and industry, and masculine and feminine labor” (p.41). When religion is understood as a technology used as a means to an end, the technical documentation of religion can be found in scripture, tradition, ritual, and the believer's narrative – all of which are rooted in particular social imaginaries. As Gaonkar (2002) explains, social imaginaries are the means by which members of a society understand the world and their roles within it, helping individuals form their identities through common practices that are built upon “implicit understandings” of the way a particular society is meant to function (p. 4). As the social imaginary shifts, so does what is acceptable religious practice. Thus, scriptural interpretation, ritual, and expected orthopraxy require updated technical documentation for user-believers who must mediate their religious ‘requirements’ for orthopraxy in light of changes in context.

Using the Muslim headscarf as an extended example of religious instruction, this presentation will challenge listeners to rethink scripture and other religious texts not only as technical communication, but as technical communication that is revised according to the user's experience engaging with a particular element of religious technology in their daily lives.

The Problem with “Overfishing:” Changing a Key Term in the Magnuson-Stevens Act

Karen Gulbrandsen, University of Massachusetts Dartmouth

In the rhetoric of science and technology, many scholars have analyzed the language used to characterize its practice—frontiers, boundaries, transfer, etc. (i.e. Ceccarelli, 2013; Gulbrandsen, 2012; Longo, 2007; Prelli, 2005). This case study extends that scholarship by examining how terminology not only reflects and deflects values in scientific discourses, but also how terms set the rhetorical grounds for adjudicating regulatory acts that involve multiple stakeholders and interests. In this case study, I examined “overfishing” in the Magnuson-Stevens Fisheries Conservation Act (MSA), the primary law that governs US marine fisheries management. Many scientists have taken issue with how “overfishing” is used in fisheries regulations, calling its mandate “prescriptive” (Sissenwine et. al, 2014), “arbitrarily defined” (Goethel et. al. 2011), “the holy-grail of fisheries management” (Hilborn and Stokes, 2010), and “metaphorical” (Rothschild, 2015). Despite over a hundred years of research, scientists argue that “overfishing” has no scientific basis. Current debates over revisions to the MSA include how to frame the problem, how to define the “best available” science, and the role of scientists in setting public policy.

In this case, I applied Kenneth Burke's Scene/Act ratio to examine how “overfishing” authorized agents and actions in the regulatory sphere. As a rhetorical principle, “scene” balances with “acts,” working both as a generating principle for the kinds of acts that have value and as an analytical tool to explain how such discourses maintain their position. In my analysis, I found that “overfishing” moved from naming an act to representing the scene. As a scenic term, “overfishing” reduces the scope of the problem and limits the agency of fishers and scientists, constituting a scene that mis-characterizes the

situation and its exigencies. This case study has implications for how rhetorical theory can not only explain language use, but also its authorizing power in regulatory discourses that involve science.

Redesigning Meeting-Minutes: The Multimodal System

Mariah Kemp, Iowa State University

In this presentation, the speaker will argue that meeting-minutes in their common form have reached a point of stagnation and must be redesigned. While traditional minute-keeping might seem tedious, minutes are an undeniable necessity to the workforce and project planning. Minutes record decisions and define roles, yet they remain a frustration to the minute-keeper and virtually useless to workers who may need contextualized information. Minutes are generally considered a mystifying means to an end, but they don't have to remain so.

Hansen (1995) embraces a succinct ideology regarding minute-keeping: "Meetings shape the minutes; minutes, in turn, help shape subsequent meetings." Guided by theory centered in minimalism, brevity, and multi-audience strategies, this speaker will assert that a crucial component left out of Hansen's system are the participants and their needs. If the goal is production, minutes must encourage workers to participate. Without taking into account the accessibility needs of workers, minutes will continue to seem poorly written or overly informative.

During this presentation, the speaker will propose a new exploration into the redesign of current minute-keeping. A multimodal system at once simplifies information and its accessibility, yet also allows workers to explore in-depth material from the meeting that might otherwise go unrecorded. This multimodal approach incorporates new directions to enhance pre-existing textual forms using audio and technology. Re-envisioning minute-keeping to be multimodal and more accessible means taking a preexisting necessity and strengthening it with collaboration and empathetic design.

Session D5, Ross Island

D5: Approaches of Re-Visioning Writing Practices

Susan Youngblood, Auburn University, session chair

Technical Editing as Rhetorical Work

Bailey S. Cundiff, Texas Tech University

Rebekka Andersen (2014) argues that the rhetorical work of content management should form the basis of technical communication education, research, and practice. While this argument opens avenues for academy/industry collaboration and begins to reconceptualize the role of the technical communicator, it does not fully treat one crucial aspect of the technical communication process: editing. Andersen and others address editing and writing together, implying that the skillsets are identical and not worth separating. While writing and editing are both rhetorical processes that require significant attention to audience, context, and other factors, editors must balance slightly different considerations.

Editors are often conceptualized as quality assurance experts, coming in as the final set of eyes on content before it reaches users (Corbin, Moell, and Boyd, 2002). But as Jennifer Slack (2003) notes,

this connection to the user is not as direct as it might seem. Editors are necessarily trapped in the hierarchical structure of a company as the ones most unable to pass on “alternative conclusions to the users” (Slack, 2003, p. 204). Their recommendations are constrained by style guides and the idiosyncrasies of writers, as well as easily overridden by management or marketing oversight (Flanagan, 2015; Rude and Eaton, 2011).

These constraints are only tightened by the recent ubiquity of agile development, which privileges working software over comprehensive documentation. Drawing on Suzan Flanagan’s (2015) recent work on Intelligent Content Editing (ICE), this presentation will argue that editors, particularly in agile environments, are best equipped to act as project and content managers and should not be relegated to the last point in a product lifecycle. It will also advocate for pedagogy that positions technical editing as a rhetorically informed practice beyond simple quality assurance, thus expanding the understanding of technical editing in both the academy and industry.

I Didn’t Notice That Before: Using Genre Ecology Modeling to Better Understand Your Data

Tana M. Schiewer, Virginia Polytechnic Institute and State University

Clay Spinuzzi and Mark Zachry’s (2000) idea of the “genre ecology” offers a useful framework to describe and understand the dynamic and interconnected nature of genres and activities in an organization. What is most useful about this theory is a methodology called “genre ecology modeling” (GEM), which Spinuzzi, Zachry, and Natasha Jones (2016) have demonstrated in their work as an effective way to make sense of the genres and activities of a particular site. Though GEM has not yet been put to extensive use in our field, it holds great promise for researchers to reveal patterns in data that are not readily visible through other analysis methods.

In this paper, I seek to apply and expand the concept of the genre ecology model, using my own research site as an example of its affordances. While studying the genre ecology of a small nonprofit organization, I began to use GEM to map out the results of my observations and textual analyses simply for the purposes of visualization. What I found instead was that the model helped me see new patterns in the relationships between the genres and activities in the organization that I hadn’t previously seen; in fact, creating these models produced some of the most interesting findings of my research. Drawing from my experience, I will demonstrate how GEM can help researchers gain new perspective on their data and uncover conclusions they may have otherwise missed. In addition, I will offer some thoughts on how to expand our usage of GEM.

As we continue to develop new methods of data collection and analysis, it is important to experiment with existing models, apply them in new ways, and share the results with other researchers so they can continue to refine and shape these methods. My presentation seeks to do just that.

The Rules Revision Process for Women’s Flat Track Roller Derby as DIY Feminist Technical Writing Practice

Keith L. Harms, University of Arizona

In 1997, Flynn categorized the majority of feminist work in technical communication as “radical” or “liberal” because it largely focused either on differences between men’s and women’s ways of knowing, or the legitimacy of women’s contributions to professional and technical communication practices and settings. There has since been feminist technical communication research that exposes the ways that technical communication practices regulate women’s bodies. This research has focused on academic, pedagogical, legal or medical discourses and sites (Smith and Thompson 2002, Schuster 2006, 2011). This is important work, but in the almost 20 years since Flynn’s article, we have still been largely concerned with traditionally defined technical and professional settings for our research (Thompson 1999, Thompson and Smith 2006, White, et al 2015) despite Durack’s (1997) call for work that takes seriously nontraditional spaces where women have used technical communication to practice written agency.

In response, I have undertaken an IRB-approved study of the revision process for the rules of women’s flat track roller derby, an openly feminist and queer-friendly sport in which participants write the rules under which their own bodies will be regulated during gameplay. The Women’s Flat Track Derby Association, though a centralized, standardizing body, structures itself as a bottom-up, grassroots organization. As such, its non-hierarchical writing processes are situated within the familiar second and third wave tension between the modernist desire for legitimacy and the postmodernist distrust of normative processes and structures.

This presentation will report on interview, survey, and ethnographic data on the rules revision process in order to describe an intentionally feminist DIY technical writing project. I will focus on the modernist/postmodernist tension built into the writing process that preliminary data suggest is, though contentious, productive, and seems to reflect Jarratt’s (1991) call for a feminism that embraces conflict.

Vital Data: Quantitative Writing in the Age of Big Data

Patrick Danner, University of Louisville

Joining Joanna Wolfe’s (2010) call for more quantitative writing in the classroom, this presentation reviews a workplace study that traces a health/policy initiative’s development of data-driven studies of a Midwestern city. Specifically, this presentation zeros-in on the group’s practice of, in their words, “telling stories with data.” This “storytelling” practice signals that, in the age of “big data,” writers and users of data reports understand data to be simultaneously “fact” yet “manipulable.” As such, data is no longer taken to be an Aristotelian “inartistic proof.” This presentation thus recasts data in science/policy communication through three specific rhetorical concerns: invention, narrativization, and ethics.

The rhetorical invention of data in circulated quantitative writing complicates traditional scientific ethos, what Halloran (1978) describes as the myth of scientific researchers as “dispassionate, disinterested truth-seeker[s]” (85). The inventional process is bound by choices, determined

independently or by ecologies of users and audiences. Narrativizing such data is similarly audience-, user-, and stakeholder-driven, attesting to the reversal of the Aristotelian “inartistic” bias. Here, to narrativize is to invent, to make qualitative or even subjective. Foregrounding data narrativization thus evokes clear questions of data ethics. The qualitative nature of data-gathering becomes necessary but troubled work; data foregrounds some stories while backgrounding others.

Technical writing classrooms are in privileged positions to discuss quantitative and data-driven communication as public-facing, circulating practices. Data is increasingly (either by its writers or by the public) transformed and delivered as narrative about our world. This presentation thus closes by suggesting that an ethics of narrative medicine could provide terms for a new ethics of quantitative writing practice, one that would call on quantitative writers to see data as not only narrativizing realities, but also, by default, in conflict with the narratives of the people or places that experience those realities.

Session D6, Morrison

D6: TechComm@TechTown: Detroit’s New Brand of Client-Based Pedagogy

Jared Grogan, Wayne State University, session chair

In 2014, Wayne State’s Composition and Rhetoric Program began to revitalize their Community Writing initiative, and began a new Professional and Technical Writing initiative:

TechComm@TechTown (TC@TT). Partnering with TechTown, a Detroit-based technology research incubator and business accelerator for entrepreneurs, presenters in this panel have developed valuable perspectives on programmatic growth, teaching and pedagogy, and student experiences in a set of courses that have technical communication students working on client-based projects with entrepreneurial partners selected because of their disruptive technologies, economic “promise,” social and ethical import to Detroit, and relevance to student learning outcomes. TC@TT has established some compelling roles for teachers, students and clients within this partnership, roles that support Wayne State’s research and community missions, that support our field’s core values of research, teaching and service, and that challenge us to think through new values and competencies for this distinctive brand of “entrepreneurial” work.

The Technical Communication Scholarship on Service and Client-based Learning

Vyautas Malesh, Wayne State University

Speaker one (Vyautas Malesh) will situate TC@TT within the technical communication scholarship on service and client-based learning. This presentation will argue initially that the program-wide entrepreneurial client-partner model uniquely prepares our students for future work ecologies. To make this case, this presentation will focus on what is distinctive about the TechComm@TechTown in a Michigan context (it’s place within regional University and the State’s emphasis entrepreneurial/start-up partnerships) and the larger context in the field’s ongoing discussion of such pedagogies. Work with

TechTown entrepreneurs puts students in position that surpasses certain service models by engaging elements of the distributed, dynamic work essential for technical communicators (Johnson-Eilola, 1996; Dubinsky, 2004; Ramachandran et al., 2002; Spinuzzi, 2009, 2012, Bekins & Williams, 2006; Weber and Spartz, 2014), while placing these ‘distributed’ discussions and compositions into rhetorical negotiations and dialogues that revolve around rhetorical and ethical standards we would summarize as a ‘Network Detroit’ revival. In plainer terms, TechTown’s community-first initiatives have allowed us to avoid some of the less ethical, transactional client-based learning approaches (Scott, 2004, 2007) while completing work for client-partners that have both familiar and novel technical, rhetorical, and ethical components (Blakeslee, 2002).

Initiating and Developing the TC@TT Program

Jared Grogan, Wayne State University

Speaker two (Jared Grogan) will discuss his work in initiating and developing the TC@TT program. He will focus on programmatic goals and the specific affordances and constraints of several client-based courses and projects for (1) a high-profile client working on a biometric gunlock, and (2) a home-health-care application layering a scheduling system onto an ‘on-demand’ (Uber-style) system to increase reach, trust and quality of care in Detroit, while raising pay-rates for providers and lowering costs to families. While the first portion of this talk focuses its narrative on how TechComm@TechTown developed programmatic goals and course parameters supporting these clients, through a process that placed a heavy emphasis on negotiations between TechTown executives, instructors, clients and students, the second part of this talk focuses an argument on how several of the core values and standards came under critical review during these negotiations, based on ideas about a sustainable network of ‘professionals’ and ‘amateurs’ that has moved to the center of debates about Detroit’s economic turn-around, and which has presented opportunities to think about both theoretical and practical connections between WSU’s program and TechTown – connections that raise important ethical questions about the future of the ‘professional writing’ Wayne State is now supporting.

A Student’s Perspective on Working Within the Program, and with TechTown Entrepreneurial Client-Partners

Delani DeGrosky, Wayne State University

Speaker three (Delani DeGrosky) will present a student’s perspective on working within the program, and with TechTown entrepreneurial client-partners. This talk also begins as a narrative of several core experiences: working on a client project in an introductory Technical Communications course, taking up a TechTown client project in an advanced course, and working with this client in a subsequent internship. These experiences shed light on student work that faced familiar challenges (collaborations with students, instructors and clients, etc.) and less familiar encounters (writing with, and for, a client developing a high-risk disruptive technology embroiled in the American gun-debate, and under the scrutiny of the NRA). These experiences also shed light on the pragmatic and scholarly value a student brings to instructors negotiating with clients while piloting new projects, and the intellectual value or competencies developed for both instructors and students when integrating theory with practice in the

higher-level courses that experiment with TechComm@TechTown projects. The talk concludes by comparing these experiences to several articles charting what students have valued about comparable client projects.

Session D7, Hawthorne

D7: Exploring Advocacy, Intervention, and Surveillance in Health Communication

Patti Poblete, Iowa State University, session chair

Interrogation of regulatory rhetorics, particularly concerning the female body, has maintained traction in technical communication (Koerber, 2006, 2007; Lay et al, 2000). More recently, the rise of reproductive legislation (e.g. 2014 SCOTUS decision re: Burwell vs. Hobby Lobby) has led feminist technical communication scholars to call for the implementation of methodological intervention in our scholarship and pedagogies (Frost, 2014, 2015; Novotny, 2015). This panel responds to this need to intervene in the regulation of bodies. In particular, we investigate the adoption of surveillance technologies on the body within website and mobile apps through privacy policy statements and algorithms. Since the web is increasingly becoming a form of surveillance capitalism (Zuboff, 2015), there is a need for discussing how datafiction--the power given to digital data collected from algorithms (van Dijck, 2014) affects people. In response to this year's conference theme, we consider trajectories in technical communication by weaving digital surveillance studies with issues of patient agency. This panel will provide our audience with ways to implement these trajectories publically and in the classroom to promote critical consciousness into the workplace.

A Technical Communicator's Dilemma Upon Finding Consumer Apathy Toward Website and App Privacy Policy Statements

Estee Beck, University of Texas at Arlington

Website and app privacy policy statements are instruments of legal protection for owners of online platforms. Oftentimes, the statements outline and justify the collection of personal data, data storage and use, and how consumers may contact the site owners for more information. Yet, an existing body of technical communication research (Markel, 2005; Proctor & Vu, 2007; Vail & Earp, 2008) revealed that such statements are difficult for consumers to understand with respect to the dense, legal language. As a result, many consumers often ignore such statements and consent to terms and conditions without knowledge of the contents. However, with datafiction (van Dijck, 2014) resulting from medical health websites, apps and health monitoring devices, a return these statements are needed. This research focuses on identifying the underlying behaviors of consumer orientation toward website and app privacy policy statements, drawn from a quantitative pilot study exploring participants' attitudes and beliefs about privacy policy statements, and the underlying behaviors for ignoring or interacting with such statements. Speaker 1 will address the function of privacy policy statements; consumers perception; and, how these statements impact agency. The findings provide insight into the complex consumer behavioral indicators and suggest possible avenues for redesign.

Data Our Bodies Tell: A Feminist Case Study on the Fertility App Glow

Maria Novotny, Michigan State University

Speaker 2 will provide a critical surveillance analysis of GLOW, a mobile fertility app. Glow invites couples with difficulties conceiving to track their cycles as well as sexual intercourse over a 10-month period to enhance their chances of successful conception. The app guarantees by the end of 10-months couples should have successfully conceived. Importantly, if couples do not conceive during this 10-month period, Glow provides a “pay out” that allows the couple to receive funds for fertility services. Yet, a critical surveillance analysis of Glow raises serious questions about Glow’s gathering of bodily data - particularly how funding for this mobile application is supported by a national and well-known east coast fertility clinic. Upon framing the exigency of Glow, in relation to an infertility context, speaker 2 will conclude with potential implications for how the gathering of such bodily data impacts the exercise of patient agency in fertility clinic settings.

Affective Technologies: A Technical Communication Pedagogy that Promotes a Critical Digital Literacy of Surveillance

Les Hutchinson, Michigan State University

Upon such analysis, speaker 3 provides further implications for engaging in topics of surveillance and the body in technical communication pedagogy. She engages with Bill Hart-Davidson’s (2002) call, “Why not us?” to consider how technical communicators in the workplace and academia can come together to transform the technologies that define and determine technical communication. She answers Hart-Davidson’s question by integrating critical approaches to surveillance into technical communication course design. Connecting technical communication literature on heuristics (Johnson-Eilola & Selber, 2013), information design (Schrivner, 2014), technical rhetorics (Frost & Eble, 2015), network analysis (Spinuzzi, 2007), and surveillance (Beck, 2015), technical communication educators can situate theory in the field with projects involving case studies such as the Glow app and other interfaces to teach students rhetorical engagement with technological infrastructure that seeks to regulate bodies. Students learn to be critical of digital interfaces as they interpret privacy policies, terms of use, and backend design in preparation for their technical communication work as practitioners in industry. Speaker 3 concludes with an invitation for audience participants to imagine additional correlations between technical communication theory and practice that addresses critical engagement with how technologies regulate the body both in our classrooms and in our everyday lives.

Toward Advocacy and Intervention in Health and Medicine

Molly Kessler, University of Wisconsin-Milwaukee

One important and growing area of technical communication (TC) scholarship resides at the intersections of TC and medicine and health contexts. As this work has argued, TC plays a key role in healthcare including medical education (Fountain, 2015; Schryer & Spoel, 2005), patient experience and identity formation (Graham, 2009; Arduser, 2011), wearable technologies (Teston, 2016; Kessler, 2016), and health policy (Koerber, 2013; Teston, 2009), among others. One unifying goal across TC scholarship in health and medicine is a commitment to advocacy and intervention (e.g., Meloncon &

Frost, 2015; Arduser, 2005; Graham 2015). As Melconon and Frost argue, scholars “can directly intervene into many of the problems plaguing our healthcare system” (2015). Recognizing the importance of this work, this presentation aims to evaluate and foster strategies TC scholars might use to pursue interventional scholarship.

I will draw on a three-year study of chronic illness communication in order to reflect on the value and challenges of ameliorative efforts in TC scholarship. In particular, I aim not only to examine the ways patients with Inflammatory Bowel Disease (IBD) manage challenging communication experiences with healthcare providers, family members, fellow patients, and the public, but also to use the insights of my research to improve communication practices and experiences for these patients. Building on this research, I will reflect on how TC scholars might productively intervene and advocate within spheres of health and medicine including 1) collaborating with study participants through member checking, 2) expanding TC methodology to incorporate practice-based inquiry, and 3) disseminating findings to reach wider audiences of patients as well as healthcare providers, educators, and advocates. As we look forward as a field, interventional work—including and extending beyond health and medicine contexts—both demonstrates the critical value of TC and challenges us to develop innovative strategies and approaches in our scholarship.

Session D8, Mt. St. Helens Room

D8: Graduate Student Career Workshop

Richard Johnson-Sheehan, Purdue University

Lisa Meloncon, University of Cincinnati, session chairs

The workshop gives graduate students in Technical Communication, Professional Writing, Rhetoric, and Composition opportunities to meet with faculty from a variety of universities. Graduate students and faculty members meet one-to-one in five minute “speed dating” segments, so they can share ideas, talk about the job market, and discuss preparing for the job search. Attendees should bring business cards and a one page CV to the workshop.

Changes

In addition to some minor corrections, we’ve made the following changes since this session preview was first published:

1. Strike Rude (A1), Flores (A3), Watkins (AM posters), Adkins (D4).
2. Correct switched descriptions in B1.
3. Add Pullman (B2).
4. Add Guenzel to AM posters.
5. Switch C2 and D2 (Zachry, Zhou, Sun, & Sarat-St. Peter now C2; Powell, Bratta, Hidalgo, & Tekobbe now D2).

6. Correct switched presenters in C3.
7. Replace Wang with Johnson-Sheehan (C3, chair).
8. Replace Love with Gonzales (D1, chair).
9. Replace Lauren with Nancy (D3, chair).

Accessibility

Should you have issues accessing this content, please contact ATTW web editor Bradley Dilger dilger@purdue.edu or +1-309-259-0328.

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