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About CPTSC

Purpose: The Council for Programs in Technical and Scientific Communication was founded in 1973 to promote programs in technical and scientific communication, promote research in technical and scientific communication, develop opportunities for the exchange of ideas and information concerning programs, research, and career opportunities, assist in the development and evaluation of new programs in technical and scientific communication, if requested, and promote exchange of information between this organization and interested parties.

Annual conference: CPTSC holds an annual conference featuring roundtable discussions of position papers submitted by members. The proceedings include the position papers. Authors have the option of developing their papers after the meeting into more detailed versions.



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Concurrent Session 1

Session 1, Panel A: Honoring the Diversity of Technical and Professional Writing Programs

Moderator: Michael J. Salvo. Purdue University

In a recent guest editorial, Stuart Blythe asks, "What should CPTSC...be doing today" to best serve students? He calls for more coordinated action among CPTSC, ATTW, and NCTE in promoting shared interests. An important, related question concerns the place of technical communication within multi-focus writing programs. Blythe notes that the field is in danger of being subsumed within more broadly based undergraduate writing programs, such as "professional writing" programs that offer technical writing as a specialization. Programs, in short, like ours, and a growing number of programs nationwide. This panel addresses issues of "quality and policy" that Blythe calls on professional organizations to take up. It does so from the perspective of programs that are often invisible in the disciplinary literature—undergraduate and Master's granting programs where technical writing is one among a number of foci, including creative writing, rhetoric/composition, and journalism. In staking a claim for programs like ours within these discussions, we seek to widen the understanding of diversity in technical communication to include smaller programs as well as a consideration of the often under-served and non-traditional audiences they are designed for. A program constitutes a community of diverse interests and objectives in terms of career goals, lifestyles, and life commitments. As CPTSC grapples with how best to serve students, we hope that both the definition of writing programs and the definition of tech comm students are wide enough to accommodate the diversity of writing programs and the range of students we serve. Thus, this panel addresses issues of disciplinary integrity and program growth from the perspective of liberal arts institutions, and from the perspectives of both administrators and students. Participants will be invited to join the dialogue about the CPTSC's role in promoting program development and share strategies for using professional resources to shape curricular growth in a way that affirms disciplinary integrity while still responding to local conditions.

Reference

Blythe, Stuart. (2012). A call for a coordinated, inter-organizational exploration of current arrangements. *Programmatic Perspectives*, *4*(1).

What Gets Left Out: A Survey of Programs Outside the Margins of Organizational Databases

Chalet Seidel, Westfield State University

Speaker one will share results of a survey of Northeast colleges and universities, highlighting the diversity of programs that fail to meet the criteria for inclusion in formal counts of undergraduate writing programs like CPTSC's TechComm Programmatic Central. In terms of sheer numbers of students, multi-focus programs are responsible for much of the teaching of technical communication at the undergraduate level. In order for their local practices to support disciplinary integrity, they must be made visible in national conversations.

Student Perceptions of Disciplinary Identity within an English Department's Technical/ Professional Writing Emphasis

Jamie McDaniel, Pittsburg State University

Speaker two will share results of a survey taken by current students and alumni of Pittsburg State's Technical/Professional Writing emphasis. Though the respondents acknowledge a general lack of knowledge about the field from colleagues in other emphases offered by the English Department, they likewise acknowledge the importance of community building across the emphases. Students leave our program with a disciplinary identity that allows them to understand how they can best contribute to diverse communities, what they might use and adapt from these communities, and how that knowledge translates into the workplace.

Small Towns, Big Jobs: The Importance of Technical/Professional Writing Programs in Small Communities

Anna Carpenter, Pittsburg State University

Speaker three, a graduate English major with an emphasis in technical/professional writing, will address how technical/professional writing programs situated under English departments in less prominent universities provide rural areas and businesses with the expertise they need to be successful—to create professional documentation, graphics and other literature. As the population in the Midwest moves away from the farming industry and toward e-commerce and other technologically-related vocations, these small tech writing programs provide rural areas with essential knowledge and skills.

Benefits of Interdisciplinary Collaboration for Technical/Professional Writing Majors in English Departments

Michelle Gorges, Pittsburg State University

Speaker four, an undergraduate English major with an emphasis in technical/professional writing, will discuss the benefits she has experienced in collaborating with students in a variety of majors, including literature, creative writing, and rhetoric and composition. Working with such a diverse group gives students an opportunity to become active critical thinkers ready to engage diverse discourse communities, an advantage that they cannot fully develop when limited to collaborations or learning experiences with those who share their major.

Session 1, Panel B: Communal Translators, Communities of Translation: Collaborative Approaches to Multilingual Communication

Moderator: Matthew Livesey, University of Wisconsin-Stout

Migration, global commerce, and cosmopolitanism are responsible for the creation and expansion of multilingual communities. Translation is no longer an occasional, specialized endeavor but a daily, pragmatic necessity. This panel considers three case studies with three collaborative models and some tools of translation that work toward meeting the practical demands of translation on the ground.

Exploring Translation Technology Innovation in an Arabic-English Online "Gathering Place"

Joleen Hanson, University of Wisconsin-Stout

Despite the dramatic innovations in automated translation, undergraduates in U.S. technical and scientific communication programs often come to campus with a negative impression of machine translation because of the warnings and prohibitions of their high school language teachers. In a world of global communication, professional technical and scientific communicators need to understand both the power and limitations of current translation technologies. Therefore, exposing students to innovative applications of machine translation can enable them to experience first-hand the valuable role of machine translation in the translation process. This presentation describes a classroom activity that introduces students to Meedan.net, an online resource that combines innovative automated translation with social media to create an interactive forum where worldwide users of Arabic and English can "meet" and discuss current events of mutual interest across the language barrier. All content on Meedan.net, including news stories and user comments, is translated automatically by machine, and then corrected by one of Meedan's human translators.

Interlanguage (,) Interface: A Pilot of Communal Translation

Mitch Ogden, University of Wisconsin-Stout

This presentation considers a pilot model for collaborative translation of an obscure and opaque sacred text from the Hmong diaspora. It presents a design prototype for a layered translational interface (inspired by meedan.net) that allows members of a diasporic community to cooperatively mark up, translate, and interpret the text from Hmong into English, Thai, French, and other languages of the diaspora. Embracing the continua of polylingual fluency of diaspora migrants, this model attempts to organize and facilitate communal translation when traditional models of expert translators and scholars are insufficient to achieve a robust translation.

Learning a New Language: Health Care Communication

Kate Edenborg, University of Wisconsin-Stout

Health care organizations are being asked to meet the cultural and language needs of an increasingly diverse patient population. Often, the first reaction is to translate printed handouts and brochures in multiple languages. But many organizations are recognizing the need to be more thoughtful in how they present health care information to diverse audiences. This presentation will show how one health care organization explores ways to communicate to multicultural families. We assume that materials for those who come from different cultures and speak different languages should be created differently, but just what should those diverse materials look like?

Relation to Conference Theme

Increasingly fluid multilingual communities are at the core of many workplace settings, including hospitals and newsrooms. Through intentional collaboration, communities of translators and communicators—with the aid of technological tools—can innovate approaches to the age-old challenges of translation in a contemporary age.

What Will Attendees Gain?

A glimpse into three diverse translational contexts: Arabic/English news, diasporic Hmong religious studies, and healthcare in a multilingual urban setting.

- Insights into various approaches to and models of translation
- · Innovative characteristics of Meedan.net
- Student reactions to exploring Meedan.net

Session 1, Panel C: A Stakeholder Approach to Program Development

Moderator: Nicole St. Germaine-McDaniel, Angelo State University

We are working to develop a technical and professional writing program within a department that gives little recognition to writing disciplines. To create a presence for technical communication in our context, we must start by building on what is already here. This panel addresses creating a community for technical writing within the tenth most diverse college campus in America. But while our student body is diverse, our campus is dominated by the hotel and business colleges, so fostering diversity within our program is a matter of educating students to see beyond the obvious majors.

First the Context, then the Community: Developing a New Minor/Major

Denise Tillery, University of Nevada, Las Vegas

Creating a new writing major requires developing a community that includes students, teachers, and administrators. We are reaching out to stakeholders in programs that already exist in our department: our business writing program, staffed by graduate students and PTIs; our composition department, involving adjuncts, graduate assistants, and administrators; and our former certificate program, with a small but dedicated set of undergraduates. We are creating a community by joining all these roles through a shared focus on writing in various contexts to help us redefine writing within our department to incorporate new genres and technologies as well as traditional ones.

Producing Stakeholders

Julie Staggers, University of Nevada, Las Vegas

Some stakeholders are born; others must be made. Moving from a few courses in technical/scientific communication to a major necessitates expansion of the community of stakeholders. As we learned during a budget crisis, when the professional writing faculty was slated to be eliminated, individuals and entities that are vital to our success may not see themselves as stakeholders. As we beyond our department's borders, it becomes simultaneously more difficult and more important to help individuals and entities recognize that they are stakeholders in our program. Producing stakeholders across these various boundaries requires a strategic effort, combining social media and other technology to develop community.

Positioning Graduate Students for Self-Interested Involvement

Lauren Cagle, University of Nevada, Las Vegas, and University of South Florida

Graduate student activities are motivated largely by self-interest. This is not meant as criticism; graduate students are advised to carefully choose activities that provide marketable experiences. Graduate students also differ from faculty by being involved in the department only for the short-term. In creating a new major in technical and professional writing, we can leverage this understanding of graduate students' constraints on involvement.

While graduate students have limited time to dedicate to program development, we can motivate them by demonstrating how involvement with a technical and professional writing major is in their interest. In a department that does not value the writing disciplines, we can engage with graduate students to secure their involvement with the development of a new writing major.

The speakers hope to engage participants in a lively conversation about how to position a new major in technical and professional writing within a context that offers both difficulties and opportunities. Discussions might include:

- How to attract prospective students, many of whom are first-generation college students, to see possibilities beyond typical majors.
- How to work around difficulties of staffing, given severe budget constraints.
- How to create a flexible administrative structure that enables each faculty member to play a role in several different programs.
- How to build bridges to other departments and colleges to strengthen our position within our department.

Session 1, Panel D: Program Administrators as Community Builders

Moderator: Joyce Carter, Texas Tech University

Restorying: Administrative Tales over Forty Years

Karla Saari Kitalong, Michigan Technological University

The Association of Departments of English (ADE) is an organization that promotes a sense of community among English department chairs. Its journal, the ADE Bulletin, began publication in 1964, making it arguably the oldest journal dedicated to the scholarship of administration in English Studies. Today, our resources and publication venues include CPTSC's Programmatic Perspectives and Writing Program Administration (WPA) from the Council of Writing Program Administrators, as well as the ADE Bulletin. This state of affairs bodes well for the future of the scholarship of administration in our sub-fields, but the history of technical communication program administration remains sketchy.

That's why I keep revisiting a cluster of more than 20 articles published in the ADE Bulletin between the mid-1970s and the mid-1980s: As department chairs in the 1970s and 1980s pondered the emerging academic specialty of technical communication, they identified the story-starters for the profession—the issues that have come to shape our work and that continue to resonate with program administrators forty years later. I seek opportunities to "restory"—revisit and reflect upon and reinterpret—these narratives that have shaped our profession.

In this presentation, I highlight enduring challenges for technical communication program administrators that the stories in the ADE Bulletin introduced some forty years ago. These include the science/humanities divide, relationships between academia and industry, curriculum design, community contexts, and the growing number of programs. Drawing on selected chapters from an edited collection, Sharing Our Intellectual Traces, currently under review, I briefly explore how programmatic decisions are impacted both by such on-going challenges and by emerging challenges such as high-stakes assessment, certification, diversity, second-language learners, and technology integration; and

by curricular issues such as international technical communication, software instruction, usability and user-centered design, and networked digital technologies. Finally, I elicit new stories concerning members' views on the status of our field's enduring and emerging challenges and draw out their actual and potential strategies for addressing the most important of these.

Appropriateness to the Conference Theme

This presentation explores the impact of communities and their practices—namely the communities of English department chairs, program administrators, and journal contributors—on the historical development and evolution of the field of technical communication.

Attendee Learning or Action Objectives: Attendees will:

- explore the roots of technical communication program administration
- consider how the narratives related by early technical communication programs have shaped and continue to shape the field
- contemplate whether, and if so how, our most recent challenges might embody, reflect, or perhaps resist, the narratives we've been telling ourselves for the past forty years.

Profession Building for Program Administrators

Nancy W. Coppola, New Jersey Institute of Technology

Many thought leaders in professional and technical communication tell us that our field will not achieve the status of a mature profession until it can come to grips with a coherent body of disciplinary knowledge—a framework for multiple skills, concepts, and knowledge—areas that enable technical communicators to contribute so effectively to business, government, and the public good. As practitioners in an applied field, we manifest our professional knowledge as core competencies. Core competencies are those integrated combinations of knowledge and skills that allow evidence-based demonstration of professional accomplishment to stakeholders of our field. Although we do not yet have a collection of empirically-based and nationally-recognized core competencies, we are moving toward consensus on knowledge and skills necessary for success. Also, we have made gains in achieving disciplinary and professional status. For practicing professionals, the Society for Technical Communication (STC) worked with the U.S. Bureau of Labor Statistics (BLS) to create a distinct designation for technical writing; BLS acknowledged that technical writers are distinct from other writers, a critical boundary for our autonomy. For professionals working in the academy, the Consortium of Doctoral Programs in Rhetoric and Composition successfully lobbied for one code for all instructional programs in Professional, Technical, Business, and Scientific Writing, recognizing our common disciplinarity.

As program administrators, how do we determine if our programmatic core competencies align with those of the professional stakeholders? Are we preparing our early career professionals to maintain disciplinary and community integrity as they face challenges of identifiability, status, value, and professional consciousness? Might we better serve our discipline if we were able to guide our students toward the kind of complementary research questions that could help lead us toward a coherent body of knowledge?

The Enterprise of Brokering: Program Administrator as Broker

Tracy Bridgeford, University of Nebraska at Omaha

Kirk St. Amant, East Carolina University

Although we technical communicators regularly participate in multiple academic groups or communities on our campuses (e.g., teaching circle, research triangles), one particular community stands out for us—that of program administrators. Here at the annual CPTSC meeting we come together in what we consider to be a community of practice (COP) that, from Etienne Wenger's (1998) perspective, is a group of people who share a common interest (enterprise) in a particular practice connected to a certain body of knowledge (domain), and as members of this group/community, we are willing to invest time, resources, and energy toward learning more about it. This COP perspective, moreover, is central to who we are and how we define ourselves and what we do. Even a cursory look at the CPTSC conference proceedings from the last three decades demonstrates a commitment to learning more about the COP of program administration. From this standpoint, it is easy for us to see who we, as a community, are and what we, as a community, value. Even those new to the COP of program administrators immediately recognize the enterprise that brings us together through our common practices around a central body of knowledge.

But on our local campuses, the community of practice involves a variety of people from across various offices and disciplines—people not familiar with the domain knowledge or the related practices of technical communication, its theory, its pedagogy, or its administration. This lack of familiarity on the part of "outsiders" is not necessarily a lack of interest; rather, it is often a matter of what Wenger calls an experience of identity. Like us, these "outsiders" have their own commitment to a primary COP with its own enterprise, domain, practice, and identity. Moreover, the members of these other communities often have a distinct interest in technical communication, but only so far as it provides them and the members of their primary COP with the ability to "introduce elements of one practice into another" (Wenger, p. 105). It is in this realm among different COPs that the potential either for synergy or for confusion and conflict can take place.

In the COP that develops locally, it's easy to see who we are not (e.g., what practices we don't undertake) and what we don't value (e.g., ideas or theories we don't use) in terms of an enterprise—an important part of building what Wenger calls an identity of nonparticipation—an identity that is "as much a source of identity as full participation" (p. 164) Within our primary COP of technical communicators, we engage with each other as full members in direct meaning-making activities that add value to its enterprise. That is, we use our shared interest in a topic to find better ways of applying ideas to practices valued by our group/community. But in the seemingly makeshift COP we cobble together locally (i.e., at the school, college, or university level) in order to accomplish the goals of our individual programs, these COPs often operate without a clearly articulated enterprise. This lack of clarity means that it is often difficult for the members of such a local COP to determine what foundation of knowledge and what related practices are needed to achieve a common community goal (e.g., the various disciplines in an English department needing to work together in order to address a departmental mission or objective). However, we believe that what members of these makeshift COPs do engage in is the enterprise of Wenger calls brokering.

By virtue of their roles within a department, program administrators (PAs) are brokers—mediators negotiating among the ideas and perspectives of different groups in order to identify, label/name, and share information and ideas that are especially important for our purposes and our practices. In so doing, these PAs must often convey information across different disciplines, levels of administrative hierarchy, and stakeholder groups involved with oversight. Moreover, they must do so in ways that makes the members of these various groups understand the importance of such information as it relates to the practices of those disparate groups.

As brokers, PAs are already naturally situated on the periphery (what Wenger would call the "boundary") of multiple and varied communities in an effort to "coordinate, and align elements" among various stakeholders, including students, faculty, administration, and community. In so doing, these PAs must also address various positions with which they have a stake as program administrators—areas such as internships, job shadowing, advisory boards, and teacher training and evaluation (p. 107). Within this complicated context, PAs in Technical Communication work deliberately to ensure stable negotiating positions on the periphery of various communities both locally and globally with other brokers also playing the role of broker. We think it is fair to say that PAs engage in and support an enterprise of brokering.

The Enterprise of Brokering

Etienne Wenger (1998) uses the verb broker to refer to how brokers "use of multimembership [membership in different COPs] to transfer some element of practice [from one COP] into another" (p. 109). Thus, at its core, the enterprise of brokering values involves the building of relationships across communities in ways that encourage engagement in practice while also aligning ideas, perceptions, and perspectives. Such brokering must also encourage individuals from different COPs to use their imagination in relation to all activities in order to enable "new possibilities for meaning" to be associated with new information (p. 109).

This idea supports the program administrator's role both officially and unofficially. In "Social Learning Situations," Wenger (2000) identifies enterprise as the "level of learning energy" (p. 230), which, when connected to the idea of brokering, "can also allow brokers to recognize one another, seek companionship, and perhaps develop shared practices around the enterprise of brokering" (p. 110). This enterprise makes it possible for members to create an "identity of nonparticipation, which then enables boundary encounters. For these various reasons, program administrators in technical communication need to begin viewing themselves as brokers who can help share ideas of our field, its knowledge base, and its practices, with other groups and do so by selecting strategies that help members of other COPs see the value in applying such concepts in ways that create effective meaning for those communities.

Questions for Discussion

- What are the opportunities to negotiate a joint inquiry and important questions?
- Are members able to identify gaps in their knowledge and work together to address them?

- What visions of the potential of the community are guiding the thought leaders, inspiring participation, and defining a learning agenda?
- What picture of the world serves as a context for such visions?
- Have members articulated a shared purpose?
- How widely do they subscribe to it?
- How accountable do they feel to it?

References

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Session 2, Panel A: Information Design, Usability Testing, and Community Building: Positioning Community as a Technological End

Moderator: Matthew Livesey, University of Wisconsin-Stout

The members of this panel propose to discuss their recent work redesigning and usability testing the website for the English graduate program at Angelo State University. In response to the conference theme addressing the intersection of communities with workplace communication and technologies, the panelists will describe how their use of technologies, communication practices, and content development processes to complete the website had the unexpected benefit of more deeply integrating each of them into the departmental community. The panelists will argue that when members of a community engage in a process of methodically creating, testing, and revising their community website, that process can function as a community building experience, and such a process therefore has value beyond the successful completion of the website itself. The panelists will situate their argument within theoretical discussions of "systems-centered" versus "user-centered" approaches to mationdesign and usability testing (Johnson, 1998; Spinuzzi, 2003; Clark, 2010), positing the additional possibility of a "community-building" approach to each of these activities. Attendees will therefore gain both practical and theoretical understandings of how information design and usability testing can function as community building processes.

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Refiguring the End of Usability as Community Building

Kevin Garrison, Angelo State University

Dr. Kevin Garrison, the director of the ASU Usability Lab, will discuss the design, technolo-

gies, and mission of the lab, characterizing it as a community building space that serves the English department and the larger ASU community. He will focus on how a lab can place communities rather than users or "systems [...] at the center of our focus" (Clark, 2010) by operating from a more rhetorical perspective than is typical.

Usability Testing as a Student Assistant: Integration through Involvement

Javier Medina, Angelo State University

Javier Medina, a graduate student in the English M.A. program, will discuss his experience as the lab assistant, arguing that his work in this position, part of which involved creating and implementing the usability testing portion of the website project, helped him develop practical skills and become more deeply connected to the individuals, goals, hierarchies, and policies that constitute his departmental community.

Approaching Web Design as a Process of Community Immersion

Joe Erickson, Angelo State University

Dr. Joe Erickson, the departmental website content manager, will discuss his process of researching and developing content for inclusion on the website. He will focus on how the processes of interviewing students and faculty, reviewing university documentation, revising existing website content, and performing iterative usability tests with Medina and Garrison helped him, a first-year faculty member, become more familiar with and tightly integrated into his departmental community.

Session 2, Panel B: Infusing International Collaborations throughout Technical Communication Programs

Moderator: Michael Charlton, Missouri Western State University

Since its inception in 1999, the Trans-Atlantic Project has involved ten universities in eight countries. Partnerships have paired technical writing classes at three of the universities— University of Wisconsin-Stout and North Dakota State University in the U.S. and Vaasa University in Finland—with translation classes at the other seven universities in Austria, Belgium, Denmark, France, Italy, and Russia. By 2006, Trans-Atlantic Project partnerships were infused throughout the technical communication program's curriculum at UW-Stout (Maylath, Preparing). In 2007, the Project spread to NDSU (Mara, Mara, and Maylath). Today, the partnerships have been grafted onto several courses in the professional writing emphases in NDSU's English degree programs and have begun to take root as well as in the university's vertical writing program, emphasizing writing in the disciplines.

The Project's infusion through professional and general writing programs has been successful at promoting outcomes suggested by many of the topics listed under this year's CPTSC conference theme, "Communities, Workplaces, and Technologies." In particular, the Project's international collaborations go out of their way to define diversity in technical communication; explore issues of diversity and programmatic objectives in technical communication; encourage understanding of the impact of technologies on ethnic and cultural communities and pedagogy; research issues of ethnicity, culture, and workplace communication; teach technical communication among diverse universities; use plain language as a way to address multiculturalism and multilingualism, not only

in the United States but across Europe as well; and, most especially, localize technical documents and prepare them for translation. The panel assembled below will describe how international collaborations have been infused and managed effectively throughout technical and professional communication programs and how audience members' institutions can do likewise.

Growing the Trans-Atlantic Project across Universities and Programs: Seeding, Grafting, and Cultivating

Bruce Maylath, North Dakota State University

To provide the audience with a brief history and overview, this paper will present the Trans-Atlantic Project's seeding and germination at the University of Wisconsin-Stout and Belgium's University College Ghent, then other European universities, as a means by which students (and faculty) learned to grapple with the issues listed above. It will then describe the ways in which the Project was infused throughout UW-Stout's technical communication curriculum before it spread to North Dakota State and Vaasa universities. Collaborative translation/localization projects were seeded into a course in business writing, followed by a course in technical writing, including sections taught entirely online. An international editing project was grafted onto senior capstone seminars for technical communication and English majors. In a new course on international technical writing, students at NDSU, Vaasa, and three more universities in Europe collaborated simultaneously on translation, usability testing, and editing projects. Recently, the Trans-Atlantic Project spread to writing courses in other disciplines at NDSU, described in the next paper, as former students of the project, now instructing their own classes in the US and Italy, paired their students in international collaborative teams.

Positioning Trans-Atlantic Collaborations in Diverse Disciplinary and Technological Spaces

Steven Hammer, North Dakota State University

In the last year, the Transatlantic Project has expanded to two more upper-division writing courses at NDSU: Writing in the Humanities and Social Sciences and Writing in the Design Professions, both taught by a former student participant in the Project. This presentation details two outcomes of the Project's newest iteration. First, cultivating the Transatlantic Project in NDSU's vertical writing curriculum (part of general education requirements) has afforded both American and European students the opportunity to collaborate on a wide variety of topics, ranging from architectural projects tailored and localized to actual design problems in Paris, to international analyses of correctional facilities and cross-cultural recidivism rates. Students are not only engaged in a translation project but also in a mutually dependent exchange of cultural knowledge. Second, students have increasingly abandoned email as a means of communication and have instead engaged in new media platforms such as Facebook and Skype. These technologies, paired with two whole-class video conferences, have contributed to American students' increasing awareness of their European colleagues as "actual people" that are "just like them." Indicative of studies that suggest that face-to-face communication leads to more satisfying collaborative experiences (Walther), opportunities that allow students to visually interact have had overwhelmingly positive effects on students' perceived value of the project. This presentation expands on these two outcomes as reported in American students' reflections and initiates a discussion of ways in which future projects and programs might employ diverse disciplinary and technological approaches.

Managing Trans-Atlantic Translation and Editing Projects

Karen Sorensen, North Dakota State University

As international collaboration infuses academic programs, and especially as classes take on multiple, simultaneous projects with multiple partners, nationalities, languages, and cultures, tracking the projects' status and direction of text travel becomes critical. While complex assignments require students to develop strategic processes and project management techniques, partnerships involving multiple participants require the insight of experience to foresee potential pitfalls of the project. For this reason, NDSU assigned a PhD student with project management experience to take on the role of assistant coordinator and develop several project management spreadsheets for students and instructors to use as organizational aids.

The spreadsheets were designed not only to provide students with a tool to track their projects and communications with their international partners but also to illustrate for them the complexity involved in professional international project management. As the term ended, students reported that the spreadsheets assisted them greatly in learning processes of technical writing, translation preparation, and editing, and that they had gained a better appreciation for project management in general because their success relied heavily on keeping track of texts' points of origin, direction of text travel, stages of development, and other related details. This presentation provides examples of documents used by both students and instructors to illustrate the types of information that were tracked and to reveal how students learned project management with help from the documents

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Session 2, Panel C: Bringing Diverse Perspectives to Programs, Classes, and Workplaces: Five Cases of Research and Scholarship

Moderator: Gary Kaunonen, Michigan Technological University

There is often a perception in academia that a gulf divides scholarship from teaching and programmatic development. Such a perception is, of course, just that—a perception, and it may be less than accurate. But how often do we explicitly bring theory and research to our programs and classrooms?

To interrogate this question, our panel provides five examples of how we have created a community of teacher-scholars that brings a diversity of theories and methods to our teaching and program development. Specifically, we will discuss examples of empir-

ical, theoretical, historical, and consultant work that presents an array of topics through a diverse community of teachers, scholars, and students.

Attendees will gain insight into the importance, as D.N. Perkins has famously stated, of making our theory visible to students. In addition, we will demonstrate how such explicit involvement of scholarly work plays a reciprocal role in that we, as teachers and program developers, are constantly "testing" our scholarship in the practical context of teaching. In short, we become better learners, too, as a result of this close interaction with our users.

Labor + Work + Action = STC

Ann Brady, Michigan Tech University

The first speaker takes the position that Scientific and Technical Communication programs will be better prepared to engage issues of diversity and incorporate a practical commitment to them by considering the work of political theorists. Using Hannah Arendt as one example, the speaker begins by identifying key principles in Arendt's work that apply to curricular development; for instance, her caution against identifying knowledge with command and obedience with action. She then focuses on several moments of pivotal change in the STC program she directs, demonstrating how such principles have infused these changes, supporting faculty as they engage diversity in their pedagogy and students as they grapple with "the paradoxical plurality of unique beings" (Arendt, 1958, p. 176).

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Feminism and Technical Communication: From Theory to Practice

Marika Seigel, Michigan Tech University

The second speaker talks about bringing her research in feminist approaches to technical communication and usability to the classroom. First, drawing on scholars such as Durack, Haraway, Harding, and Lay, as well as on her own work, she defines what she means by feminist approaches to technical communication. Then, she explains how usability projects for her technical communication class, and client projects for her grant writing class, are both informed by this definition.

Using Service-Learning to Help Students Develop Global Literacy

Jingfang Ren, Michigan Tech University

The third speaker discusses helping students develop global literacy through client-based community service-learning projects. She uses Starke-Meyerring's framework of global literacy as a theoretical framework for her discussion. The project focuses on international technical communication students that worked with local city officials and the university's international program office. Students created a user guide that welcomes first-time international residents into the area, targeting primarily international students, and secondarily non-student members, such as international faculty and their families. The speaker presents

this project as an example of school-community collaboration that meets the challenges and opportunities of globalization.

Safety Information Consulting as User Advocacy

Erik Hayenga, Topaz Agriculture

Speaker four discusses how his consulting work pertaining to safety information in agricultural operator manuals is seen by professional communities he works with as more than just the communication of a specific hazard to an identified audience. Rather, the corporate communities he works with see him as a user advocate, broadly construed, and especially as a person who can identify the usability issues of not just an instructional document, but also of the agricultural machine itself.

Bringing "Critical History" to Technical Communication Curricula

Bob Johnson, Michigan Tech University

Speaker five talks about bringing "critical history" to technical and scientific communication curricula, both at the undergraduate and graduate levels. He provides a working definition of critical history that embraces history as storytelling that is indeed interested in "facts," but that also provides a significant space for the subjective judgment of the storyteller/historian. He makes the case—through the history of atomic and nuclear development—that such an approach to writing and teaching history in technical and scientific communication will not only broaden our perspective on historical method and methodology but will also allow our profession to speak to wider and more diverse public audiences in compelling ways that propel our voices beyond the boundaries of our own disciplinary space.

Session 2, Panel D: Preparing Students for the Workplace: Trends in the TPC Curriculum and Professional Expectations

Moderator: Karen Sorensen, North Dakota State University

Preparing Students for the Workplace: Trends in the TPC Curriculum and Professional Expectations

Lisa Meloncon, University of Cincinnati

Sally Henschel, Midwestern State University

In the first part of the panel, we will update the 2005 survey of undergraduate degree technical and professional communication (TPC) programs in the US. We located 185 undergraduate programs in TPC that offer majors, concentrations, emphases, or tracks, a 131% increase from the 2005 study, and restricted our analysis to 65 programs that offered majors in TPC. We will provide specific information about degree locations and an overview of curricula, as well as trends in curriculum since 2005.

In part two, we place the curricular data against published scholarship that discusses professional expectations in the workplace. The objective of part two is to examine "why we teach the skills we do" in an attempt to answer whether academic programs are ad-

equately preparing students for the workplace. We review the scholarship on conceptual and practical skills. Following our analysis of this literature, we create an explanatory matrix to visually display and organize these skills. Then we align these core courses against existing scholarship, i.e., within our matrix. Finally, we discuss our findings and pose a series of questions for the field, including asking the audience how we as a field can assist or participate in future curricula studies, for example, by updating and clarifying course titles and descriptions and through the sharing and examination of course syllabi.

Connection to conference theme:

This panel connects with the conference theme in three distinct ways:

- It describes the connections between and among different programs, which are all part of the TPC academic community
- It describes undergraduate curricula as it relates to what is necessary in the workplace
- It offers specific commentary on technologies within our academic programs

What attends will learn:

Attendees will walk away with a field-wide overview of the current state of undergraduate degree programs, and how degree programs align (or not) with the published scholarship on what our students should know to be successful in the workplace. The attendees also will leave with information that they can use to evaluate their own programs as they relate to field-wide trends.

Session 3, Panel A: CPTSC Research Grants: Where We Have Been and Where We Are Going

Moderator: Erik Hayenga, University of Findlay

Angles of Repose: Encouraging Productive Exchange among Technical Communication Programs and the Workplace

Ann Brady, Joanna Schriber, & Marika Seigel, Michigan Technological University

Activating Prior Knowledge through Metacognitive Awareness: An Empirical Study of Professional Writing Courses

Josephine Walwema & Dana Lynn Driscoll, Oakland University

Veteran Technical Communicators: Their Take on Quality, Subject Matter Specialists, and Audience

Tammy Rice-Bailey, University of Wisconsin Milwaukee

Session 3, Panel B: Contemporary University Campuses as Sites of Workplace Writing

The presenters on this panel will explore the contemporary university campus as a site for both research into and practice of workplace writing that, in turn, can shape the development of technical communication curricula. Emergent from the university's increasingly corporate organization and structure, one finds complex activity systems and networks at the intersection of sites such as campus research and teaching labs; educational work-

places in the university for students and staff; and campus information technology centers and classroom technology development. Using a blend of activity theory (AT) and actornetwork theory (ANT), this panel will explore how those intersections provide robust opportunities for student engagement with the broader, non-academic-side of the campus community. Of central concern will be the development of curricula in technical communication: not only in the traditional classroom but also in the development of student life and other campus professionals in training situations conducted in non-classroom settings, but still within the university.

Startup Culture and University Innovation

Liza Potts, Michigan State University

Presenter one, speaking from the perspective of a former manager in industry and now faculty working across multiple research and teaching labs, will talk about how start-up cultures can cultivate a space in which innovation and creativity can thrive—empowering students, faculty, and specialists to create learning experiences based in solving for real-world problems, working across disciplines, and leading communication teams.

Applying Tech Comm Learning to the University Workplace

Kelly Schaefer, Illinois Institute of Technology

Presenter two, speaking from the perspective of a PhD student in technical communication and director of a campus and conference center at an urban university, will present about non-academic workplaces in a university by focusing attention on educational experiences for tech comm students at the university, and education for student affairs departments regarding hands-on, professional writing development in a university workplace. Both contribute positively to students' educational experience while developing writing for the university workplace.

Technology Development Beyond the Support of Campus IT

Karl Stolley, Illinois Institute of Technology

Presenter three, speaking from the perspective of faculty who recently received tenure in part for technology development work, will discuss the activity system of a centralized campus information technology center—and the ways that effective communication enables faculty and campus partners (such as librarians) to route around campus IT to develop unique instructional environments for students so as to radically reshape the core technology components of graduate-level technical communication curricula.

Attendees at this panel are invited to explore with us the following questions:

- What kinds of outreach to various campus partners (e.g., innovation incubators, student life, libraries, campus IT) can provide new and fruitful avenues for collaboratively developing technical communication curricula that treat of the university as a site for workplace writing?
- What are the consequences (for individual faculty and for entire programs) to reframing the university as a workplace? How does that change the visibility and public face of the university's written output in non-academic situations?
- What types of mutual professional development opportunities exist for technical communication faculty and students as well as staff in areas of the university that are not

- traditionally considered "academic"?
- In an educational environment where faculty and administrators are the experts, how do theories of student development and adult learning play out in the workplace to develop writers, and how can professional and technical communications research address this?

What's the Right Size? Graduate Program Growth Strategy in the Context of Academic and Workplace Communities

Joyce Carter, Texas Tech University

When we look at graduate programs, regardless of our roles as faculty, colleagues, When we look at graduate programs, regardless of our roles as faculty, colleagues, deans, or advisory boards, one of the questions we always take up involves the size of the program. Most of the discussion centers on internal factors, such as faculty-to-student ratios, number of semester credit hours generated by the program, the ratio of PhD to masters to bachelors to certificate students, and so on.

Harder to calculate, but equally important, are external factors. Being an entrepreneur and having been trained in business (as well as rhetoric), I see the internal program questions as being akin to cost accounting and operations questions one would encounter in a business, and the external questions being more akin to strategy and macroeconomic factors, and I will spend the bulk of my time looking at those external factors as major part of the way programs may think about size and ratios.

The topic is relevant to the conference theme in the macro sense of viewing graduate programs as integral parts of larger webs of rhetoric and scientific communication programs around the country and globe, employers and internship providers, and the community at large, which interacts with graduate programs in service-oriented projects, among other things.

Questions we may consider include the following:

- What does the market for rhetors look like? Who are major stakeholders? Competitors? Complementors?
- What is the role of distance-education graduate programs in this market?
- How does one gauge concepts like "flooding the market," bigness, or boutiqueness in general?
- What does having graduate students who don't pursue traditional (i.e., MLA) career paths do to our concept of placement?
- Is it necessary or important to adhere to MLA job listing guidelines and timelines?
- What is the role of consortiums in discussing program size, discipline size, discipline specialties, certification, among others? Should these questions be "regulated" in a centralized fashion, or should individual programs proceed in a decentralized fashion?

Session 3, Panel C: Teaching about Culture: Challenges and Suggested Methods

Moderator: Steven Hammer, North Dakota State University

Role-playing Class Struggle: Simulating Class and Social Justice in the STC Classroom Gary Kaunonen, Michigan Technological University

In 1978, New York University Professor of Political Science Bertell Ollman created a board game titled Class Struggle. The game attempted to prepare players "for life in capitalist America" by simulating conditions, scenarios, and situations on a game board that might mimic encounters between the customary Marxist dialectic "Workers" and "Capitalists." Unique in nature, Class Struggle in Ollman's game required players to accumulate assets and debits while rolling dice and passing over Worker and Capitalist squares while collecting "Chance" cards, one of which read, "Together with your fellow workers, you have occupied your factory and locked your boss in the toilet. Capitalists miss 2 turns at the dice."

In designing an "Introduction to Technical and Scientific Communication" course as an instructor at Michigan Technological University, I began to wonder how to make the student experience in technical and scientific communication a meaningful point of contact that moved past standard STC curriculum. This conundrum was not new to pedagogical concerns in the field of technical and scientific communication. Gerald J. Savage's 1996 article, "Redefining Responsibilities of Teachers and the Social Position of the Technical Communicator" in Technical Communication Quarterly, called for three new "levels of responsibility" for teachers of technical communication. Two of Savage's three levels of responsibility seemed to mirror the goal of Ollman's revolutionary (literally), role-playing board game: "at the pedagogical level, we need to incorporate social and historical perspectives into [teaching] technical communication" and "at the level of social action (participation) in...creating new sites of practice." Thus, I undertook the task of developing a way to deliver a new site of practice that addressed issues of social justice and class in STC course content.

As scientific and technical communicators struggle to redefine the nature of the field as a professional discipline, a robust discussion of ethics, social justice, and guiding theoretical applications should accompany the move towards professionalization. This presentation responds to the theme of the conference by examining and then presenting case-study-like findings on the simulation of aspects of class and social justice that will deeply affect the discourse regarding community and workplace in the scientific and technical communication classroom. Attendees will leave the presentation with an alternative pedagogical framework and methodology that includes tackling such difficult issues as class and social justice, while still addressing the practical applications of writing technical documents and working in the corporate community.

Pedagogy and Power to the People

Natasha N. Jones, University of Washington, Seattle

As an African American woman in higher education, issues of diversity play a large role in my professional and personal life. This years' CPTSC call for proposals considers the themes of social justice and diversity as they pertain to the field of technical communication. My presentation aims to respond to questions about how teachers and scholars in technical communication can explore issues of social justice and expand scholarship related to diversity. Further, my interests and recent research focusing on communication within an activist organization has not only raised my awareness of the important connections

that can be made between activism and technical communication, but has also increased my desire to engage in meaningful studies that reach beyond academia and contribute to activist causes. Moreover, what is understood about activism is rapidly changing and these changes have the potential to impact how information is communicated, how policy is created, how publics are influenced, and how activist and social justice oriented goals are accomplished. Investigating these sites of transition in activism provides scholars the opportunity to study a dynamic communication phenomenon. Scholars in technical communication and rhetoric have found the study of activism and the changes occurring in activist organizations and activist contexts a particularly rich area of study, even in regard to how researchers themselves can function as activists. Moreover, helping our students to understand how activism and communication can interrelate promotes the kinds of critical civic engagement that we encourage in our students. My individual presentation seeks to present considerations for how technical communication courses can be designed to:

- Advance our students' understanding of and engagement in critical conversations about issues of social justice,
- Incorporate topics in social justice and equality to foster an appreciation for diversity in technical communication classrooms, and
- Highlight the symbiotic relationship between activism and technical communication.

Teaching Localization to Native Spanish Speakers: Opportunities for Growth

Nicole St. Germaine-McDaniel, Angelo State University

One of the significant challenges that educators in technical communication face when they teach localization is encouraging students to step outside of their cultural contexts. For example, according to Geert Hofstede's cultural dimensions, dominant-culture Americans are the most independent culture in the world, meaning that they are oriented toward individual success and expect loosely-knit social groups where one's success or failure are credited toward individual effort ("Dimensions" Accessed April 20, 2012). Our students often consider such beliefs to be "normal," or the default method of viewing the world, and they have difficulty objectively examining their beliefs.

Increasingly, however, more of our students are products of more than one cultural background. According to the Pew Hispanic Center, 16 percent of the U.S. population identifies as Hispanic, as of the 2010 census (Passel, et al., 2011). Of these Hispanics, 44 percent are bilingual in English and Spanish, states the Pew Hispanic Center (2007). This figure accounts for both immigrants and U.S.-born Hispanics. While the rate of English speaking increases dramatically among subsequent generations of Hispanic immigrants, the rate of Spanish speaking decreases more slowly. In addition to the retention of their heritage language, identification with their native Hispanic culture often remains strong even across many generations.

This shift in demographics creates a unique opportunity, as well as a challenge, for educators in technical communication. Not only are we tasked with helping students remove themselves from their cultural contexts, but we must help students who reside in more than one culture step out of both cultures. In some ways, this is easier because students who are bicultural or multicultural tend to have a broader worldview, but it can also be more challenging. For example, students whose grandparents were from Mexico may still

strongly identify with the Mexican culture, and may not realize how much of their world-view has been influenced by their daily contact with dominant-culture, English-speaking America.

This paper meets the theme of the 2012 conference because it directly addresses the concept of addressing defining diversity in technical communication, as well as teaching technical communication in diverse colleges and universities, and localizing documents and preparing content for translation. I will discuss my experiences with challenging these bicultural and multicultural students to stretch outside of their cultural boundaries when they learn to localize information. Some of these techniques include teaching cultural awareness, exploring cultural beliefs, teaching cultural research techniques, teaching localization techniques, and usability testing their localized project to check for cultural correctness.

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The Other Kind of Funnies: Comics and Technical Communication

Han Yu, Kansas State University

This presentation examines the use of comics in technical communication across cultures and responds to one of the conference's broad themes: "researching the issue of culture."

The presentation refutes the mainstream American cultural assumption that comics have little to do with technical communication—that the former is entertaining (in a low-brow sense) and juvenile, whereas the latter is practical and serious (to the point of being stuffy). Drawing from comic artists and theoreticians such as Scott McCloud and Will Eisner, I establish that comics are a medium and, as all media, contain both quality and questionable content. We can denounce some comic works, but not the medium. Instead, I argue that comics can be used to create technical communication that is effective, user-friendly, engaging, and socially responsible. Japan offers the prime example: comics are a respectable form of communication and art in Japan, enjoy a large and diverse readership, and are used in all types of communications, including government reports and manuals.

The same practice can be found in the U.S., but it is far from being the norm—even though a number of factors and theories can be drawn upon to argue for the merits of using comics in technical communication. For instance, readers often see comics as being poetic rather than rhetoric, that is, concerned with entertaining rather than persuading. This perception means that comics have the potential to create subconscious persuasion. Comics can also juxtapose multiple verbal and visual types: the authority voice that is conveyed through captions, various other voices—such as lay speech and user complaints—that are expressed through character dialogs, visuals that resemble scientific illustrations, and visuals that are exaggerated and cartoonized. This heteroglossia creates the Bakhtinian dialogic discourses, which can lead to more responsible, ethical, and user-centered

communication than what we may find in conventional, monologic technical communication discourses.

This presentation discusses these and other factors that contribute to the potential of using comics in technical communication, accompanied by examples from various national cultures such as Japan, China, and the U.S. It also asks the audience to discuss the implication of this argument on technical communication classroom instruction and programmatic objectives.

Session 3, Panel D: How New Technologies Affects Communities and Rhetoric

Plowing the Dark: Enjoying the Fruits Gleaned of Virtual Workplaces

Michael J. Salvo, Purdue University

"Plowing the Dark" refers to Richard Power's 2000 novel in which he narrates the creation of virtual reality using an agricultural metaphor, and it is on these fruits this presentation focuses. As the U.S. returns to making stuff and building things, what lessons learned from the hardware, software, web-based, and hand-held world of digits make us better prepared to effectively participate in emerging opportunities as communicators?

Insourcing, flattened hierarchies, task teams, and flextime work: these are all innovations of the digital workplace that are making inroads into traditional workplaces, specifically into next-generation manufacturing, agriculture, and logistics. As the attention shifts to the economic, environmental, and social costs of globalization, new models of sustainability emerge that emphasize the value of locally produced alternatives to commodities and the carbon footprint of global networks. As the evidence begins to mount that off-shoring is not saving as much as predicted, numerous industries are returning to U.S.-based manufacturing. Nowhere is this more evident than in a presidential photo op at Milwaukee's Masterlock.

A recent special issue of The Economist dedicated to emerging postindustrial manufacturing culture pointed that manufacturing floors seemed empty. They were empty because human labor has effectively been replaced by machines, but the back offices were full of robot programmers and maintenance workers, IT Professionals, designers, advertising specialists, social media experts, web and user-experience designers, etcetera. Productive futures await students trained as technical communicators.

Analysis and Impact of Student Research Writing in a Technical and Professional Writing Course

Lee-Ann Kastman Breuch, University of Minnesota

Brian Larson, University of Minnesota

Overview. This project focuses on "research writing," or the ways in which undergraduate students interpret, evaluate, and communicate research findings in a written report. Specifically, we share preliminary findings of an analysis of thirty student research reports in a technical and professional writing course at a large public institution. Students enrolled in this course represent a diversity of majors at a large public university. Our analysis is informed by Swales' Genre Analysis of research reports, specifically the rhetorical moves in "results" sections including background information, statement of findings, explana-

tions, reference to previous research, hypothesis and generalization, and future research. We adapted Swales' rhetorical moves to include references to primary research. Using a sentence as a unit of analysis, four raters coded all sentences in the "results/discussion/conclusion" sections of thirty student papers (totaling nearly 3,000 units of analysis). Interrater reliability was calculated and coders met in person to discuss disagreements. Results from the coding suggest that "statement of findings" and "reference to previous research" were the most frequent categories found in student papers, followed by "statement of findings from primary research." Surprisingly fewer units were coded as "explanation," and even fewer in terms of "generalization." Ultimately, the samples we reviewed suggested that students had difficulty explaining their findings and had difficulty comparing and contrasting previous scholarship to situate their work. In essence, students articulated the skeleton of their studies using IMRAD headings but did not fully articulate the connections leading to conclusions.

How Proposal Responds to Theme

This proposal addresses the stated topic in the call for proposals "teaching technical and scientific communication in diverse colleges and universities." The study addresses an analysis of student writing in a large professional and technical writing course that draws a diverse student population across seven colleges at the university. Results from this study shed light on writing habits of students from a diversity of backgrounds.

What Attendees Can Learn or Gain

Attendees will learn about the ways students in this study interpret and apply the IMRAD genre to their own research writing. Specifically, we will share results of common rhetorical moves among student research writing. Presenters will also mention how this study responds to recent criticisms of technical communication pedagogy regarding a lack of emphasis on research writing and research activities in technical communication programs (Wolfe, 2009; Spilka, 2009). As well, attendees will hear about genre analysis as a method for analyzing student writing.

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On the Rhetorical Radar: The Multimodal Genre of the STEM Presentation Poster

Kevin Cassell, Michigan Technological University

Poster presentations are a relatively new venue at conferences in the humanities and social sciences, but they are a standard feature of many professional gatherings in the STEM disciplines. It is not unusual to find such posters decorating the hallways of engineering, math, and science departments at technological colleges and universities. My presentation will argue that undergraduate courses in composition, science writing, and technical communication should put "on the radar" the oftentimes overlooked genre of the poster presentation. This genre cuts across a wide variety of STEM disciplines and is a standard professional practice of both undergraduates and graduate students. Still, few of the leading textbooks in technical communication pay heed to this genre

(though some do attend to other forms of visual presentations, like PowerPoint) or to the specific rhetorical exigencies generated by venues for which they are prepared. Consider the following about the poster presentation:

- It is a multimodal rhetorical project, requiring attention to textual, visual, oral, and aural dimensions of delivery and reception; it is meant to be read and seen as well as interpreted, on the spot, in terms of its presenters' explanations;
- It requires that complex scientific and technical information be condensed within very specific spatial and textual constraints; written texts often do not carry the full weight of information delivery; images must do more work than they do in standard technical articles;
- Unlike bounded written texts, posters are "read" by a wide variety of people in a single setting, often in dynamic and interactive environments; these can morph into agonistic spaces where presenters are challenged by scientists, professors, judges, and other conference attendees;
- Vocal delivery may be rehearsed but is highly improvisational in that presenters need to constantly adjust to amorphous, shifting audiences and interactive conditions that do not abide by standard protocols; the presenter must strike a balance between formal presentation and informal discussion in a kairotic "on the spot" manner.
- Unlike the panel presentation, which ends when the speakers depart the room, the
 academic poster must have concrete staying power: some hang for days at professional venues, subjected to ongoing assessment. It is not uncommon for especially
 provocative posters to be displayed in home departments for months or even
 years after the initial presentation.

How does this relate to the theme of the conference "Communities, Workplaces, and Technologies"?

The presentation poster is a genre that links all three of the terms in the conference title. Poster presentations are often made collaboratively, in labs and other workplaces, by a community of researchers; they are presented to communities in professional venues; and they are designed using any number of presentation software programs; in many cases, the content of such posters is technology itself.

What might conference attendees gain from this presentation?

Although many people at this conference have seen poster presentations—and may have actually done them—they may not actually consider it a "genre" on the same scale as, say, a white paper or a usability report and, hence, worthy of inclusion in a technical communication curriculum. But to the undergraduate (and graduate) STEM student at most technological institutions of higher education, this is an important form of multimodal technical communication—one with specific rhetorical challenges that are not identical to those of standard print documents. Poster presentations are increasingly popular at academic and professional conferences as well as at in-house research colloquiums. There are numerous websites and YouTube videos that describe how to design such posters (do's & don'ts) and depict occasions at which they are delivered. A Google Image search for the key words "poster presentation" will bring up thousands of these posters from across the world, most in

the STEM disciplines. But if our standard textbooks are any indication, the field of technical communication tends to overlook this increasingly ubiquitous professional practice. My presentation would attempt to position "on the rhetorical radar" this internationally widespread practice of multimodal technical communication.

The speakers in this panel seek to transgress hegemonic notions of "communities, workplaces, and technologies" by instigating and facilitating multivocal conversations and by critiquing the power relations at play in our field. We each bring theoretical and methodological approaches, including decolonial, black feminist, and apparent feminist, which we believe attendees can adopt in order to effect programmatic and disciplinary change for social justice in practice.

Session 4, Panel A: Transgressing Business as Usual in Technical Communication Programs

Moderator: Mitch Ogden, University of Wisconsin-Stout

Technical Communication, Empire-Building, and Social Justice¹

Angela Haas, Illinois State University

'siyo diqualidv ale wa'do. Hello everyone, and thank you for attending our plenary session today. Ale wa'do, thank you, to the Anishnaabeg peoples—the Ojibwe and Chippewa—whose lands we are conferring on. Ale wa'do, thank you, to the CPTSC 2012 conference and program organizers for all their work. Today I'd like to share my initial inquiry related to my most recent research project that interrogates who we imagine being part of our technical communication histories, communities, and work places and the places we imagine technical communication work transpiring. What follows is an attempt to open productive conversations that work toward social justice in our discipline, programs, curricula, and pedagogy.

What would happen to the discipline of technical communication (and what it would look like) if we revised our origin story with Other and earlier narratives of technical communication theory and practice? What might we learn about the colonial history of technical communication practices in the Americas by studying the treaties between the peoples indigenous to the Americas and the Europeans settlers? What could happen if we acknowledged the histories of indigenous technical communication theories and practices prior to colonization?

To imagine some answers to these questions, I trouble our WWII engineering origin story with another story of how technical communication was a critical component of empire-building in the early formation of the Nation state of the U.S. To explain, treaties are technical and legal contracts between two or more sovereign political authorities formally signed by representatives duly authorized and usually ratified by the lawmaking authority of the state. In the case of early colonial America, treaties were written almost exclusively by the Europeans and then translated to the indigenous peoples, oftentimes obscuring the technical information written in a foreign language that ignored, transgressed, if not altogether abolishing indigenous rights over their lands, resources, education—essentially, their whole ways of life. Some times Native Americans voluntarily attended the "signing" of the treaties, other times they were tricked or forced. In some instances, treaties

were forged. Among other things, in the early days of colonial invasion and expansion, treaties worked to establish and organize thirteen Atlantic seaboard British colonies and to expand their sovereignty "over the vast, prime midsection of North America in less than a century of frontier conquest" (Williams, p. 7).

Mark Hannah (2011) recently called for technical communicators to develop a complex understanding of the relationships between our work and the law toward a legal literacy that acknowledges how we coproduce the law. My work here serves to both respond to and extend Hannah's call, as I promote that we develop a plurality of legal literacies that in addition to Hannah's suggestions—expose the asymmetrical power relations at work in coproducing the law. For example, the cultural values and stories of Indians have been left out of the history and rhetorics of early legal proceedings on this continent, proceedings that worked—at best—to disrupt indigenous lifeways and—at worst—in service to cultural genocide. As Lumbee legal scholar Robert Williams makes clear, "the legal rules and principles adhered to in the course of this countries historical dealings with Indian peoples are exclusive by-products of the Western legal tradition brought to America from the Old World" (p. 6). Thus, as a discipline, I assert that we have a responsibility to acknowledge how U.S. law has historically and intentionally ignored, erased, negated, or otherwise subjugated, critical stakeholders who deserve(d) to be positioned as coproducers of the law just as much as contemporary technical communicators, if not more so when laws are being written to regulate their bodies without their consent, much less input.²

Many EuroAmerican legal scholars posit that treaties were just one of the many technologies that indigenous people needed to adopt in order to become civilized. However, this claim ignores that many tribes indigenous to the Americas prior to and after colonization designed and engineered wampum belts that required treaty-like technical communication practices between tribes—as well as Europeans—in order to formalize and document alliances, land and trade agreements, ceremonies, and more. In brief, wampum is an indigenous technology,³ and weaving it is a highly rhetorical and technical communication practice (from invention to delivery) that encodes credentials, authority, responsibility, and accountability—thus, ethos—of all stakeholders in the negotiation. In historical and intertribal legal contexts, wampum strings and belts served to engender sustainable diplomatic relations, and their presentation in the presence of all stakeholders worked to support reciprocity among them. One of the better known intertribal wampum treaties is the Hiawatha Belt, which represented agreement between the five original nations⁴ of the Haudenosaunee (Iroquois) Confederacy—Mohawks, Oneidas, Onondagas, Senecas, and Cayugas—to live together in alliance and peace in ways that support equality and self-determination. Wampum scholars maintain that the Hiawatha Belt influenced the democratic thought that led to the Constitution of the United States (Tehanetorens, 1999; Wallace, 1994; Williams, 1997).

So how, then, might these quick considerations of Western and indigenous treaties teach us something about our past, present, and future discipline, programs, curriculum, and pedagogy? I suggest that they can help us to understand the importance of regularly interrogating whose histories of and perspectives about technical communication theory and practice we value. Carolyn Rude (2009) explains,

Any mapping of a field will construct its power relationships. [T]he hegemonic process by which some meanings and practices are chosen for emphasis and others

are excluded or repressed. If we are to understand ourselves and our field, we must understand where power is located and how it shifts. (p. 178)

I posit, then, that studying and mapping some of the profession's colonial roots (e.g. paper treaties) and decolonial roots (e.g. wampum treaties) can work to reimagine and reconstruct the power relationships in our discipline and beyond.

For example, how did EuroAmerican paper treaties (and their historical and rhetorical contexts) "function as agents of knowledge making, action, and change" (Rude, 2009, p. 183) for some stakeholders and as agents of oppression Others? Which hegemonic values that historically sponsored these Western treaties continue to sponsor our discipline, curriculum, and pedagogy today? How did wampum belts (and their historical and rhetorical contexts) "function as agents of knowledge making, action, and change" (Rude, 2009, p. 183) and support sustainable and reciprocal relations? Which cultural values informed indigenous wampum treaties, and how might our discipline change if we were to share these values? Perhaps these questions give us pause to consider that our discipline and corresponding academic programs may (albeit unwittingly) function as systems that support "knowledge making, action, and change" for some while at the same time function in service to systems of oppression that prescribe, undermine, or prevent the "knowledge making, action, and change" of others?

Ultimately, to map our discipline and related professions, we must either admit that we are locating our disciplinary history in the Western rhetorical tradition of discovery, meaning that technical communication theories and practices did not exist in this new world until the colonists brought enlightenment to this continent, or we can capitalize on our fairly new history and begin to hypertextualize our histories by intervening with underrepresented technical communication theories and practices—theories and practices that flourished on this continent long before colonial contact and conflict, those that struggled to be part of the conversation during the early years of colony and subsequent Nation building, those that were destroyed, erased, or dismissed in the process, and those that are being recovered and are emerging today.

If we choose the latter strategy for growing our discipline in culturally inclusive and responsible ways, how do we operationalize it? What are the implications for our discipline, programs, curriculum and pedagogy? As suggested already, we should include, honor, and value diverse and underrepresented histories of technical communication practices. And as Miriam Williams suggested in her keynote presentation (2012), more historiographical research grounded in social justice is needed to do this kind of work. Admittedly, engineering is an important part of our history, but we still have much to learn about how engineering has impacted technical communication and we have impacted engineering. For example, consider Slack & Wise's (2005) research on the relationship between culture, power, and the engineering of technologies, in which they uncovered that Robert Moses deliberately designed and built the Long Island Bridge with amazingly low overpasses in order "to hinder poor people and blacks, not only from using the parkways, but also from accessing Jones Beach, a park Moses designed. In this case, the task delegated to the technology was in part that of racial and class discrimination" (as cited in Slack & Wise, 2005, p. 158).

Further, what do most of us know about the technical communication practices

required of the engineering that transpired before colonization, from the building of Cohokia Mounds in the Midwest to the Mayan Empire in the Southwest? Interestingly, although many acknowledge the magnitude and complexity Mayan engineering, many are unaware that Cohokia—constructed over one thousand years ago by Mississippian Indians, or popularly called the Moundbuilders—grew to become of the two largest urban areas north of Mexico in the 11th and 12th centuries ACE and the home of over one hundred mounds and thousands of homesteads.

I think it is helpful to use decolonial⁵ theories, methodologies, and pedagogies in relation to studying our histories. Put simply, we should acknowledge in our research and pedagogy that Western technical communication theories and practices were critical in the colonization and Nation building of this continent and expose the ways in which these practices impacted stakeholders other than those authoring the communication. For example, this paper serves to expand our legal literacies by bridging Hannah's (2012) call with Scott, Longo, & Wills (2006) call for "more research and teaching approaches that historicize technical communication's roles in hegemonic power relations" (p. 1) by demonstrating how this Nation was built upon unethical intercultural, risk, and legal communication—treaties—that did not provide informed consent, or the risks involved with signing over land to the colonists. Although these theories and practices surely transpired prior to establishing technical communication as an academic discipline, we nonetheless have a responsibility to interrogate how colonial theories and practices of technical communication may unwittingly continue to inform our disciplinary, programmatic, curricular, and pedagogical work.

We must all recognize our roles as stewards of this discipline, and this stewardship is based upon responsibility and accountability. And I posit that if we truly understand technical communication to be concerned with users, and we really value diversity, then we will all understand that it is our responsibility to design our discipline, programs, curriculum, and pedagogy to be usable for diverse audiences, communities, and workplaces. This stewardship joins the imperative to engage more diverse histories of technical communication with the imperative to recruit more underrepresented students, professionals, and faculty into our programs, professions, and discipline. Doing so requires us to consider users of our research and curriculum different from ourselves. We should not think of these users as guinea pigs, but as inspiration for doing a better job of considering how we represent the discipline, professional work, and pedagogy in ways that are usable, useful, and ethical for a diverse range of users. And these diverse users could end up becoming future stewards of our discipline and professions. Thus, we have a responsibility to research the diverse users of our research, programs, curricula, and pedagogy—much like we teach our technical communication students they must do in order to produce effective and culturally responsible communication products.

Certainly, there are multiple ways of imagining underrepresented and diverse users of our disciplinary and programmatic communication—from gender and sexuality to socio-economic class and nationality, but given the scope of this paper and a focus of my scholarly and curricular work, I will focus on racial and ethnic diversity. First, we must read and subsequently contribute to the emerging research that is interested in interrogating mul-

tiple perspectives on diversity in technical communication programs (Savage and Mattson, 2011), engaging in critical issues of race in technical communication programming, curricula, and pedagogy (Haas, 2012), learning from and collaborating with technical and scientific communication programs in historically black colleges and universities (HBCUs), tribal colleges and universities (TCUs) (Savage and Matveeva, 2011), and Hispanic-Serving Institutions (HSIs) (Matveeva, 2011) in the United States. Given that there are at least 105 HBCUs, 38 TCUs, and 240 member HSIs in the United States, we have plenty of places to start researching and recruiting. In the process, we should be mindful to privilege user-based self-representation and self-determination. Appendix A provides additional resources for contacting HBCUs, TCUs, and HSIs, for increasing the diversity of faculty, on campus and government diversity initiatives, and more.

While the emerging social justice work in technical communication studies is encouraging for those of us interested in exposing and revising asymmetrical power relations that have influenced and continue to shape the mapping our discipline and related professions and programs, much more work is needed to mobilize and sustain this movement. There are many other areas of inquiry in technical communication that could be transgressively revised if we—to draw on Bob Johnson's (2012) presentation—employ a "critical history" framework to study technical communication practices. Although he didn't define his framework, I suggest that a critical history framework be concerned with the critical uncovering or recovering of underrepresented histories that have the political potential to inspire new tactics for imagining and subsequently making or re-making of a more humane and socially just society. I can imagine that interfacing rhetorical, critical race, postcolonial, decolonial, and feminist theories with a critical history framework can help us to personally acquire, and subsequently foster in others, deeper understandings of the ways in which the relationships between technical communication and history, race, ethnicity, gender, rhetoric, and colonialism have complex implications for the ways in which our disciplinary history and identity has been written and on whose backs this history and identity has been written—as well as complex implications for the pressing contemporary concerns of our discipline and related professions, from user-centered research, risk communication, regulatory writing, and legal literacies to information architecture, digital and visual rhetoric, medical rhetoric, scientific rhetoric, workplace writing, globalization and localization, community informatics, curricular programs, pedagogy, and more.

Appendix A

- American Association of University Professors. Recommendations for increasing diversity of faculty. www.aaup.org/statements/Redbook/AARDPLAN.HTM
- American Indian Higher Education Consortium. Tribal Colleges and Universities (TCUs) Roster. http://www.aihec.org/colleges/TCUroster.cfm
- The Association of American Colleges and Universities. Campus diversity initiatives and resources. www.aacu-edu.org/issues/diversity/
- CIC Directory of Minority PhD, MFA, and MLS Candidates and Recipients. www.cic.uiuc. edu/programs/DirectoryOfMinorityCandidates
- CIC Directory of Women in Science and Engineering. http://www.cic.uiuc.edu/pro-grams/DirectoryOfWomenInScienceAndEngineering
- Diversity & Affirmative Action in Higher Education. How to Diversify Faculty: The Cur-

rent Legal Landscape. www.aaup.org/Legal/info%20outlines/legaa.htm

- Diversity & Affirmative Action in Higher Education. The Educational Benefits of Diversity. http://www.aaup.org/lssues/AffirmativeAction/aaedbene.htm
- Hispanic Association of Colleges and Universities. HACU Member Hispanic-Serving Institutions (HSIs). http://www.hacu.net/assnfe/CompanyDirectory. asp?STYLE=2&COMPANY_TYPE=1,5
- The Minority and Women Doctoral Directory. www.mwdd.com/index.asp
- U.S. Department of Education. Alaska Native and Native Hawaiian Serving Institutions. http://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst.html
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- ¹ This version of my paper brings together my CPTSC 2012 plenary talk on Social Justice in Technical Communication and my presentation, "Technical Communication and Empire-Building," on the panel "Transgressing Business as Usual in Technical Communication Programs." I also added a bit more scholarly framing so as to better credit colleagues doing important work in social justice and technical communication.
- ² Erin Frost (2012) & Flourice Richardson's (2012) work evidences how women and African American's have been legally and rhetorically positioned as bodies to regulate rather than critical stakeholders and coproducers of law.
- And was later adopted as a EuroAmerican technology, as they appropriated wampum to use as currency. For more background on wampum and how it works as a technology and rhetorically, see Haas (2007).
- ⁴ The Tuscarora Nation later joined the Confederacy to become the Sixth Nation.
- ⁵ For more on decolonial theory, methodology, and pedagogy, see Haas (2012).

Black Feminist Thought: Tools for Dismantling Hegemonic Notions of Power

Flourice Richardson, Illinois State University

What are we doing in Tech Comm?

Before I begin, I want to borrow a tradition from my mentor, Dr. Angela Haas. It is a tradition of giving thanks for those whose ancestral lands in which we confer. My thanks, however is not tied to land but to spirit. I give thanks and honor for the work and the voices of those who have enabled me to do the work: ancestors, mentors, educators who empower, inspirer, and encourage my work and the work of those who will follow me.

Pattie Ann Lassiter, Annie Richardson, Melody Moore, Patricia Bonner, Adrianna Jones, Angela M. Haas, Gerald Savage, Lee Brasseur, Duriel E. Harris, Pamela Hoff, Mariam Williams, Erin Frost. It is on their shoulders, I stand.

Now to the business at hand

My task today is to give you some information about my research and how it came to be. This is a journey of discovery and investigation so stay with me for a moment and I will get to my main point.

When I came to Illinois State, my intent was to examine how identities are formed in an online environment, but as fate would have it, I stumbled across an interview with Harriet Washington discussing her book, Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present. Washington's book exposes a stark and horrific reality of this country's racial health divide through the use of historical archival data. Her work began with a file and rhetoric. In the interview she talked about the rhetoric that was used to save the life of one man, and condemn the life of another. Both at the same diagnosis; both stage of illness. What killed one and condemn the other their race and rhetoric. What gave birth to her research; was a document that she found that chronicled both of their treatment options. From there, I was inspired to investigate how health or health disparities are formed. My research in that area lead to an investigation of how doctors and medical practitioners speak about illness and chronic disease; Again, rhetoric. I began to question how they use rhetoric to inform patients about their conditions and how that information is translated into documentation that the

patient can use and understand.

Hold on....I am still on my journey.

From there I began to notice how these files, documents, and speech patterns had the power to make people, especially people of color, invisible. See the disease and not the man. To see the issue and make the human invisible is a strategy that empowers one and dis-empowers or disenfranchises the other.

I was inspired to investigate how culture and identity are informed by technical communication from my own experience. Through her research, especially her examination of the Eugenics Movement, she quickly learned the power of communication and how communicative strategies can build or destroy ones agency. Since her primary focus at ISU is to promote concepts of social justice, she feel that my duty as a professor to ensure that voices of the under-represented and served are represented in any curriculum that she designs. Through her research, she acknowledges the historical and cultural perspectives of those whose voices have been ignored by celebrating diversity. In this way, she feels that she is honoring her heritage and building a bridge for future scholars in the field of technical communication.

While my work at East Carolina introduced me to a wider scope of inquiry in the field of technical communication, my work at Illinois State has inspired me to investigate how culture and identity are informed in technical communication. Through my research, especially my examination of the Eugenics Movement, I have quickly learned the power of communication and how communicative strategies can build or destroy ones agency.

Since the primary focus at ISU is to promote concepts of social justice, I feel that my duty as a professor is to ensure that voices of the under-represented and served are represented in any curriculum that I design. Through my research, I acknowledge the historical and cultural perspectives of those whose voices have been ignored and celebrating diversity. In this way, I feel that I am honoring my heritage and building a bridge for future scholars in the field of technical communication.

But in order to do this work, administrators and program directors must do their parts in making sure that the voices like mine are given the space to be heard. And they must be given real support.

I was able to do what I do because I was fortunate enough to be in a program where people felt that it was important take a genuine approach to social justice. That is, they felt that it was not enough to talk about diversity behind closed, or just in conference halls. They made a conscious effort to make diversity and social justice their main focus and that is why I am here.

As I contemplate my journey, I have to reflect on the students who have not had the advantage or having such wonder mentors and advisors to guide them through their academic journey. So as I stand here before you, program designers and educators, I have to ask what are you doing? There are too many of you that use the term diversity as a catch phrase to say nothing, and to do nothing. Your understanding of diversity is nothing more than an articulation of tokenism that masquerades as diversity or a phrase that many like to use, social justice.

If you are not providing your students with the resources they need to succeed in

your program, you are not practicing social justice; in fact, you are doing your students an injustice. Don't bring students to your programs and then refuse to provide them with the resources that they need to succeed. Again, what are you doing? Where are the mentors and peer advisors, where are the instructors that actually embrace cultural differences? Where are the people who understand that the academy is a place for sharing ideas, not control who's able to present their ideas or how those ideas are presented; a place of creation, not stagnation. Again, what are you doing? I stand here before you as the representative of many. My voice is not unique. You call me a scholar, but I am not the exception. I am not overly articulate; nor am I more scholarly than anyone else or any person of color, African-American, woman that you might know. But I speak as one who understands, and who has been given a platform to speak. So again, I ask for all of us, What are you doing?

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Apparent Feminism: Technical Communication's Obligation to Intervene in Public Rhetorics

Erin Frost, Illinois State University

I will use apparent feminism to discuss how the uncritical uptake of rhetorics of science in some public-sphere conversations—like those about reproductive digital imaging technologies—create an obligation for technical communication programs to ensure that students receive instruction in analyzing communication practices with an eye to social justice.

Little by Little: Social Justice Perspectives in Programs at a Hispanic-Serving Institution Godwin Agboka, University of Houston-Downtown

Social justice is already rooted in technical communication discourse, (e.g., participatory action research, decolonial/feminist/disability approaches, etc.) although currently there is a gap between an acknowledgment of these approaches and a genuine commitment to shape TC programs to draw from these approaches. Nevertheless, some programs have begun to incorporate such perspectives. I will discuss how UHD, buoyed by its student population and location, has begun making little changes through civic engagement, increasing student diversity, and other measures.

Engaging Transgressive Soundings in Technical Communication Programs

Gerald Savage, Illinois State University, Emeritus

The voices in this panel are representative but not all inclusive of what we might call "transgressive soundings" from perspectives that have been heard too little or not at all in our programs and in the sites for which we need to be educating practitioners. Each voice speaks for lived experiences and understandings of the world that are inadequately or not at all allowed for in much of technical communication scholarship, pedagogy or practice. We must learn how to hear and engage with these voices for our own good as well as theirs.

Session 4, Panel B: Teaching Ethically about Culture and Communication

Moderator: Adam R. Pope, Purdue University

Negotiating culturally sensitive service-learning design in a milieu of diverse cultures Huatong Sun, University of Washington Tacoma

This presentation examines a service-learning project assignment in an undergraduate advanced web design course and discusses how we could better prepare students for effectively negotiating culturally sensitive design ideas in a milieu of diverse cultures.

A service-learning project is a good way of teaching students to create culture-sensitive design as it provides a concrete context where students could connect with community partners and local users. However, the current teaching arrangement of service-learning projects in technical communication classrooms tends to suffer from a superficial and uncritical view of culture, which makes developing student's civic awareness difficult. As Scott (2004) observed, a hasty process of enculturation into a sponsoring organization could bring potential problems later in the design process; a packed teaching schedule with multiple project milestones (e.g., proposal, progress report, and various versions of designs) usually leaves less time or no time for critical reflection of complex cultural issues; when the component of a critical reflection such as a reflection report is present, it is usually scheduled towards the end of the term which is too late for design intervention. When a service-learning project involves working with multicultural audiences, these problems become more challenging.

In this spring quarter, a group of undergraduate students worked with a local non-profit organization, a cultural center which represent 47 cultures from the Asia Pacific Region, to provide a web content management solution that includes upgrading their static website into a dynamic CMS one, facilitating participatory authoring, and achieving culture-sensitive design. "A dialogic pedagogy of production" was employed in the design process, which emphasizes theoretical understanding and practical know-how, informed by the framework of Culturally Localized User Experience (CLUE) (author, 2012). Centering on an iterative, dialogic design process, this approach aims to pursue a better rhetorical solution to a local problem and help students gain civic awareness, with a goal of articulating local voices. Students were enthusiastic about working with a real client, but they struggled to navigate different types of cultural issues during the design process: the collide between school culture and workplace culture, the muddy rhetorical situation with multiple stakeholders, and the complicacy of diverse cultures that needs to be addressed in one website.

The chosen topic resonates with the conference theme by exploring how to refine pedagogy of technology design for ethnic and cultural communities in technical communication classrooms. The attendees will accomplish the following objectives:

- Search for a better way of incorporating critical cultural studies in technology-intensive service-learning projects (Scott, 2004; Turnley, 2007).
- Develop guidelines of teaching students to handle complex cultural issues for culturesensitive service-learning projects
- Share teaching ideas and insights on designing for ethnic and cultural communities Below is a list of discussion questions:

- What could we do to help students to navigate multiple cultural contexts in a servicelearning design project for culturally diverse users and to develop a sophisticated understanding of culture and a critical view of technology? What assignments could be developed to help students acquire skills of designing for culturally diverse audiences?
- What could we do to design a more balanced schedule that incorporates technology know-how, critical reflection, and a forward design-thinking?
- What could we do to teach students to both respect the feedback of community partners and encourage design intervention? When should students draw a line between pleasing community partners and advocating ethical design ideas aiming for intervention? What assignments and activities could be used to help students distinguish "community partners" and "clients"?
- How should we prioritize the topics of technology, culture, and community in a tenweek undergraduate class?

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Swarming the Client: Applying the Agency Model to Service Learning in the Professional Communication Capstone

Matthew Livesey, University of Wisconsin-Stout

The professional communication capstone course is a required part of the BS in Professional Communication and Emerging Media curriculum, and is taken by all students in the major at or near the end of their degree. In it we cover preparation for the job market, career planning, and final portfolio preparation. The course also includes a semester-long service learning project. Service learning in technical communication programs ranges from individual internships to collaborations between classes in two different disciplines (Brown & Chao, 2010). In the literature of service learning, however, very little is described with regard to whole-class service learning projects.

We use what I refer to as the "agency model" for these projects—the entire class works together to "swarm" the project. This kind of service learning is perfect for community organizations that serve diverse populations; such organizations typically have a broad spectrum of communication needs, but are not likely to have the staff resources to provide the kind of mentoring that an individual internship placement would require (McEachern, 2001). It is also distinct from an approach that dedicates individual students or small groups of students to individual client-facing tasks (Sapp & Crabtree, 2002); the client only has contact with the liaison, just as would be the case in an agency. A significant benefit for the students is that they get experience working for the betterment of their own community and often gain a new perspective on the experiences of diverse groups within that community (Bowdon & Scott, 2003; Scott, 2004).

This spring the capstone class implemented a new website for a local Latino community organization. Students had experience working with the backend administration

of content management systems undertook to set up a Drupal installation for the new site. One student with extensive non-profit administration experience took the position of client liaison; another with an interest in project management stepped into that role. A student with a minor in photography began attending events put on by the community group to take professional-quality original photos for the website. Other students contributed their specialties as well, with the result being that the community group got the benefit of the entire team.

For discussion

- How can a program director or instructor identify community organizations that could benefit from the agency model?
- What best practices have emerged for managing whole-class service learning?
- How should students be organized to enable them to do their best work while serving the needs of the client, and what assessment model is most appropriate for evaluating their learning?

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Selling a \$600 Piece of Paper: The Automotive Technician and Teaching Technical Communication

Jeremy Cushman, Purdue University

In this presentation, I will outline my preliminary finding from a study concerning the communication practices of automotive repair technicians. My goal is to use the findings to offer two challenges to what normally counts as technical communication inside much of our field's curriculum.

Automotive repair technicians are certainly professionals that, in general, do not consider communication a central part of their work. Yet auto repair shop owners and their service-writers will point to the written documentation produced by technicians as a primary source of communication breakdown. This communication breakdown obstructs the service-writers' ability to 'add-value' to the final repair bill. The breakdown can also perpetuate an underlying conflict between the technician and service-writer, which negatively impacts the shop's workflows. Accordingly, 'labor blocks,' or computer-generated text detailing technical procedures, are regularly employed by small shop owners to alleviate this all-too-common conflict. The 'labor blocks' are designed to capture the creative diagnostic work of the technician and add discernable value to the customer's repair bill. But the breakdown persists.

The communication breakdown between service-writer and technician along with the use of the computer generated 'labor block,' I'll argue, can benefit technical communication curriculum design in two ways: 1.) It introduces the notion that technical communication is as much about recognizing embodied practice as it is about learning concise writing skills, information technology, and system analysis. The repair shop traditionally employs technicians that learn a trade, in a sense, by feel. That is, they stereotypically know what's wrong with an engine because of experience and know-how, rather than reading and interpreting tests (know-that). Arguably, such know-how is either ignored or at least subsumed by a curricular focus on the know-what. 2.) It challenges teachers and administrators to foreground repertoire and experience rather than reductive procedures or a common body of knowledge. Such an emphasis allows students to see this unique problem as that one without reducing it to a familiar category or rule.

Most research privileges technical professions supported within traditional universities and, consequently, that research impacts the curriculum we deign. By taking "non-professional" writers as my subject, this small study can begin to highlight diverse pedagogical opportunities for innovative author roles and channels of communication that extend students' imagination.

Session 4, Panel C: Technical Communication Programs as Communities of Practice

Moderator: Joanna Schreiber, Michigan Technological University

A New Technical Communication Program in Culturally Diverse Arkansas

Kyle Mattson, University of Central Arkansas

Joanna Castner, University of Central Arkansas

We offer an overview of a new undergraduate technical communication program at the University of Central Arkansas (located in Conway, profiled by a 2009 Chronicle of Higher Education article as a growing hub for the arts). Now in its final stages of university approval, the program will be housed in a stand-alone writing department within the College of Fine Arts and Communication rather than in a College of Liberal Arts. Indeed, though English and writing are not housed in the same college, the interdisciplinary dynamic of this soon-to-be-approved program will give students the kinds of opportunities perhaps unobtainable in writing departments in other university contexts (Porter & Sullivan, 2007, p. 18). Significantly, a similar location was not mentioned in the 2010 TCQ special issue on the positioning of programs in professional and technical communication, contributing to our suspicion that this new program might be the first of its kind. We will offer attendees an explanation of how this alternate college community impacted the program proposal and vision as well as the challenges and affordances such a placement may provide a technical communication program.

For example, our university's proximity to student populations across urban and rural Arkansas is a relevant area for future research, making our program a likely contributor to diversity studies and outcomes regarding undergraduate technical communication programs in Arkansas and the nation. Notably, this program will potentially draw students from the Arkansas Delta, the Ozark Plateau, the Ouachita Mountains, the Ark-La-Tex re-

gion, the Arkansas River Valley, and greater Little Rock. Perhaps helping to correct deficits in student cultural diversity among undergraduate technical communication programs (Savage & Matveeva, 2011), we are situated to contribute to the well being of socioeconomically disadvantaged students across the state.

Thus, we foresee a path for all students in this program to develop relevant knowledge of theories and technologies that would lead them to contribute effectively and ethically in varied workplaces while also preparing some students for eventual graduate-level study elsewhere. Encouraging underrepresented communities to participate in this program early on is a major concern as we proceed. Certainly, we want our students to benefit from learning in an environment that values curricular and demographic aspects of cultural diversity. Thus, learning about and following up with students from underrepresented communities is a recursive process we will describe for attendees.

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Teaching Technical Communication to Diverse Audiences

Thomas Barker, University of Alberta

Natalia Matveeva, University of Houston-Downtown

In our presentation, we will suggest some methods and practices of teaching international and diverse students in technical communication programs. Working with diverse populations of students in undergraduate and graduate programs can be a challenge. Cultural difference and similarities can inform our teaching and, at the same time, require certain adaptations. Students may come from different ethnic groups and generations, speak English as a second language, or be technologically savvy or not. How can we better accommodate our diverse students' needs?

Based on our personal teaching experience and findings from recent research studies, we would like to recommend certain strategies that have worked well for us. Some of them will include more emphasis on experiential methods and tutorials, opportunities for service learning and community projects, certain ways to address ESL issues, the inclusion of discussion topics and assignments on diversity and intercultural communication in any given course, close ties to local communities, and the emphasis on critical skills for employability.

The topic of our presentation responds directly to the conference theme, specifically, to the following subcategory: "teaching technical and scientific communication in diverse colleges and universities." The attendees of our presentation can gain new insights into challenges of teaching in programs with a diverse student body and the ways to augment their teaching methods to respond to the needs of the students.

The "Economy of Emotions" in Technical Communication

Alex Ilyasova, University of Colorado, Colorado Springs

As the conference theme for this year explains, technical communication is "defined by people, communities, contexts, practices, and technologies that affect written, oral and visual communication." The target of the theme is the impact of these communities and their practices on technologies and workplace communication. Within this targeted theme, the topic of this presentation focuses on the impact of the "emotional investments" we make within technical communication. More specifically, the goal is to explore some of the ways emotional investments shape our practices, communities, and contexts, and how they help to define this field. As Micciche explains in A Way to Move, "emotions yield insights about us and the world [...]" and "reflect the knowledge of the values of a community embedded in the social framework" (Jacobs, 2003). They are an affective response to a situation, enabling or disabling change, and they are individually and socially experienced and constructed.

With this in mind, the presentation explores the "emotional investments" of program administrators and faculty in technical communication through what Daniel Gross calls "the economy of emotions"—the distribution of emotions among people, contexts, and within communities. As Gross (2006) explains, emotions are often unevenly distributed (e.g., tenured vs. untenured), enabling certain conditions and asymmetrical power structures (e.g., access to resources in engineering vs. the humanities), where some people have significantly more liabilities than others in the ways they experience, construct, and invest emotions. What insights can we gain as a field when we look at how and where we as administrators and teachers emotionally investment? What emotional investments are rewarded? How do these investments change depending on the community? How do such investments create social relations and which kinds? And what are the liabilities for us as administrators, teachers, and as a field to invest emotionally in specific practices, technologies, and communities that shape and impact us? As Koziak states in A Way to Move, "The very existence and experience of emotions depends upon social conditionsties to the capacity to be moved (emotion or motere means "to move"), how people are disposed to being moved, their habits of emotion and action" (Jacobs, 2003). The aim in this presentation is to discuss what the emotional side of technical communication can tell us about what we value and where we are going, and hopefully, what it can offer us in terms of understanding the ways we move this field, our programs, and our own individual work.

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Understanding Our Metaphors, Understanding Communities

Stephen Markve, Michigan Technological University

This individual presentation brings to light new work on the old trope of metaphor and asks how insights originating in Lakoff and Johnson's 1980 work on conceptual meta-

phor could find a home in professional communication classes. Throughout the 80s and 90s, "metaphors we live by" became a familiar mantra in the halls of the humanities, providing a readily accessible social constructivist framework in the form of the humble yet ubiquitous metaphor. Recent work by Giles (2008) on metaphor in technical communication highlights its importance; he promotes its pedagogical potential in all technical fields, including technical communication classes, and suggests its value in international venues. Lakoff and Johnson's Conceptual Metaphor Theory (CMT) can play a role in helping students acquire a solid understanding of the workings of what Aristotle called "the greatest thing to have command of" and witness how it pervades a culture's thinking (and thereby reconsider how its ramifications go far beyond the mere ornamental value sometimes attributed to it). Though powerful on its own, later work in linguistics (e.g., Fauconnier and Turner, 2002) has continued to examine the workings of metaphorical thinking and has developed an equally accessible theory (Blending Theory) which attempts to account for inventional aspects that come about when two unlike concepts are joined and a new one emerges. I have recently brought this and CMT into my composition classes to empower my logos-laden students with an analysis of such figurative ways of thinking, and have met with success. By deepening our understanding of the "metaphors our cultures live by" and the processes by which we and our audiences blend our metaphors, we can enrich our students' appreciation of how they can more effectively engage their domestic and overseas audiences.

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Session 4, Panel D: Poster Presentation Session

Moderator: Lee-Ann Kastman Breuch, University of Minnesota

Theory vs. Applied Technical Writing Education

Anita Ford, Missouri Western State University, St. Joseph

Two distinct tracks are emerging within the field of technical communication education. While both schools of thought do teach theory, the first emphasizes theory over application within its core curriculum classes, while the second focuses more on practical application. For my thesis, I am studying two Missouri universities that offer Bachelors of Science in technical writing programs, each taking one of the tracks. Missouri University of Science and Technology in Rolla emphasizes theory, while Missouri State University in Springfield emphasizes application. The purpose of my study is to discover if one of these programs better prepares its graduates for their first foray into their technical-writing careers.

I am specifically studying recent graduates of each program to see how effectively their training prepared them for their first jobs within the technical writing field. I am asking about ease of transitioning to their first jobs, as well as what specifically about their programs was most beneficial in preparing them for their new careers.

This proposal fits into the theme of the conference because it directly targets the curriculum used in teaching technical and scientific communication in colleges and universities. It also speaks to the diversity found in programmatic objectives in technical scientific communication. Why has this split occurred? How do we adequately prepare our graduates for work in such a diverse field? Does one of these educational tracks produce better prepared graduates than the other? What are the implications for college and university curriculum if one track does produce better-prepared technical communicators?

WebCT and Moodle: How to Fix a Broken System

Kristopher Miller, Missouri Western State University

WebCT and Moodle are both online course management programs that allow instructors to teach students from a distance and for students to complete classes from a distance. While both programs share certain features, their features also differ. How usable are both WebCT and Moodle as individual programs? Several experts in the field will be referenced for their information and experience regarding to both programs and the field of online course management systems. I will also cite various scholars who have worked in online education and technical communication and link to how these two fields deal with program usability for both instructors and students. Ann Heirdsfield's, Susan Walker's, Mallihai Tambyah's, and Denise Beutel's article on Blackboard will be cited for how instructors and students view online classes, for students appear to have an easier time than instructors operating online classes. For Moodle, Anastasis Petrou's article will be cited to give insight on how Moodle works. Melissa L. Burgess' article will also be cited regarding how WebCT is used as a supplemental learning tool for reading development students. Susan Feinberg's, Margaret Murphy's, and John Duda's will be cited in how learning theory should be applied to online learning systems, which goes with analyzing Moodle's and WebCT's usability. Qun Jin's article will be used to propose a conceptual framework in how to design an online class. Geraldine Clarebout's article regarding to tool use will be used to explain what tools students are most likely to use. And Alicia David's and Peyton Glore's study on aesthetics and cognition will explain that a well designed site will be easier on the students' and instructors' minds as well as their perception.

This poster will present information about what has been going on in the field and what can be done to look at future online courses by using these scholars' studies as well as the research conducted so far in the thesis. I will also be presenting information from instructors of Missouri Western State University who will give their insight on WebCT and Moodle and their perspectives of online education. Their insight will provide new information about WebCT. Also, their insight information will provide new information for Moodle, which being a new program, has research that is undetermined and most importantly, underdeveloped.

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Teaching the Ethics of Intercultural Technical Communication

Dan Voss, Lockheed Martin Missiles and Fire Control

Bethany Bowles, University of Central Florida

NOTE: This poster presentation is based on a chapter researched and written for an anthology of articles on teaching intercultural communication to engineering and science students and to professional engineers and scientists, edited by Madelyn Flammia and Kirk St. Amant and under contract with John Wiley/IEEE Press. The abstract and introduction of the chapter follow.

Communicating across cultures is challenging. Resolving ethical issues across cultures is at least as challenging. It therefore follows that the ethics of intercultural communication would be more challenging still. The issues are complex. Effective communication is rooted in the fundamentals of rhetoric; resolving ethical issues boils down to understanding values and doing what is right—in cases of ethical conflicts, defining "right" as that which serves the highest, or most core, value. But what if the fundamentals of tried-andproven communication theory that dates to Aristotle clash with ethical principles that also date to Aristotle, or even earlier? And what if different cultures define ethical values differently? Can what is considered "wrong" in one culture be "right" in another? That ensnares us in the bramble patch of cultural/moral relativism versus cultural/moral universalism. This presentation attempts to blaze a safe trail through that thorny thicket—one that helps teachers and trainers of engineering and science students and professional engineers to and scientists present the ethics of intercultural communication in a manner that is sufficiently structured to provide useful instruction yet which retains the flexibility so as not to become a formulaic process, prey to the dangers of stereotyping and ethnocentrism.

Introduction

The topic of this presentation is teaching the ethics of intercultural communication to a technical audience such as engineering or science students or practicing engineers or scientists within industry. What makes this topic especially challenging is that it represents the intersection of two other topics: teaching ethics and teaching intercultural communication. Both of these broad topics need to be addressed to do justice to the much narrower overall topic. Fortunately, we may safely assume the latter topic is receiving ample treatment. But the former, teaching ethics in general, demands some form of treatment to establish a framework for teaching the ethics of intercultural communication in particular.

The increasing importance of international commerce to U.S. corporations with a technical focus—whether they are in aerospace, information technology, or other areas where engineers comprise a major part of the workforce—demands the technical community understand the principles of intercultural communication. The phenomenon of globalization, in turn, has led to increasing emphasis on teaching intercultural communication, both within the curriculum of engineering degree programs and also via in-service training of practicing engineers. Teaching the ethics of intercultural communication is an area that has not heretofore received much attention, either in academe or in industry, yet the ethical conflicts likely to arise while doing business across international and cultural boundaries are quite significant and therefore warrant a closer look in the teaching/training of the technical community.

The objective of this presentation is to start taking that closer look. The presentation begins with a review of the literature, which shows that while much has been done on teaching ethics in a technical context and on teaching intercultural communication in a technical context, the body of work grows much sparser when you "zero in" on the intersection of the two. Accordingly, following the review of literature, we provide a brief overview on ethics, beginning with classical ethical models, proceeding to describe two value models typical of U.S./western European culture, and then presenting the ethical codes and quidelines of two technical companies and two professional organizations of engineers and technical communicators. We explain the use of value analysis as a "scientific" approach to identifying and resolving ethical conflicts using different value models. Next, we introduce the intercultural "filter," which complicates the equation by bringing into play value systems that, in some cases, are quite different from those of western culture. We then explore the critical concept of cultural/moral relativism versus cultural/moral universalism. Finally, we "roll up" the package into a matrix that illustrates how to apply value analysis to approach ethical conflicts in the context of intercultural communication. The matrix is tied to twelve scenarios on technical subjects that involve ethical conflicts caused by or exacerbated by intercultural issues.

Means of Presentation

The means of presentation will be to make two large posters:

- 1. One showing the Venn diagrams to illustrate the specialized "niche" into which this research falls, and how it relates to a number of subjects likely to be explored under the conference theme.
- 2. One showing the a large poster of the matrix, with which we will use one of the scenarios to "walk" attendees through the process of value analysis to show how multiple factors come to bear upon ethical issues in technical communication across cultural lines.

Connection to Conference Theme

Based on the paucity of data we unearthed in the review of literature for this presentation, this rather specialized yet important topic has not received much attention. Representing the intersection of pedagogy, ethics, and intercultural communication in a technical context, this presentation dovetails nicely with several topics pertaining to the conference theme.

Learning Objectives

- 1. Participants will gain an understanding of the complexity of ethics and intercultural communication within the technical community, both in industry and academe.
- 2. Participants will learn the six-step process of value analysis in identifying and resolving ethical conflicts—in this case, conflicts specific to the ethics of intercultural communication, an area just now being explored.
- 3. Via a "guided tour" through the matrix with a realistic scenario, participants will learn how multiple value models and intercultural "filters" impinge upon the value analysis process.

Session 5, Panel A

Bringing Technical Communication and International Students Together: A Mutual Learning Experience

Moderator: Karl Stolley, Illinois Institute of Technology

Bringing International Usability Testing into the Technical Communication Classroom

Felicia Chong, Michigan Technological University

Changing the Campus Climate

Sylvia Matthews, Michigan Technological University

Learning from Each Other: the Students' Perspective

Jessica Kennedy, Michigan Technological University

Laura Harris, Michigan Technological University

Technical communication and usability studies have intertwined with and influenced each other greatly in the last thirty years (Redish, 2010). The need for usability in technical communication programs has developed in parallel with, but not always connected to, the need for international communication. As our workplaces become more globalized, it is imperative for technical communication programs to be infused with opportunities to understand, practice and implement international communication. However, a recent study indicates that only 1% of undergraduate technical communication programs require a course in global or international communication and only 5% of programs offer the course as an elective (Harner & Rich, 2005). Though many technical communication textbooks offer "tips and tricks" on communicating with an international audience and conducting usability tests, our students' exposure to and experience with usability studies and international technical communication is clearly limited. As an attempt to provide an opportunity for technical communication students to practice international usability testing, an undergraduate technical communication course partnered with an on-campus international graduate teaching assistant assistance program called IGTAAP, whose goals are to prepare new international graduate students to become teaching assistants and to enhance their communication and cultural understanding skills. These two groups of students (domestic undergraduate and international graduate) collaborated on a usability assignment in which the technical communication students developed strategies and methods for testing the usability and usefulness of brochures intended for those international students,

conducted the testing with the users, documented the process in a report and presented their findings and recommendations in a memorandum. In addition to enjoying involved and engaged conversations with domestic students, the international students gained ideas from creative collaborations that provided opportunities for global awareness.

In this panel presentation, the technical communication instructor will begin by providing an overview of the course, the usability assignment and the collaboration process. Then, the IGTAAP director will explain the program and discuss her impetus for partnering with this technical communication course. Next, an IGTAAP student, an IGTAAP student-coach and a technical communication student will describe each of their experiences participating in this assignment, in particular how they learned to negotiate the language and cultural barriers and what communication lessons and skills they gained. Finally, the instructor will report on results from the post-assignment survey where technical communication students described the most challenging and rewarding parts of this assignment, followed by the instructor's and director's suggestions and strategies for optimizing this partnership.

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Examining the Diversity of Culture and Communication across the East-West Divide: A Comparison of Technical Communication Practices and Pedagogies in the former USSR to the U.S.

Pavel Zemliansky, University of Central Florida

Kirk St. Amant, East Carolina University

Over the last decade, Russia, Ukraine, and other former members of the Soviet Union have emerged to play key roles in the global economy. As a result, the nations of the former USSR have become growing and dynamic markets for a range of goods. They have also become important providers for a range of technical products and services. For example, companies from Apple to IKEA have, in turn, opened offices, stores, and distribution centers in a number of these nations in order to tap these trends. Moreover, international business practices indicate these nations will continue to play an important role in the growing global economy.

These developments bring a new cultural and linguistic diversity to the global context in which technical communicators must increasingly participate. In sum, these developments mean today's technical and professional communicators will increasingly need to recognize and address such cultural and linguistic diversity in order to:

- Develop instructional and informational materials for these markets
- Collaborate with engineers, technicians, and other subject matter experts (SMEs) in these cultures

The successes of such undertakings—as with any international collaboration—hinges on effective communication across cultures, very diverse cultures, socio-political systems, and languages. Thus, the more Western technical communicators know about professional communication practices in the former USSR, the more successfully they can understand and appreciate such differences in order to interact effectively in these contexts.

This proposed presentation would provide a review of the research on technical and professional communication practices in the countries of the former Soviet Union. In so doing, the presenters would also discuss the role that the various educational systems in these nations have played on the development of and current practices in technical communication in the former USSR. In examining these topics, the presenters would provide attendees with both a foundational understanding of these differences (and the miscommunications or misperceptions they might cause) as well as present strategies for interacting more effectively with technicians, engineers, scientists, and other subject matter experts living and working in the former USSR. The presenters will also address ideas for collaborating with technical communication educators in these nations.

Session 5, Panel B: Usability as Service Learning

Moderator: Bruce Maylath, North Dakota State University

Partnership between the Usability Lab and Academic Departments

David Rosen, University of Minnesota

Insights on the Usability Course as a Partnership Effort

Nick Rosencrans, University of Minnesota

Experiential Learning in a Usability Course

Lee-Ann Kastman Breuch, University of Minnesota

This presentation discusses a service learning model for teaching usability research and theory. We will discuss the challenges and opportunities in developing a course model that contains both rigor and professional development opportunities for students, while also including real-world organizations, communities, and their projects. First we describe a key partner in this model, Usability Services at our institution; and second, we describe a specific usability service-learning model in our technical communication program.

The Usability Services team within our Office of Information Technology is a key resource for usability research and teaching on our campus. The Usability Services team purpose is to incorporate a variety of methods to help inform design, training, and support through the end-user testing of web sites, applications, and software. The team's work is almost entirely focused internally at the University of Minnesota, with only sporadic external client projects. The team manages a Usability Lab on campus, which is a centrally funded resource in the Office of Information Technology (OIT). Its existence is due to collaboration between OIT, the Digital Technology Center (part of the College of Science and Engineering), and five stakeholder departments (Writing Studies; Design, Housing, and Apparel; Computer Science and Engineering; Kinesiology; Journalism and Mass Communication). The stakeholder departments use the lab space in a variety of ways including: class visits, graduate student and faculty research, and course projects. There are two courses in particular that use the lab in their coursework, WRIT4501 and GDes2385. Each course structures its use of the lab differently, with one course focusing on a single large-scale project and the other working on several smaller projects.

WRIT 4501: Usability and Human Factors in Technical Communication is a required course in the Scientific and Technical Communication program at University of Minnesota, and for the last decade the course has involved a team-based, hands-on web usability test in the Usability Lab on campus. Recently, the instructor formally partnered with our institution's Community Service-Learning Center to open web usability tests to interested community organizations. Consequently, students have had the opportunity to work with several non-profit organizations such as the YMCA, Council for Asian Pacific Minnesotans, Friends of Island Lake, and Hennepin County Library. Students work with community/organization representatives to learn more about user populations, concerns about their organization's web site, and feedback about the test plans and reports.

This presentation topic relates to the conference theme in terms of understanding the impact of technologies on cultural communities and pedagogies. Specifically, the service-learning model for usability involves rich interactions with community members about the ways they are representing their organizations through web technology. Attendees can expect to hear about a centralized usability lab model as well as how usability pedagogy is uniquely positioned for service learning opportunities.

Session 5, Panel C: Implementing Lean Management at Michigan Tech: Implications of Technical Communication through Theory and Practice

Moderator: Sally Henschel, Midwestern State University

In talking about how technical communication addresses diverse communities, we should also be looking at management practices and principles that shape and/or standardize the workplace. As part of an organization using lean management principles to restructure work, the panelists would like to explore how lean management implementation affects technical communication practices and informs our field's ongoing concern with professionalization (See special issues of Technical Communication published November, 2011 (58.4) and February 2012 (59.1)). We will use lean training seminars as the focal point for our discussion, offering three unique perspectives on the training and lean management's relationship to technical communication.

Applying Lean Business Practices in the Technical Communication Workplace

Ann Kitalong-Will, Michigan Technological University

Ann Kitalong-Will is a co-investigator on a grant-funded project to develop a Lean training program at her organization. She will discuss how technical communicators are uniquely positioned to participate in and impact current business practices, and why this is important if technical communicators are to address issues surrounding the professionalization of the field. Specifically, she will talk about her role in the project, using Lean Management Practices as a starting point to identify ways technical communicators can and should engage with business practices that drive the industries where we work.

Researching Lean Management Practices

Joanna Schreiber, Michigan Technological University

Joanna Schreiber is a technical communication researcher observing the training sessions for the purpose of understanding the relationship of lean management with technical

communication. She will talk about how technical communication practices and technical communication as a field are affected and can affect lean management. More specifically, she will critically engage with core lean values like local knowledge and customer-driven processes in order illustrate both places for technical communication to intervene and potential issues if technical communication does not.

Session 5, Panel D: Technology, Culture, and Pedagogy

Moderator: Lisa Meloncon, University of Cincinnati

Using Print and Video Instructions to Teach Usability

Kara Poe Alexander, Baylor University

One primary goal of technical and scientific communication courses is to teach students the concept of usability. We want students to design and create documents that allow users to quickly and easily accomplish tasks with effectiveness, efficiency, and satisfaction. One genre of technical communication where usability is of special concern is technical instructions. In the past, we mostly asked our students to compose written instructions in the form of print manuals. This medium has a long history of usability testing (we now know, for instance, to integrate text and visuals; to write instructions as procedures rather than descriptions; to keep sections short; and to have end goals. The digital age, however, has brought about new mediums of instructions, including online videos, but they have a shorter history of usability testing than their print counterparts, and many of our classes are still asking students to create print instructions.

This presentation, therefore, reports on an empirical study investigating the usability of print and online video instructions. Usability tests were conducted on college users and four areas of usability were measured: effectiveness, short-term retention, satisfaction, and preference. Findings show marginal differences between the two mediums, except in terms of user satisfaction and instruction length. Thus, neither print nor video instructions are necessarily better than the other for computer tasks but rather that each medium has its own strengths and weaknesses. These results are important for technical communication scholars and teachers to better understand the affordances of particular mediums and also reconsider the kinds of projects they assign.

This presentation responds to the theme of the conference by helping technical communicators consider how best to teach technical and scientific communication in a wide range of settings. It also addresses the issue of diversity—at least in terms of encouraging teachers to introduce a wider range of texts and assignments, such as video instructions, into the classroom.

Attendees of this presentation can gain a better understanding of the usability of print and video instructions. They can also consider the following questions:

- What medium is more usable in terms of procedural instructions?
- Do technical communication programs need to adapt to changes in the way users learn how to do something?
- How might these findings impact the way we teach usability?

Free Play: Video Game Culture and Teaching Technical Writing

Michael Carlton, Missouri Western State University

This individual presentation seeks to explore the conference theme through focusing on a subculture that cuts across lines of ethnicity, gender, sexual orientation, age, and even geographical backgrounds. In terms of economic and social impact, video games are the largest entertainment medium of the twenty-first century. From educational games to games based on social networking sites to the latest blockbuster first-person shooter, video games have a broad and diverse audience. Not incidentally, the video gaming industry is also an increasingly important employer of technical communicators, who work in the field on subjects ranging from usability and accessibility testing of the software to the creation of documentation in the form of user licenses and manuals. Yet, while many text-books and handbooks have raced to discuss the impact of communication technologies like social networking or micro-blogging, there has been comparatively little interrogation of video games or discussion of their place in the technical communication curriculum.

The Open-Source CMS as a Tool for Program-Specific Teaching Environments

Adam R. Pope, Purdue University

This presentation seeks to ask questions about how video games and the issues raised in gamer culture can be integrated into the training of technical communicators. Video games raise multiple issues of community, from the exclusion of gamers with certain visual or other physical disabilities to harassment based on gender, race, or sexual orientation to the types of cross-cultural and global communication taking place during online gaming sessions. As we currently train students to be aware of how issues such as these play out in written documents and on the Internet, so we should train students to consider how gaming connects with communication across cultures. Attendees will come away with an awareness of how these issues could be introduced into classes on issues as diverse as the global workplace, professionalization, and editing.

This presentation will give an overview of the benefits of committing to using an open-source CMS for departmental teaching, focusing specifically on the capabilities of such technologies to create a context and program specific tool that allows for a closer connection of pedagogical and departmental goals with the technologies used. The presenter will base this talk on two years of experience developing, customizing, and administrating an open-source CMS for his Professional and Technical Writing program.

The program in question has over the past two years made a dedicated effort to embrace the Drupal open-source CMS, and has steadily customized and optimized the CMS for the specific writing environments present in our courses. As this process has gone on, pedagogy has changed due to how the CMS operates, and at the same time pedagogical goals have shaped the way the CMS has developed.

Benefits that will be discussed include the power that open-source CMS software gives to program directors in shaping pedagogy, the assurance of project sustainability and the avoidance of orphaned code, and the ability to keep abreast of newer web standards such as responsive design.

This topic aligns with the overall theme of the conference by looking at the ways that custom CMS software can impact and shape the pedagogy and community of a depart-

ment. Specifically, the speaker will look at ways that pedagogy has shaped the technology as well as how that the technology has shaped pedagogy.

Attendees can hope to learn about options in open-source CMS implementation, benefits of these implementations, and about the impact these implementations have on programs and their pedagogy.