

TECHNIQUES

TOPICS IN TECHNICAL COMMUNICATION



FALL • 2013

WHO WE ARE



TECHNIQUES is a collaboration between the Minnesota State University, Mankato Chapter for the Society for Technical Communication and ENG 577.

A Note from Your STC President.....1

Useresting.com: An Affordable and Effective Tool for Improving Usability1

In the Beginning, There Were Technical Communicators and They Collaborated and It Was Good.....4

The Decline of Community in Social Media.....5

A Fad Called Google@.....5

Filling a Communication Void: A Technical Communicator among Engineering Students..... 9

INSIDE THIS ISSUE

A Note from MNSU STC Student Chapter President

By John Maxwell

Hello. I hope this issue of Techniques finds everyone well. Our student chapter of Society for Technical Communication (STC) has had a great term. We've hosted several great speakers online this fall and had fairly good turn out. We even tried a "lunch" meeting. While we didn't actually serve lunch, because we meet online, we still learned some interesting things. We look forward to an interesting line up of speakers this winter and spring.

Communications/Secretary position and a Speakers Coordinator position. If you are interested please contact me via email at johnmaxwell@ymail.com. These positions don't require a large amount of time and will provide a great way to network with current students and other professionals. Please consider becoming involved in our student chapter of STC. I look forward to hearing from you soon.

...

We've had a successful run of speakers and a core group of officers for our chapter for the last year or so. Several of our officers are moving on and we need some people to step up and fill the void. We are looking to fill a

Useresting.com: An Affordable and Effective Tool for Improving Usability

By Ashley N. Flitter

Years ago, I joined an e-commerce company as the director of Web Development. I was thrilled to be in a position where I could use my education in usability testing and user experience to make an immediate impact on the success of the company.

Due to constraints with budget and time, I wasn't able to perform full-scale usability tests before site launches. At first, I was reluctant to try

Useresting.com, which seemed like a shortcut that would result in unreliable data, creating a flawed action plan for site updates. However, after using it for several years now, I've found that it's a truly useful tool for improving site usability, especially when working with tight timelines and limited resources.

The basic process of starting a usability test with Useresting.com is straightforward and user-friendly. As

you can see in Figures 1-3, the tools are clear and easy to use, even for those who have no experience with usability tests.

continued on page 2

TECHNIQUES
Fall 2013

Editorial Staff

Kristin Tatro
Katrina Reed
Gere Hirsch
Titus Anderson
John Maxwell

Design Staff

Titus Anderson

STC Officers

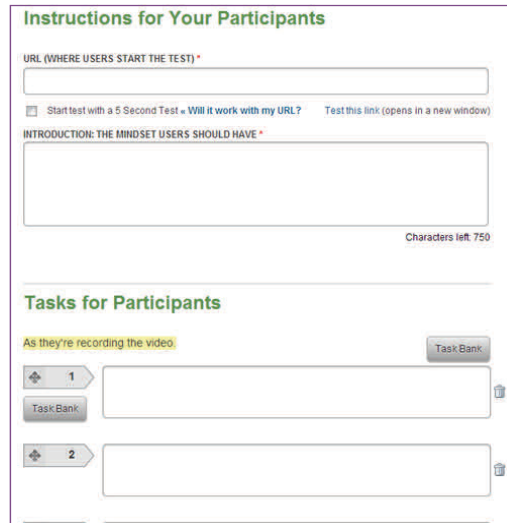
John Maxwell
Katrina Reed
Gere Hirsch

Faculty Advisor

Dr. Lee Tesdell

Useresting.com

continued from page 1



The screenshot shows the 'Instructions for Your Participants' section. It includes a text area for the URL where users start the test, a checkbox for 'Start test with a 5 Second Test - Will it work with my URL?' with a 'Test this link (opens in a new window)' button, and an 'INTRODUCTION: THE MINDSET USERS SHOULD HAVE' text area. Below this is the 'Tasks for Participants' section, which has a 'Task Bank' button and two task slots. Each slot has a 'Task Bank' button and a trash icon. The first slot is numbered '1' and the second is numbered '2'.

Figure 1. Writing Instructions and Tasks for Participants

As an added bonus, they also provide free templates to work from that are more than sufficient for most users. Depending upon your business's needs, you can pay as you go or you can buy credits up front to use for future tests. You can choose from 1-100 participants, at a cost of \$49 each. Since

studies by Jakob Nielsen found that 85% of a site's problems can be detected by 5 people, the tests can be done effectively for a relatively low cost (Neal, 2005). The cost is more than reasonable when you consider the cost-per-participant of a full-scale test can be more than \$100, and that's before the cost of the equipment you'll need for the test (Neal, 2005).

The tasks are the actions that the users perform while recording each movement and click via video. You can set up as many tasks as you'd like, but one thing to be aware of is that their participants may not opt to do a test that takes longer than 15-20 minutes, so keeping the number of tasks to 4-5 is optimal. If you have more tasks than that, it may be best to set up several tests to ensure that you receive the most useful feedback possible.

continued on page 3

Figure 2. Writing Questions for Participants



The screenshot shows the 'Questions for Participants' section. It includes a text area for questions to be asked after the video recording is finished. The questions listed are: 'What frustrated you most about this site?', 'If you had a magic wand, how would you improve this site?', 'What did you like about the site?', and 'How likely are you to recommend this site to a friend or colleague (0=Not at all likely, and 10=Very Likely)?'. At the bottom, there is a 'Choose Participants »' button and a 'Secure Server' icon.



Ustesting.com

continued from page 3

NUMBER OF USERS: 3 Users

You get two things from each user:

1. A video of the user speaking their thoughts as they browse your site
2. The user's written responses to your questions.

Source of Participants: Use our panel of participants

Who is your Target Audience?

AGE: 18 to 65+

INCOME: \$0 to \$150k+

GENDER: Any (use highest rated testers)

WEB EXPERTISE: Any (use highest rated testers)

COUNTRY: Any (use highest rated testers)

Choosing Your Target Audience

Only users that match the demographics you specify will be notified.

If you're not sure whether to specify a demographic, we recommend the default selection for two reasons:

1. You'll get your results faster.
2. The feedback is often more helpful, since these users have received the highest ratings from customers.

Target Audience FAQ »

Figure 3. Choosing Participant Demographics

In addition to the tasks, you can also ask participants up to four follow-up questions that they will write their responses to. This is where you can get helpful information about overall experience and direct recommendations for improvement. You are also able to select basic demographic information for your participants, thus allowing you to easily get the sample of users that most fits your intended audience. A nice feature that they recently added is the ability to do mobile tests. Considering over 17% of Internet traffic is from mobile phone and tablet users, this is an incredibly useful tool (Fox, 2013).

Once you submit the test, it is made available to their bank of thousands of testers who fit your specifications. Generally, you will receive full feedback within an hour from all participants. I've only had one test that took

several hours to get responses, and that was due to very particular demographic settings. The feedback that you get is incredibly comprehensive and it includes the written responses to your follow-up questions, as well as a fully narrated video of their test.

Since you can't control the majority of the actual testing process, there will inherently be holes in the test and the feedback that you receive compared to an in-house test. However, they are very selective with their participants, so you know you're getting someone who has a proven track record of providing useful data. If you like a participant and would like to use them for future testing, you can specify that on any further tests you perform.

Though Ustesting.com is not comparable to a full in-house usability test, it does allow for individuals or compa-

nies with limited resources to improve site usability with a limited budget. Testing is an essential part of building and operating a user-focused site, and Ustesting.com allows site owners to do it in a cost-effective and action-based way.

Sources

- [1] Fox, Z. (2013). 17.4% of Global Web Traffic Comes Through Mobile. Mashable. Retrieved from <http://mashable.com/2013/08/20/mobile-web-traffic/>
- [2] Neal, E. (2005). Not the Usual Suspects: How to Recruit Usability Test Participants. Sitepoint. Retrieved from <http://www.sitepoint.com/usability-test-participants/>

• • •

In the Beginning, There Were Technical Communicators and They Collaborated and It Was Good.

By Amy Tidwell

It might be an exaggeration to say that technical communicators have always existed, but it would *not* be an exaggeration to say that technical communicators have always worked in teams. The simple fact is they communicate about products and services they do not create, which means they have to work with those who do the creating. Technical communicators have to communicate with subject matter experts (SMEs), other writers, and anyone else involved in the development of the end product. However, despite the use of the word "collaboration" in research studies, often the term is not clearly defined, and that raises the question: Do technical communicators collaborate in the workplace, or would their teamwork be better be defined as something else?

This question of whether technical communicators truly collaborate is even more problematic when discussing technical writers who work remotely because most definitions of collaboration include some reference to social relationships as part of the collaborative process. It is easy to see how technical writers working remotely might have difficulty forming and maintaining social connections with other members of the project team, but we do not really know whether this prevents them from collaborating.

Defining Collaboration

In 2004, Lowry, Curtis, and Lowry addressed this issue in order to develop some consistent terms and definitions, as well as to identify collaborative writing activities.

They start with a definition of single author writing proposed by Flower and Hayes in 1981 and build on it to define collaborative writing. Flower and Hayes define three cognitive processes in single author writing: planning, translation, and reviewing. Planning includes organizing the information, setting goals, and generating information needed for the writing task (Flower and Hayes [1981] as cited in Lowry, Curtis, and Lowry 2004, 70). They point out that even though collaborative writing is a group effort, much of the work is done on an individual basis. Lowry, Curtis, and Low-

ry, propose a definition of collaborative writing: "[Collaborative writing] is an iterative and social process that involves a team focused on a common objective that negotiates, coordinates, and communicates during the creation of a common document" (72).

Building on the work of Lowry, Curtis, and Lowry (2004), Scott Jones in 2005 looked at how changes in technology altered the collaborative practices at one insurance company. He defined collaboration as "interaction by an author or authors with people, documents, and organizational rules in the process of creating documents" (450), and he analyzed the activities using a continuum of collaborative activities that he developed. On the continuum, shown in Figure 1, Jones positioned collaborative activities according to their degree of overt collaborative interaction.

In contextual collaboration, the individual's writing is shaped by the needs and aims of the organization and draws on the vocabulary, knowledge and beliefs organization members share (Winsor [1989, 271], as cited in Jones, 2005, 452). Hierarchical collaboration is more rigid and structured, "driven by highly specific goals, and carried out by people playing clearly defined and delimited roles" (Ede and Lunsford, [1990, 133], as cited in Jones 2005, 452).

Group collaboration is team-oriented collaboration and involves a group of people who plan, draft, and revise together (Jones 2005, 454).

Each type of collaboration is made up of several activities. Contextual collaboration includes genres used as models and document borrowing to re-use various amounts of text (Jones 2005, 452). Hierarchical collaboration includes sequential collaboration, where a document is passed from writer to writer and writers are not really part of a group (452), and author-centered collaboration, where a single author does most of the work and is responsible for the project, working with others mainly to get advice or review the content (453).

"Do technical communicators collaborate in the workplace, or would their teamwork be better be defined as something else?"



The Decline of Community in Social Media

By Ryan Berndt

In the mid 1990's, GeoCities emerged as a new and upcoming social media site that allowed users to form communities and exchange ideas in more ways than previously thought possible. Paving a new path for online interactions between users, the work of GeoCities influenced social media tools such as Myspace and Facebook, the latter being one of the most visited websites in the world. But as Anil Dash writes in his article "The Web We Lost", the state of the web in terms of community and privacy is quite different now.

My first experience with online networking happened in the summer of 2004, when I made an account on Myspace, the newest and largest social media site of its kind. Established in 2003, Myspace grew to fame with its easy-to-use sign up process and the amount of customizability users could have over their profile. Through the use of HTML, users could create their own profile designs or borrow code

from members of the community for free. But, as time passed and membership grew, Myspace also cultivated a reputation that it never could get rid of: a horribly immature user base. Despite strides to make the site more mature to attract older users, many found the site unfamiliar and clunky. By February 2011, Myspace had seen their traffic decline by 44% in comparison to the previous year, with millions in planned revenue lost.

When Facebook became open to the general public in 2006 (it was previously for university and high school students only), it followed the same model as Myspace, which only required the user to be above 13 years of age and have a valid e-mail address. Facebook, however, didn't include the option for users to customize their profiles, and instead opted to have a unified layout for each and every person. This lack of individuality didn't appeal to the younger generation of web users, but attracted older users who

might not otherwise use a social networking site.

Anil Dash, entrepreneur and CEO of ThinkUp, has been around the web since the very beginning and noticed a disturbing trend in the realm of social networking: companies such as Google are requiring users to use their legal names while taking away user control over content. Not only that, but social tools such as Instagram are forcing users to allow advertisers to use the content for their own financial gain. Dash noticed that many users don't know they're "selling their soul" for corporate gain.

Dash also mentions the new "walled-garden" culture growing around social media sites. In 2012, when Instagram was bought by Facebook, Twitter disabled the function of allowing users to post their Instagram

continued on page 8

A Fad Called Google©

By Louisa Caran

Some fads come and go, but virtual writing tools like Google Docs™ are here to stay. The ability to share documents helps save time by reducing the number of emails sent back and forth between writers. Yet, ways writers organize and use collaborative tools when constructing a co-authored document are diverse and complex. Google© provides the medium, yet there are many ways to manage this collaborative writing tool called Google Docs™. My claim is that members of virtual writing teams, through their collaboration, can create new ways for sharing, archiving, and storing documents. In my discussion I refer to the work of Bruffee,

Burke, Miller and Norman who support the importance of community in collaborative writing projects.

Collaboration

Bruffee (1984) argues that writing teachers must develop awareness and skills foreign to the English profession (p. 652). He promotes the idea that teaching collaborative learning means a great deal more than throwing students together with their peers with little preparation. His findings are interesting since I have personally noticed that team members may

continued on page 6



A Fad Called Google[®]

continued from page 5

excel in technical writing or editing, web design, or instructional design, yet lack other skills, which negatively affect ability to work in virtual teams. Perhaps Bruffee would agree that technical writers must also apply communication skills of listening and supportive responses to elicit shared knowledge, the knowledge that is “foreign and irrelevant to our profession” (1984). This collective approach suggests understanding sharing documents and barriers of that exchange when writing in work groups. Bruffee advocates for the importance of social engagement with others in teams. The social exchange of working collaboratively, he believes, allows understanding of other perspectives. Bruffee promotes understanding of and adapting to other perspectives by labeling this learning the act of reacculturation (652).

Miller (1984) claims communities shape genre and I would suggest that Google Docs[™] is a medium that is highly accessible, and does facilitate virtual writing communities. According to Norman (1999), ideas expand the mind, but ideas are developed and improved through teamwork. When developing how to work through a group writing process the team designs a structure and patterns of organization that allows collaborators to deliver, share, and organize in a tool like Google Docs[™]. We have this tool, yet there can be a lack of understanding on the part of team members to provide a framework for the intricate ways writers work with sharing documents.

Google Docs[™] Practice

If ideas develop from teamwork then we need to observe writers working in tools like Google Docs[™]. In addition we need to gather narratives from users of these tools. For example, after asking a friend who is skilled and has expert knowledge using Google Docs[™], the following suggestions

emerged from our casual conversation (we often have work related discussions). His suggestions show his ability to engage in and create reacculturation in virtual teams. He gladly learns from listening to and adapting to alternative structures, and co-writers may benefit from his suggestions or past experience for best practice. (Jorge Evans, personal communication, 2013).

Sharing documents in Google Docs[™] requires a Gmail[™] webmail account but is accessed through different email providers. However, can only be created and maintained through this domain. A number of features in Microsoft Word exist, such as the use of color to identify and track changes. Other structures are also present in Google Docs[™] such as placing the content in reverse chronological order on running documents, which allows the team to view the most current draft at the top.

continued on page 7

	Google Docs [™] Collaboration Tips	
Use what works	Use alternative methods. Don't insist using your strategies if something works better.	
Keep a running document in reverse chronological order	All changes are tracked. When the final content is approved, save as archive document for storage.	
Use color for edits	Individual colors show changes.	

The Decline of Community in Social Media

continued from page 5

pictures to their Twitter feed. In retaliation, Facebook blocked a feature that allowed users of the app Vine (which is owned by Twitter) to find their friends using Facebook Connect. Such action kills any sort of cooperation between the users of two social media conglomerates and divides the community.

On the other side of the spectrum, a recent decision made by Google shows that forcing users to join a service results in more backlash. YouTube users were recently forced to utilize Google+ in their comments section, which has resulted in the YouTube community fighting back. With YouTube's recent misstep, competitors such as Vimeo continue to gain users and allow them to publish their videos on a wide variety of plat-

forms. This problem continues, with popular personalities on YouTube threatening to move their features over to other video streaming sites.

Even for users who want to escape the clutches of such sites aren't able to. I asked 20 Minnesota State Mankato students if they feel they are part of a community on Facebook, or if they see themselves as just another statistic. All twenty of those I asked believed they were not part of a community, with one interviewee saying, "I wish I could delete my Facebook account completely, but it's impossible. I need to have a Facebook to know what my friends and family are doing, no one texts or calls each other anymore, it's all through Facebook."

Users are finding themselves so deep-

ly entrenched in social media, that now they can't leave. With sites implementing features that allow users to port information from one social networking site to the next, the problem will only grow. So while there is less privacy and less community in social media today, as Anil Dash writes, some users still find that such tools as Facebook serve an important function.

...

In the Beginning

continued from page 5

Group collaboration includes joint writing, where two or more people work together throughout the writing process; reactive writing, where writers react to and adjust to each other's changes as the document is written; group single-author writing, where one writer writes for the entire group; and horizontal-division writing, where writers work independently on separate units of the document (454-55).

In horizontal collaboration, Jones includes the types of social interaction that might occur. Content interaction is collaboration to procure content; mentoring interaction is active collaboration with an immediate supervisor or other advisor; stakeholder interaction with key people likely to be affected by the project; and strategic interaction involves

Table 1. Comprehensive Collaborative Continuum: Source

	Less Overt Collaborative Interaction	More Overt Collaborative Interaction
	Contextual Hierarchical Group	Hierarchical Group
Genre use		Form
Document borrowing		Sequential
		Author-centered
		Type of interaction
		Content
		Mentoring
		Stakeholder
		Strategic
		Group single-authored writing
		Reactive writing
		Joint writing

Source: Jones 2005, 451.

continued on page 9



In the Beginning

continued from page 8

collaboration on issues beyond the immediate text, e.g. coordinating document release or ensuring consistency among various documents (Jones, 453-54).

Research and evidence support the assertion that the ability to collaborate is essential in technical communication. In addition, in recent years, researchers have identified key collaborative strategies and activities and attempted to generate a comprehensive definition of collaborative writing that can help unify research on collaboration across disciplines. In addition, Scott Jones has created a collaborative continuum that further clarifies the subject and reduces some of the confusion surrounding questions about what is and is not collaboration. Using this information, we can examine the dynamics surrounding technical writers who work remotely and affirm that they, in fact, can, engage in successful collaboration, although perhaps in ways less overtly interactive than they might if working onsite. Using Jones' continuum, we can see that technical communicators might collaborate in different ways (not all collaboration is created equal), but each way includes a degree of shared ownership of a project, which seems to be the ingredient that distinguishes collaboration from other forms of contribution. We can conclude that those who work remotely may be able to collaborate even if they find themselves on the Less Overt Collaborative end of the continuum.

Sources

- [1] Ede, Lisa., and Andrea Lunsford. 1990. Singular texts/plural authors. Carbondale: Southern Illinois University Press.
- [2] Jones, S. L. 2005. "From writers to information coordinators: Technology and the changing face of collaboration." *Journal of Business and Technical Communication*. 19, 449-467. DOI: 10.1177/1050651905278318.
- [3] Lowry, Paul Benjamin, Aaron Curtis, and Michelle Rene Lowry. 2004. "Building a Taxonomy of Collaborative Writing to Improve Interdisciplinary Research and Practice." *Journal of Business Communication*. 41, (1): 66-99.
- [4] Tidwell, Ramon, Skype message to author, October 16, 2013.
- [5] Winsor, Dorothy A. 1989. An engineer's writing and the corporate construction of knowledge. *Written Communication*, 6, 270-285.

• • •

Filling a Communication Void: A Technical Communicator among Engineering Students

By Ann Staton

While the criteria by which engineering programs are accredited are rigorous, historically they have not included teaching communication skills. ABET, the Accreditation Board for Engineering and Technology, investigated the need for engineering students to communicate effectively and now include criteria addressing this void. Traditionally, an engineering student would gather communication skills from courses outside the engineering department. In response to ABET's new

standards, English and engineering departments are creating partnerships to offer engineering students the proper tools to become capable communicators. Here at MSU the Integrated Engineering department pioneers two programs—Iron Range Engineering (IRE) and Twin Cities Engineering (TCE)—partnering with professional technical communicators and English department graduate students, to teach effective communication within a problem-based learning environment.

From its start in 1932 ABET evaluated engineering programs "on the basis of resources, curricular requirements, faculty credentials, and seat time (Volkwein et al, 2004). Then in the early 1990s, ABET set up a commission to investigate "complaints from the industries that hire engineering program graduates" (Williams, 2001) and to recommend changes to the accreditation criteria.

continued on page 10

Filling a Communication Void

continued from page 9

Through years of investigation, research, and collaboration, ABET developed Engineering Criteria 2000 (EC2000) with which to evaluate engineering programs on the basis of outcome-based criteria, championing communication as an important element of the student outcomes. EC2000 represents a fundamental paradigm shift in accreditation which has propelled engineering departments to change their relationships with English departments nationwide.

As the EC2000 assessment process matures, charting its progress becomes important. In 2003, Wayne Whiteman published an article (Whiteman, 2003) in the *International Journal of Mechanical Engineering Education* describing mechanical engineering curricula from 18 schools in the United States as a baseline for a follow-up study to identify any significant changes in curricula. Whiteman grouped engineering courses into 10 separate categories and all humanities and social sciences (HSS) into one category. In doing so the message is clear: all non-engineering courses are equally relevant, or irrelevant, to engineering education. A course in technical writing is no more or less relevant to an engineering degree than a course in death and dying. According to Whiteman, HSS courses comprise 23% of an engineering degree program while mathematics courses comprised 14%. Whiteman (2011) reported that after 13 years of ABET EC2000 influence and comparing data from 1987, "mechanical engineering curricula have changed only slightly over the

last 20 years...[and] the overall breakdown of subject matter percentages remains remarkably similar."

Despite Whiteman's studies, changing the ABET accreditation criteria "stimulated significant restructuring of curriculum requirements, instructional practices, and assessment activities" [1]. Many articles (Artemeva et al. 1999, Craig et al 2008, Wojahn et al. 2001, Riddell et al 2010, Hanson & Williams 2008) document changes in pedagogy at several ABET-accredited institutions. Curricular changes include communication courses designed specifically for engineering students, communication-intensive engineering courses, and writing-to-learn (WTL) pedagogical approaches in engineering courses. Some curricula include client-based capstone design courses where technical communication students team with engineering students. At Minnesota State Mankato, Integrated Engineering offers two upper division engineering programs: IRE and TCE. Both are relatively new; IRE started in January of 2010 while TCE started in January of 2013. The two-year programs graduate Bachelors of Science in Engineering with concentrations on a continuum from Electrical to Mechanical Engineering. Both programs are 100% project-based learning (PBL). Within an academic setting the programs imitate an engineering workplace in the "real world." Students complete four projects that drive the student's learning. There are no lecture classes and no set class periods. The relationship between IRE and TCE is tight with both programs using the

same curricula, syllabi, and grading rubrics. The programs differ in that IRE formed a relationship with professional technical communicators to teach the communications elements in the program while TCE requested a graduate assistant from the English department. TCE tasked its graduate assistant to advance the communication elements of the program through daily office hours as a writing resource for the students, weekly 15-minute topic presentations, bi-monthly communication seminars, and evaluation of writing assignments and presentations.

Stemming from ABET's realization that engineers need better communication skills and changes in its accreditation criteria, various engineering programs nationwide have changed their curricula and partnered with English departments to provide engineering students the communication skill-set they need to be successful.

Sources

- [1] J. F. Volkwein, L. R. Lattuca, P. T. Terenzini, L. C. Strauss and J. Sukhbaatar, "Engineering Change: A Study of the Impact of EC2000," *International Journal of Engineering Education*, vol. 20, no. 3, pp. 318-328, 2004.
- [2] J.M. Williams, "Transformations in Technical Communication Pedagogy: Engineering, Writing, and the ABET Engineering Criteria 2000," *Technical Communication Quarterly*, vol. 10, no. 2, pp. 149-167, 2001.
- [3] W. Whiteman, "Mechanical Engineering Curricula: a Baseline



Filling a Communication Void

continued from page 10

- Study for the Future Effects of ABET 2000," *International Journal of Mechanical Engineering Education*, vol. 31, no. 4, pp. 327-338, 2003.
- [4] W. Whiteman, "The Impact of EC2000 on Mechanical Engineering Curricula: A Follow-up Study," *International Journal of Mechanical Engineering Education*, vol. 39, no. 3, pp. 185-194, 2011.
- [5] N. Artemeva, S. Logie and J. St.Martin, "From Page to Stage: How Theories of Genre and Situated Learning Help Introduce Engineering Students to Discipline-Specific Communication," *Technical Communication Quarterly*, vol. 8, no. 3, pp. 301-316, 1999.
- [6] J. L. Craig, N. Lerner and M. Poe, "Innovation Across the Curriculum: Three Case Studies in Teaching Science and Engineering Communication," *IEEE Transactions on Professional Communication*, vol. 51, no. 3, pp. 280-301, 2008.
- [7] P. Wojahn, J. Dyke, L. A. Riley, E. Hensel and S. C. Brown, "Blurring Boundaries between Technical Communication and Engineering: Challenges of a Multidisciplinary, Client-Based Pedagogy," *Technical Communication Quarterly*, vol. 10, no. 2, pp. 129-148, 2001.
- [8] W. T. Riddell, J. Courtney, E. Constans, K. Dahm, R. Harvey and P. Von Lockette, "Making Communication Matter: Integrating Instruction, Projects and Assignments to Teach Writing and Design," *Advances in Engineering Education*, pp. 1-31, 2010.
- [9] J. Hanson and J. Williams, "Using Writing Assignments to Improve Self-Assessment and Communication Skills in an Engineering Statics Course," *Journal of Engineering Education*, vol. October, pp. 515-529, 2008.
- • •
-

THANK YOU FOR READING!

For more information about the **Technical Communication program** at Minnesota State Mankato, please visit our website at <http://www.english.mnsu.edu/techcomm>.

You can also contact our **Program Director**:

Dr. Gretchen Perbix
507-389-5506
gretchen.perbix@mnsu.edu

For more information about our STC chapter, please contact **Dr. Lee Tesdell** at lee.tesdell@mnsu.edu

