



IPCC 2014 October 13-15, 2014 Carnegie Mellon University, Pittsburgh IEEE 2014 International Professional Communication Conference

Meeting Grounds—Lifelong Learning, from Classroom to Workplace

The design and printing of this program was made possible by the support of Carnegie Mellon's Department of English.

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Monday, Octob	er 13
8:00 am - 4:30 p	m Registration
9:00 am – 9:15 a	
9:15 am – 10:15	am Opening Plenary
10:30 am - 11:45	am Breakout Session 🔩
12:00 pm - 1:15 p	m Lunch + Plenary
1:30 pm – 2:45 p	
3:00 pm – 4:15 p	m Breakout Session
4:30 pm – 5:45 p	m Breakout Session

Tuesday, Octobe	er 14
8:00 am - 4:30 pr	5
8:00 am – 9:00 ar	n Plenary
9:15 am – 10:30 a	am Breakout Session
10:45 am - 12:00 a	am Breakout Session
12:15 pm – 1:15 pr	m Lunch
1:30 pm – 2:45 pr	m Breakout Session
3:00 pm – 4:15 pr	m Breakout Session
4:30 pm – 5:30 pr	m Keynote
6:30 pm – 8:30 pr	m Awards Reception

Wednesday, October	15	
8:00 am – 10:30 am	Registration	
8:00 am – 9:00 am	Plenary	
9:15 am – 10:30 am	Breakout Session	
10:45 am – 11:45 am	Plenary	••••
11:45 am – 12:00 pm	Closing	

Marsha Lovett—Director of the Eberly Center for Teaching Excellence and Teaching Professor of Psychology, Carnegie Mellon University, and a co-author of How Learning Works, will talk about recent developments in Learning Sciences relevant to our community.

 Michael Alley—Ronald S. Blicq Award for Distinction in Technical Communication.

... Richard House, Jessica Livingston, Richard Layton and Sean Moseley— James M. Lufkin Award for Best Paper in IPCC 2014.

#### Doug Reeve

Professor of Chemical Engineering and Applied Chemistry at University of Toronto and a leader in both industry and education, will discuss communication and leadership strategies in the fields of science and engineering.

 Julia Williams, Rich House, Sandy Bartell Join us to honor those individuals who have made significant contributions to our field and to PCS. Exciting plans for the future of PCS will also be discussed.

 Karin Siebenhandl, Günther Schreder, Michael Smuc, Eva Mayr, & Manuel Nagl The Rudolph J. Joenk, Jr. Award for Best Paper in the IEEE Transactions on Professional Communication.

#### ····· Bernadette Longo

Emily K. Schlesinger Award for Outstanding Service to the Professional Communication Society.

#### Accessing the CMU Wireless Network

The University Center at Carnegie Mellon provides free Wi-Fi connectivity.

- 1. Open any web page. Then, you will be redirected to the guest wireless service page.
- 2. Enter a valid (non-CMU) email address and the following event access code:

#### DDB5NR4D

 Accept the terms of use and click Log In. You will be directed to the web page you originally opened.

#### Internet Access at the Hotels

The conference hotels offer complimentary highspeed Internet and Wi-Fi access.

#### Transportation

Carnegie Mellon University is within walking distance of both conference hotels. Conference hotels provide complimentary shuttle service to locations within a 3 mile radius of the hotel.

#### Parking

The East Campus Garage is the most convenient parking location on campus. The garage is open 24 hours a day, and charges \$10.00 for 7+ hours per day.

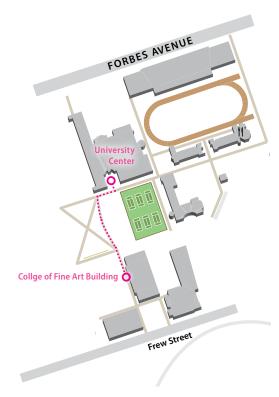
#### Dining

Lunches on Monday and Tuesday are included in the registration fee.

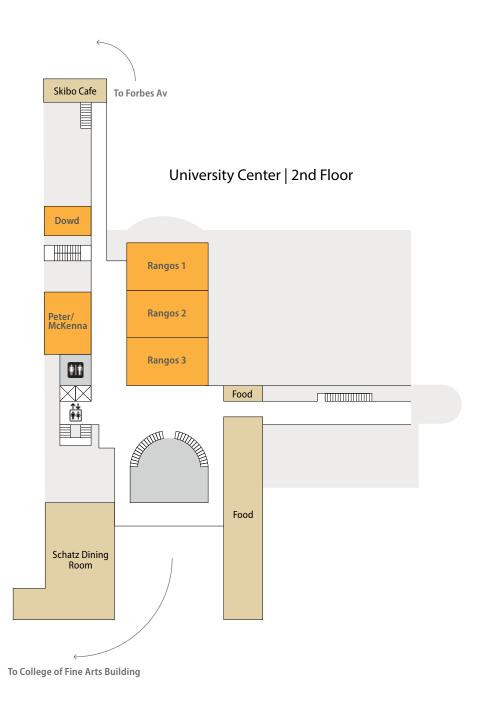
For breakfast and dinner options, please consult the restaurant guide included in the conference folder.

#### Awards Reception

The Awards Reception will take place in the Great Hall of the **College of Fine Arts Building** on the Carnegie Mellon campus on Tuesday at 6:30 p.m. You can walk to the College of Fine Arts Building from the University Center.



ROOMS



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#### **CONFERENCE SPONSORS**

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- XML Press

BA in Professional Writing BS in Technical Writing & Communication MA in Professional Writing MA in Rhetoric PhD in Rhetoric

#### **Contact Information**

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# Specialize in Engineering Communication with

# a Ph.D. in Rhetoric at Carnegie Mellon

# DEPARTMENT OF ENGLISH

english.cmu.edu/ipcc2014 Carnegie Mellon University



## **Doug Reeve**

B. Sc. (UBC), M. A. Sc., Ph. D. (Toronto), D. Tech., P. Eng., FCAE, FTAPPI, FCIC, FIAWS

Director, Institute for Leadership Education in Engineering (ILead) Professor, Department of Chemical Engineering and Applied Chemistry, University of Toronto

Professor Reeve is the founding Director of the Institute for Leadership Education in Engineering (ILead) at the University of Toronto. Providing opportunities for leadership learning has been central to his work with engineering students for over twenty-five years. In 2002 he established Leaders of Tomorrow, a student leadership development program that led to the establishment of ILead.

Dr. Reeve is a professor in the Department of Chemical Engineering and Applied Chemistry and served as Chair from 2001-2011. He has worked with industry for many years as a consultant and president of a small consulting firm, frequently in international assignments. He has created and led professional development short courses for industry on over 50 occasions reaching over 5000 attendees. His contributions to the profession and to research have been recognized by numerous awards.

#### **KEYNOTE**

Tuesday 4:30 – 5:30 pm

#### TITLE

Dream, Learn, Do and be Daring

#### ABSTRACT

Why bother to communicate? Why seek to influence others? The archetypal engineer, from student to senior professional, concentrates their efforts on the technical truth and leaves communicating and influencing to others. This is a tragic waste of talent, brainpower, drive, education and power to make the world a better place. All engineers can be clear and effective communicators and powerful influencers. It begins with self: "Dream, learn, do and be daring; bring your best self to all that you do." In the classroom or in the workplace, "Grand challenges demand leadership from great engineers." Are we up to the task? Can we communicate the urgency? Can we drive positive change?



## Marsha Lovett

Director of the Eberly Center for Teaching Excellence Teaching Professor, Department of Psychology, Carnegie Mellon University

Dr. Marsha Lovett is Director of the Eberly Center for Teaching Excellence and a Teaching Professor in the Department of Psychology, both at Carnegie Mellon. At the Eberly Center, she applies theoretical and empirical principles from cognitive psychology to help instructors improve their teaching. In her research, Dr. Lovett studies learning, memory, and problem solving. She has developed computational models of strategy selection, skill acquisition, and working memory, and she has published more than fifty research articles on learning and instruction. Throughout her career, Dr. Lovett has been deeply involved in both local and national efforts to understand and improve student learning. For example, in 2004, she brought together experts from diverse disciplines to discuss the latest research on how people work with complex data and how to best teach 21st century "data literacies," resulting in the book Thinking with Data. Her book How Learning Works: 7 Research-Based Principles for Smart Teaching distills and translates the research on how students learn into a set of fundamental principles that instructors can use to guide their teaching. Dr. Lovett has also developed several innovative, educational technologies to promote student learning and metacognition, including StatTutor and the Learning Dashboard.

#### OPENING PLENARY

Monday 9:15 – 10:15 am

#### TITLE

Hometown Research: Leveraging Technology in Learning Science

#### ABSTRACT

Learning science research has been thriving for several decades, especially in Pittsburgh where many researchers are active in the area. The methods used in this work have evolved, with today's studies leveraging technology in new ways to collect and analyze data and then apply the results to practice. This session will introduce a few such learning science studies. The goal is that, among these examples, participants will find a method, idea, or perspective to bring home and explore.

#### GOLDSMITH AWARD

The Alfred N. Goldsmith Award for Outstanding Achievement in Engineering Communication has been given by IEEE PCS since 1975. Dr. Goldsmith was the editor of the predecessor of PCS, the Institute of Radio Engineers (IRE), from 1912 to 1954, and was a founding member of the IRE Professional Group on Engineering Writing and Speech, the forerunner of the IEEE Professional Communication Society (PCS).



**Dorothy A. Winsor** is originally from Detroit but moved to lowa in 1995. She still blinks when she sees a cornfield outside her living room window. For about a dozen years, she taught technical writing at lowa State University and served as the editor of the Journal of Business and Technical Communication. Before that, she taught for ten years at GMI Engineering & Management Institute (now Kettering). She's won six national awards for outstanding research on the communication practices of engineers. She lives with her husband, who engineers tractors, and has one son, the person who first introduced her to the pleasure of reading fantasy. *Finders Keepers*, her first novel, is due out in February 2015.

SCHLESINGER AWARD Wednesday, 10:45 am The Emily K. Schlesinger Award for Outstanding Service to the Professional Communication Society has been given since 1995. A member of PCS since 1964 and Senior Member of IEEE, Dr. Schlesinger was president of the Society in 1976 and 1977. During that time, she regularized publication of the PCS Transactions and, when she could find no one to edit the Newsletter, took on the job herself, producing some 80 pages annually. She widened the sphere of the Society to include those who communicate in English as a second language and helped the PCS education committee to launch home study, conference, and workshop writing courses.



Bernadette Longo is an Associate Professor and Director of the MS in Professional and Technical Communication at New Jersey Institute of Technology. Her research explores intersections of technology, communication, and culture. At NJIT, Dr. Longo participates in a project, including faculty from physics, chemistry, biology, mathematics, and architecture, to develop a graduate training program for design and applications of distributed and remote sensors. She is also on a team developing an interdisciplinary, online MS program in Digital Media, Communication, and Marketing, comprised of courses from three existing programs in three different colleges. An article on her work in the DR Congo, "R U There? Cell Phones, Participatory Design, and Intercultural Dialogue," is forthcoming in the IEEE Transactions on Professional Communication.

JOENK AWARD

Wednesday, 8:00 am

The Rudolph J. Joenk, Jr. Award for Best Paper in the IEEE Transactions on Professional Communication recognizes an outstanding article published in the preceding year's IEEE Transactions on Professional Communication. Named after Dr. Rudolph J. Joenk, Jr., the award acknowledges and honors his extraordinary contributions to the Transactions. Dr. Joenk served as editor of the IEEE Transactions on Professional Communication for eight years, beginning in 1977.

Karin Siebenhandl, Günther Schreder, Michael Smuc, Eva Mayr, Manuel Nagl—The Center for Cognition, Information and Management at Danube University Krems (Austria) is an interdisciplinary team that addresses the challenges of modern information society. Our professional backgrounds are in cognitive science, psychology, landscape engineering, and neuroscience. In our research we aim to develop tools and methods that support cognition and communication. To reach this aim we apply and combine methods from user-centered design, information design, information visualization, and storytelling. The presented case study builds on the results of two applied research projects INNOMAT 1 and 2.

The Ronald S. Blicq Award for Distinction in Technical Communication

Education was first awarded in 2001. The Blicq Award recognizes innovative educators who have influenced the ways that technical communication is taught—in pre-college settings, in undergraduate and graduate university degree programs, and in professional life through workshops and seminars. In naming the new award for Ron Blicq, PCS acknowledged his extraordinary impact on technical communication education at all levels through his textbooks, workshops, and videos. Ron has been a member of IEEE and PCS (and its predecessor organization) since 1958 and has been developing and teaching courses for the IEEE and PCS since 1974.



**BLICO AWARD** 

Monday, 12:15 pm

Holding a Master of Science in electrical engineering and a Master of Fine arts in fiction writing, **Michael Alley** is an associate professor of engineering communication at Penn State. He is the author of *The Craft of Scientific Writing* and *The Craft of Scientific Presentations*, both of which Springer-Verlag has translated to Japanese. In addition to his university teaching, Alley has taught writing and speaking to professional scientists and engineers around the world. Sites include the European Space Organization (Chile), Google, Harvard Medical School, Institute for Energy Technology (Norway), MIT, Qatar Gas, Sandia National Laboratories, Seoul National University, Shanghai Jiao Tong University, Texas Instruments, and United Technologies. Each year, visitors view more than 1,000,000 pages from Alley's website on communicating engineering and science (http://writing.engr.psu.edu).

## **2014 AWARDS**

#### LUFKIN AWARD

Tuesday, 8:00 am

The James M. Lufkin Award recognizes the best conference paper submitted to IPCC Proceedings. The award was given irregularly for many years but in 2008 was reinstated and re-named for James M. Lufkin. Lufkin served multiple terms on the PCS AdCom and multiple terms as Society President. In 1975, he received PCS's first Alfred N. Goldsmith Award for outstanding achievement in technical communication, and he was awarded an IEEE Millennium Medal in 2000. The achievement we particularly honor in naming the best conference award for him is his core role in chairing a series of conferences (1973, 1975, 1977) on the future of scientific journals.



Richard House (Professor of English), Richard Layton (Associate Professor of Mechanical Engineering), Jessica Livingston (Associate Professor of English), and Sean Moseley (Assistant Professor of Mechanical Engineering) all teach together at Rose-Hulman Institute of Technology. They are also the co-authors of The Engineering Communication Manual (ECM), a guide to communication as an intrinsic part of authentic engineering practice. Students using the ECM learn by engaging with annotated sample documents—from reports and proposals to project documentation and correspondence—presented in a professional context that reflects best practices not only in writing, but in listening, design thinking, ethics, and the management of team projects. These themes also inform their work as teachers and scholars in engineering education, which often focuses on interpersonal professional skills and on training engineers to practice humanitarian and sustainable design. The Engineering Communication Manual will be published by Oxford University Press in January 2016.

#### HAYHOE FELLOW

Monday, 10:30 am

The Hayhoe Fellow is given to a graduate student who has submitted a conference paper that will be presented at the annual International Professional Communication Conference. The award, named for longtime PCS member George Hayhoe, provides support to the student to defray conference attendance costs. Consideration is given to all graduate-level students who submit a paper, and the selection is based on input from the paper reviewers, the conference program committee, and the conference chair. The Hayhoe Fellow Award was established in 2012 to acknowledge the activities of Dr. George Hayhoe, a long-time PCS member, member of the PCS Advisory Committee, and former president of PCS. Dr. Hayhoe's contributions to the society are numerous, but his legacy is best represented in supporting the next generation of technical communicators who can benefit from the experience of the IPCC.



**Melissa Clarkson** is an information designer and PhD candidate in the Division of Biomedical and Health Informatics at the University of Washington. She works at the intersection of design, informatics, and life sciences to make scientific information meaningful, engaging, and accessible. She also has a strong interest in teaching visual communication design skills to scientists and engineers. In addition to her training in informatics, she has a Masters in Communication Planning and Information Design from Carnegie Mellon University and a Masters in Molecular, Cellular, and Developmental Biology from the University of Kansas.

#### POSTER COMPETITION

Tuesday, 12:00 pm

This year's Student Poster Competition was sponsored by Adobe Systems, Inc. The Student Poster Competition awards three students from both the undergraduate and graduate levels for effective technical communication in a poster. Over the last two years, the competition has shifted to an exclusively electronic format so that posters are submitted and exhibited at the conference in digital form. Entrants in the poster competition may be enrolled in a program in technical communication or an engineering program for which they produce research posters. This diversity of disciplinary backgrounds enriches the competition with posters representative of a range of communication genres.

Congratulations to the winners of this poster competition!

 First Place
 Trevor Burton, Andrew Jerabek, Felix Pang and Theo Theodossion,

 Mechanical and Industrial Engineering, University of Toronto

Second Place Ram Sharma, Richard Lesco and Chris Vandevelde, 4B Systems Design Engineering, University of Waterloo

Third Place Miranda Byrd, Graphic Design, Avila University



WELCOME	Welcome	Rangos 1
9:00 – 9:15 am		
PLENARY	Opening Plenary	Rangos 1
9:15 – 10:15 am	Hometown Research: Leveraging Technology in Learning Science — Marsha Lovett (Carnegie Mellon University) Note: Dr. Lovett's profile and the abstract of her presentation are available on p.9.	
BREAKOUT SESSION	Workshop	Rangos 1
10:30 – 11:45 am	How Do We Adapt the Traditional Research Article So It's Relevant to the Practicing Professional? — Saul Carliner (Concordia University), Erin Friess, Ryan Boettger (University of North Texas)	
	Abstract	

On the one hand, professional and technical communicators translate scientific and technical content "from those who know to those who need to know" (Barnum & Carliner, 1993). On the other hand, the research and theory presented in peer-reviewed journals—including the ones in our field—are written by researchers for other researchers. As a result, this material is intellectually and emotionally inaccessible to practicing professionals. Through this workshop, we'd like to explore ways to adapt these formats so that they research and theory becomes more accessible to practicing professionals, without sacrificing the rigor required for reporting in peer-reviewed publications.

#### Lessons Learned in Visual Design

#### Moderator

George Hayhoe (Mercer University)

#### Presentations

Visual Design Principles and Effective Sentence Diagrams for the 21st Century—Alan Manning (Brigham Young University), Nicole Amare (University of South Alabama)

Learning How to Teach Visual Communication Design Skills to Scientists and Engineers — Melissa D. Clarkson (Division of Biomedical and Health Informatics, University of Washington,). The recipient of the 2014 Hayhoe Fellow Award

Cross-Cultural Emotion Responses to Japanese Typefaces—Joshua Caldwell (Brigham Young University)

#### WELCOM

Peter/McKenna

#### Innovative Teaching and Assessment Tools

#### Moderator

Julia Williams (Rose-Hulman Institute of Technology)

#### Presentations

Texts as Tools to Support Innovation: Using the Business Model Canvas to Teach Engineering Entrepreneurs About Audiences — Cory Hixson, Marie Paretti (Virginia Tech, Department of Engineering Education)

**The Value of Multimodal Assessments in 21st Century Learning** — *Tim Oldakowski (Slippery Rock University)* 

Minecraft-Based Pre-Education Process Related to Teamwork in Software Development Project — Daisuke Saito (Tokai University), Akira Takebayshi (ICT/ Programming School TENTO), Tsuneo Yamaura (Tokai University)

#### PLENARY LUNCH Blicq Award

12:00 - 1:20 pm

The Source of a Speaker's Words in a Scientific Presentation: What Schools Teach Versus What Professionals Expect— Michael Alley (Penn State)

#### Abstract

In a scientific presentation, the expectation from scientists and engineers in the room is that the speaker will not read. Rather, a scientific audience expects the speaker to show ownership of the information. This talk analyzes the history of this expectation and how scientific presenters try to meet it. In addition, the talk points out a discontinuity between what science and engineering students learn in school versus what is expected in their professions.

BREAKOUT SESSION	MOOCs and Online Learning Rangos	1
1:30 – 2:45 pm	Moderator Alan Chong (University of Toronto)	
	Presentations	
	<b>Teaching Writing Online: Two Case Studies</b> — Deborah Dysart-Gale, Saul Carliner (Concordia University)	
	Video and Course Content Discussion on Massive Open Online Courses: An Exploratory Research—Magali Dubosson (HEG Fribourg), Sabine Emad (HEG Genève), Alexandra Broillet (University of Geneva and Webster University Geneva), Constance Kampf (Aarhus University, Denmark)	

18 Years of Teaching TC Online: Tricks and Traps, Dos and Don'ts, Strengths and Weaknesses — David Hailey, Keith Grant-Davie (Utah State University)

Rangos 2/3

#### Software Engineering: Lessons from Industry

Peter/McKenna

#### Moderator

Erin Friess (University of North Texas)

#### Presentations

Modern DevOps: Optimizing Software Development Through Effective System Interactions — Constantine Cois, Joseph Yankel, Anne Connell (Carnegie Mellon University, Software Engineering Institute)

**Continuous System and User Documentation Integration** — Todd Waits, Joseph Yankel (Carnegie Mellon University, Software Engineering Institute CERT Division)

Extended Abstract: Application and Evaluation of a Process-oriented Wiki System — Jiajie Pan (Shanghai Nuclear Engineering Research & Design Institute)

#### Harnessing the Power of Rhetorical Tools

Dowd

Rangos 1

#### Moderator

Constance Kampf (Aarhus University)

#### Presentations

Opening the Window to Lifelong Communication Learning: Applying the Johari Window Framework in Engineering Communication Curriculum — Theresa Merrick (Kansas State University)

Introducing Polynesian Stick Charts as Models of Visual Technical Communication — Tom Moran (Rochester Institute of Technology)

Think Rhetorically: Navigating the Contested Territory of Social Media in the Workplace — Hilary Sarat-Stpeter (Columbia College Chicago), Josephine Walwema (Oakland University)

#### BREAKOUT SESSION

3:00 - 4:15 pm

#### What Can Social Media Teach Us?

Moderator

Suguru Ishizaki (Carnegie Mellon University)

#### Presentations

Folk Classification of Social Media Services as Grounds for Explaining or Predicting Trends in Use — Gilbert Wilkes, Brian Traynor (Mount Royal University), Jaigris Hodson (GCI Canada)

Recruiting Research Participants with Social Media: A Proposal for a Body of Knowledge — Alexandra L. Bartell (The Boeing Company)

The Use of Built-in Digital Backchannels in Professional Communication within Academic Conferences in Virtual Worlds: A Comparison With the Use of Twitter in Real Life conferences — Sabine Emad (HEG Genève), Alexandra Broillet (University of Geneva and Webster University Geneva)

#### Integrating Software in the Classroom

Peter/McKenna

#### Moderator

Anna Danielewicz-Betz (University of Aizu)

#### Presentations

Implementing an XML Authoring Project in a New Media Course — John Stewart (University of South Florida)

Comparing Cultural Models in the Context of Teaching Global Software Engineering — Amir Zeid, Rehab El-Bahey (American University of Kuwait)

#### **Quality and Engagement in Online Learning**

Dowd

Rangos 1

#### Moderator

Lydia Wilkinson (University of Toronto)

#### Presentations

The Work of Education in the Age of the Digital Classroom: Resurrecting Frankfurt School Philosophies to Examine Online Education — Chris Dayley, David Hoffman (Utah State University)

**Learning Design: Creating a Quality Learning Environment** — *Russell L Kahn* (SUNY Institute of Technology)

Designing an Engaging Digital Learning Tool: A Report on a Motivation Study and Its Impact on the Design of the Tool — Stacie Rohrbach, Suguru Ishizaki, Necia Werner, Janel Miller (Carnegie Mellon University)

#### BREAKOUT SESSION

4:30 - 5:45 pm

#### Workshop — Simple Terms

In Simple Terms: A Method for Creating Policies and Agreements Your Audience Can Understand and Follow—Leanne Libert (ThoughtForm)

#### Abstract

Legal agreements don't need legalese to stand up in court, and terms of service should be written in terms most people understand. And plain-language simplification is the answer. With Leanne as your guide, learn to transform complex or complicated concepts into simplified content your audience can easily understand and use. See samples of simplification at work in the world while discovering tools and techniques for distilling complex information, as well as methods for further clarifying your content.

#### **Rhetoric in Real World Contexts**

Peter/McKenna

#### Moderator

Ken Tallman (University of Toronto)

#### Presentations

**Argument Development for Ontario's Harmonized Sales Tax** — Debbie Davy (Texas Tech University)

**Design Research in the Context of Federal Law Enforcement** — *Barbora Batokova, Todd Waits, Anne Connell (Carnegie Mellon Software Engineering Institute, CERT Division)* 

Engaging Public-Administrators-in-Training: Technical Communication as a Responsive Rhetorical Art — Elenore Long (Arizona State University)

#### **Ethics and Rhetoric in Professional Communication**

Dowd

#### Moderator

Kendall Kelly (St. Edwards University)

#### Presentations

A Rhetorical Reboot: Technical Writing Ethics in the Age of Digital Media — J. A. Rice (Western Kentucky University)

Will We Ever Learn: Case Studies of Rhetorical Errors and Effective Rhetorical Strategies in Written Communication—From the Challenger Accident to the BP/Horizon Oil Rig Disaster to the 2011 Mississippi Flood — Carolyn Boiarsky (Purdue University Calumet)





#### PLENARY

8:00 – 9:00 am

#### Lufkin Award

**Engineering Ethos in Environmental Public Policy Deliberation** — *Richard House, Jessica Livingston, Richard Layton, Sean Moseley (Rose-Hulman Institute of Technology)* 

Rangos 1

#### Abstract

University

2013 hearings in the U.S. House of Representatives, examining the options for regulating the disposal of coal ash waste, showed a central problem of engineering testimony in public policy debates—the reductive distinction between technical judgment and policy ideas, assuming that engineers' professional verdicts transcend economic and political interests. We propose that the most credible technical experts in public policy deliberation are engineers who acknowledge that technical expertise is not disinterested—that incommensurable goals and interests are unavoidable.

BREAKOUT SESSION	Innovations in Engineering Education	Rangos 1
9:15 – 10:30 am	Moderator	
	Tom Moran (Rochester Institute of Technology)	
	Presentations	
	<b>Tethering the Classroom to the Workplace through Embedded V</b> <b>Instruction</b> —Ann Staton (Montana Tech of the University of Montan Rendahl (University of Minnesota)	5
	A Professional Communication Course for Engineering Freshme Hayhoe, Helen Grady (School of Engineering, Mercer University)	<b>n</b> — George
	Impact of Critical Thinking Instruction on First Year Engineering Students — Jason Bazylak, Peter Weiss (University of Toronto)	
	Global Literacies in the Classroom and Industry Pet	er/McKenna
	Moderator	
	Theresa Merrick Cassidy (Kansas State University)	
	Presentations	
	Reclaiming the Articulated Space: A Cultural Analysis of Learnin and Appropriation of Digital Literacy among the Ageing Popula India — Anirban Ray (University of North Carolina wilmington)	
	Practitioners' Perspectives of the Technical Communication Field Ireland — Yvonne Cleary (University of Limerick)	d in
	Laying a Foundation for Academic Writing in Engineering: Help International Graduate Students Write in English — Joanne Lax,	

#### Lifelong Learning in Context

#### Moderator

Gilbert Wilkes (Mount Royal University)

#### Presentations

"What and How do We Learn from LinkedIn Forums?" An Exploratory Investigation — Alexandra Broillet (University of Geneva and Webster University, Switzerland), Constance Kampf (Aarhus University, Denmark), Sabine Emad (HEG-Geneva)

How to Balance Control, Power and Culture in Municipal Organizations: A complex responsive process theory perspective — Walter Bolwerk (WB) (Open University), Jan Ulijn (Eindhoven and Open University)

Lifelong Learning in a Fourth World Setting — Ruth Vanbaelen (Nihon University, College of Science and Technology), Jonathan Harrison (Nihon University, College of Science and Technology), Gust van Dongen\*

#### SPECIAL BREAKOUT SESSION

10:45 am - 12:00 pm

In this special breakout session, we invite attendees to join one of three panel conversations.

#### Panel—Dynamic Rhetorics

Rangos 1

#### Moderator

Necia Werner (Carnegie Mellon University)

#### Panel Discussion

Dynamic Rhetorics: Incorporating Programming into the Technical Communication Curriculum — JD Applen, Sonia Stephens (University of Central Florida), Karl Stolley (Illinois Institute of Technology)

#### Abstract

This panel argues for a curriculum-wide model of programming. Computer languages such as HTML, CSS, JavaScript and ActionScript support the creation of electronic texts that are visual, interactive, and hyperlinked. Creating those texts at the level of source code, as programming, creates significant affordances for students to learn more deeply the dynamic rhetorical implications of information they must convey to their audiences electronically. Each panelist describes concrete classroom examples that demonstrate significant student learning achieved through code-level text construction that builds upon standard, familiar curricular emphases on writing, rewriting, and research.

#### Dowd

#### Panel—Networked Learning, Collaboration, and Connectedness Dowd

#### Moderator

Peter Weiss, University of Toronto

#### **Panel Discussion**

The Roles of Networked Learning, Collaboration, and Connectedness in the Classroom — Dawn Armfield (Frostburg State University), Ann Hill Duin (University of Minnesota), Krista Kennedy (Syracuse University)

#### Abstract

This panel explores the role of social media platforms in students' development of interconnectivity, distributed and geographically dispersed collaboration, and network literacies, demonstrating varied ways that networked learning can be implemented in different institutional models with distinct student populations. We discuss how specific connections made within the classroom can be used to enable students' awareness of and engagement with digital networks and the technological platforms that support them.

#### Panel—Diverse, International, Online Audiences

Dowd

#### Moderator

Andreas Karatsolis (Massachusettes Institute of Technology)

#### **Panel Discussion**

**Responding to the Needs of Diverse, International, Online Audiences: Writing Commons, Data, and Representation** — Jack Hennes (Michigan State University), Jason Tham (University of Minnesota), Quentin Vieregge (University of Wisconsin-Colleges), Cassandra Branham (University of Central Florida)

#### Abstract

With rhetoric at its core, technical communication is situated to confront the barriers that restrict access to open-education resources (OERs). To meet the demands of diverse audiences, OERs must also devise ways in which to manage and interpret data. This panel explores web accessibility guidelines, visualization of content, issues of reliability, and data literacies as we emphasize perspectives from technical communication scholarship to address the future of Writing Commons, a heavily-used OER dedicated to academic, business, and technical writing.

### LUNCH

12:15 – 1:15 pm

#### Student Poster Competition & Workshop on Publishing Rangos 2/3

#### Presentations

**Student Poster Competition Winners** — Lydia Wilkinson (University of Toronto)

Publishing with the Professional Communication Society: Journal and Books — Traci Nathans-Kelly (Cornell University), Saul Carliner (Concordia University)

#### BREAKOUT SESSION

1:30 - 2:45 pm

#### **Bridging Academy and Industry**

#### Moderator

Joyce Karreman (University of Twente)

#### Presentations

Navigating the Situated Learning Experience in an Environmental Engineering Project from the Perspectives of Both Students and Instructors — Lydia Wilkinson (University of Toronto)

Who Says What to Whom? Assessing the Alignment in Content and Audience Between Scholarly and Professional Publications in Technical Communication, 1996–2013 — Ryan K. Boettger, Erin Friess (University of North Texas), Saul Carliner (Concordia University)

The Role of Co-operative Education in Ensuring Students' Success When Transitioning from Classroom to Industry—Jenny Reilly, Tatiana Teslenko (The University of British Columbia)

#### Overcoming Communication Obstacles—a Global View

Rangos 1

#### Moderator

Joanna Wolfe (Carnegie Mellon University)

#### Presentations

Coding Miscommunication: A Method for Capturing the Vagaries of Language — Kendall Kelly (St. Edwards University)

Navigating the "Eddies": Cross-Cultural Teaching and Learning Experience in a Technical and Professional Writing Class — Shuwen Li, (University of Minnesota-Twin Cities), The recipient of the Carnegie Mellon Diversity Scholarship

Multicultural, miscommunication in IT research labs — Anna Danielewicz-Betz, Tatsuki Kawaguchi (University of Aizu)

#### **Communicating Science—STEM Education**

Dowd

#### Moderator

Eva-Maria Jakobs (RWTH Aachen University)

#### Presentations

An Audience of Peers: Topics in Experimental Biology — Karen Pepper (Massachusetts Institute of Technology)

Using the Structure of the Abstract to Clarify and Organize Students' Thinking — Thalia Rubio (Massachusetts Institute of Technology)

Engage: A Model of Student-Led Graduate Training in Communication for STEM Disciplines—Melissa D. Clarkson (Division of Biomedical and Health Informatics, University of Washington), Natalie R. Footen (School of Environmental and Forest Sciences, University of Washington), Megan F. Gambs (School of Oceanography, University of Washington), Ivan F. Gonzalez\*, Juliana Houghton (School of Aquatic and Fishery Sciences, University of Washington), Megan L. Smith (Department of Earth and Space Sciences, University of Washington)

Peter/McKenna

#### BREAKOUT SESSION

3:00 - 4:15 pm

#### Workshop— Empowering Engineering Presenters

Rangos 1

Dowd

Don't Get Stuck on the Bridge: Getting Past Roadblocks to Teaching and/ or Enacting Greater Engineering Presentations — Traci Nathans-Kelly (Cornell University), Christine Nicometo (University of Wisconsin-Madison)

#### Abstract

Preparing for a presentation can be an anxiety-producing effort. As a result, most speakers tend to take the path of least resistance. Arming speakers with a few critical strategies can be a game-changer to push them out of their ruts, but do these new methods stand up to the pressure of real life? In this workshop, we will address how to teach these methods and make them stick.

#### Learning to Assess and Improve Visual Communication Peter/McKenna

#### Moderator

Melissa Clarkson (University of Washington)

#### Presentations

Infographics: Horrid Chartjunk or Quality Communication — Michael Albers (East Carolina University)

Using Eye-Tracking and Form Completion Data to Optimize Form Instructions—Noël T. Alton (Western Governors University, University of Baltimore), Caitlin Rinn (University of Baltimore), Kathryn Summers (University of Baltimore), Kath Straub (Usability.org)

Visualizing Categorical Data: An Introduction to Correspondence Analysis for Technical Communication Researchers — Chris Lam (University of North Texas)

#### **Insights from Current Research**

Moderator

Ruth Vanbaelen (Nihon University)

#### Presentations

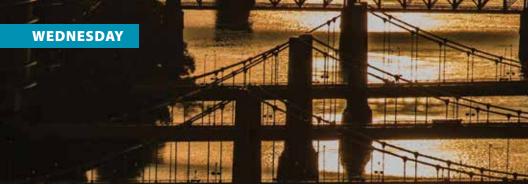
STEM Writing: Applying Lessons Learned from a Genre Analysis of Fermilab Documents — Jolynne Berrett (Utah State University)

What Are the Most Common Title words in Technical Communication Publications?, or "Using Technical Writing on the Web: A Rhetorical Case Study Analysis." — Ryan Boettger, Erin Friess (University of North Texas)

A Genre Analysis of High-Tech Marketing White Papers: A Report of Researchin-progress — Kim Campbell, Jefrey Naidoo (Culverhouse College of Commerce, The University of Alabama)

KEYNOTE	Keynote	Rangos 1
4:30 – 5:30 pm	<b>Dream, Learn, Do and be Daring</b> — <i>Doug Reeve (University of Toronto)</i> (Dr. Reeve's profile and the abstract of his presentation are on p.8.)	
AWARD RECEPTION	Awards Reception	CFA Building
6:30 – 8:30 pm	Please join us at the Great Hall in the <b>College of Fine Arts Building</b> for our	

Please join us at the Great Hall in the **College of Fine Arts Building** for our awards reception to honor those individuals who have made significant contributions to our field and to the IEEE Professional Communication Society.



#### PLENARY

8:00 - 9:00 am

#### **Joenk Award**

Help Yourself! On the User-Centered Design of Self-Service Systems — Karin Siebenhandl, Günther Schreder, Michael Smuc, Eva Mayr, Manuel Nagl (Danube University Krems)

Rangos 1

#### Abstract

Self-service systems pose a special challenge for design: Often they have to fulfill the needs of very heterogeneous users. To meet these different needs, it is important to include the users from the very beginning – assess their needs, problems, and difficulties, gather their feedback on early designs, and iteratively develop and test the prototype with them. We present a case study how this approach was applied in the design of a novel ticket vending machine.

#### Learning and Collaborating in Teams BREAKOUT SESSION Rangos 1 9:15 - 10:30 am Moderator Brian Traynor (Mount Royal University) **Presentations** What Makes Teamwork Work?: Development of an Observation Protocol Rubric for Evaluating Teamwork — Julia Williams, Richard House (Rose-Hulman Institute of Technology) Strategies for Dealing with Slacker and Underperfoming Teammates in Class Projects — Joanna Wolfe (Carnegie Mellon University), Elizabeth Powell (Tennessee Tech University) Students and Engineers Collaborating in Global Virtual Context — Xiaoli Li (University of Dayton) **Creativity in the Engineering Classroom** Peter/McKenna Moderator Richard House (Rose-Hulman Institute of Technology) **Presentations** Professional Writing in the Arts and Media : Reports From the Field — Hilary Sarat-Stpeter (Columbia College Chicago) **Extending Creativity in the Engineering Classroom** — Ken Tallman (University of Toronto)

Using Digital Storytelling with Infographics in STEM Professional Writing Pedagogy — Sandra Hill (University of Baltimore), Claudia Grinnell (University of Louisiana at Monroe)

#### Learning from Corporate Communications

Dowd

#### Moderator

Alexandra Bartell (The Boeing Company)

#### Presentations

The Cultural Production of New Forms of Practice: Social Media, Sustainability and Lifelong Learning for Consumers — Constance Kampf (Aarhus University, Denmark)

Corporate Lifelong Learning 2.0: Design of Knowledge Management Platforms with Social Media Functions as Learning Tools — Claas Digmayer (HCI Center, Textlinguistics & Technical Communication, RWTH Aachen University), Eva-Maria Jakobs (HCI Center, Textlinguistics & Technical Communication, RWTH Aachen University)

How to Design Work Related Risk Information for Low-literate Employees? — Joyce Karreman, Nienke van Norel (University of Twente), Ellen Uiters, Desirée Beaujean, (National Institute for Public Health and the Environment)

#### PLENARY

10:45 - 11:45 am

#### Schlesinger Award

From Disciplinary Grounding to Interdisciplinary Understanding — Bernadette Longo (New Jersey Institute of Technology)

#### Abstract

Important questions we face as communication professionals and global citizens challenge us to transcend a single discipline or worldview. Our complex technical projects, working with teams of people from around the world, require us to call on understanding from our technical training, as well as our human understanding. This presentation will explore the importance of interdisciplinary approaches to technical communication in classrooms and workplaces – as well as some of the challenges in transcending disciplinary boundaries.

#### **CLOSING**

Closing

**Rangos 1** 

Rangos 1

11:45 am - 12:00 pm

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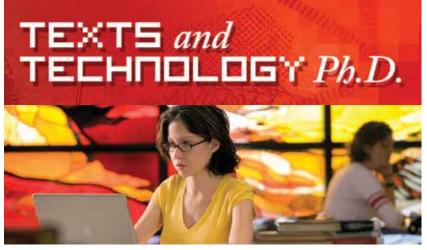
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