## 2017 IEEE International Professional Communication Conference (ProComm 2017)

Madison, Wisconsin, USA 23 – 26 July 2017



**IEEE Catalog Number: ISBN:** 

CFP17IPC-POD 978-1-5090-3043-9

## Copyright $\odot$ 2017 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number: CFP17IPC-POD ISBN (Print-On-Demand): 978-1-5090-3043-9 ISBN (Online): 978-1-5090-3042-2

ISSN: 2158-091X

## **Additional Copies of This Publication Are Available From:**

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



## **Table of Contents**

Developing the Academic-Industrial Partnership through Student Research and Projects: Case Studies from Iceland.....1

Kristinn Andersen, Saemundur E. Thorsteinsson, Helgi Thorbergsson, Karl S. Gudmundsson

Intuition in Healthcare Communication Practices: Initial Findings from a Qualitative Inquiry.....6 *Elizabeth L. Angeli, Lillian Campbell* 

Teaching Biomedical Engineering Technology Students How to Tailor Messages: Lessons Learned from a Technical Communication in Healthcare Professions Course.....12

Mary Baechle, Corinne Renguette

Starting from Scratch: Incorporating Communication Instruction in a Revised Mechanical Engineering Curriculum.....18

Nancy Barr

Improving the Data Information Literacies of Technical Communication Undergraduates.....23 *Ryan K. Boettger, Chris Lam, Laura Palmer* 

Learning Information Literacy Across the Curriculum (LILAC) and Its Impacts on Student Digital Literacies and Learning Across the Humanities.....28

Jeanne L. Bohannon, E. Jonathan Arnett, Ella Greer

Diverging Currents: Continuous Innovation in an Engineering-Based Technical Communication Program.....36

Pam Estes Brewer, Helen Grady, Robert Watson

TecCOMFrame: A Competence Framework for Technical Communication.....46 Yvonne Cleary, Joyce Karreman, Sissi Closs, Zygmunt Drazek, Jan Engberg, Voichita Ghenghea, Birgitta Meex, Patricia Minacori, Julia Müller, Daniela Straub

Project-Based Learning and Design Thinking: Fomenting Agility and Innovation in Government.....51

Jeffrey A. Collins, Michael W. Chiaramonte

Sustainability or Eco Fraud? Perception and Communication of 'Carbon Capture and Usage'.....59 *Claas Digmayer, Eva-Maria Jakobs* 

Disrupting Transmission Theory: Genre as Social Action in the Professional Communication Classroom.....66
Sara Doan

Inter-Department Cooperation Can Spell Success.....71 *Raymond Floyd* 

"I Guess I'll Give It a 13": Exploring the Language of Agile-Oriented Software Engineering Teams.....74

Erin Friess

Are We Missing the Boat? A Roundtable Discussion on Research Methods and How They Define Our Field.....78

Erin Friess, Ryan K. Boettger, Kim Sydow Campbell, Chris Lam

Examining the Rhetoric of Civic Engagement in Government Digital Service Design: Case Study of the Federal Source Code Policy's Use of GitHub in a Public Comment Period.....81

Jeffrey M. Gerding

Extended Abstract: Scaling Collaboration and Communication of a Growing Consulting Firm.....88 *Geoffrey M. Goll* 

Information Process Maturity Model.....91 *JoAnn T. Hackos* 

Transforming Your Conference Paper into an Article for the IEEE Transactions on Professional Communication.....99

George Hayhoe, Chris Lam, Pam Estes Brewer

Studio Sessions: Engineering Epistemology, Design Pedagogy, and Rhetoric.....101 *Richard House, Patricia Brackin, Anneliese Watt* 

Preparing Technical Communication Students for Workplace Practitioner Research.....106 *Marjorie Rush Hovde* 

Audience Involvement: The Role of Social Media in Web Usability.....112 *Lee-Ann Kastman Breuch* 

Humanistic Approaches for Teaching Technical Writing Service Courses Better Meet the Needs of Our Students (and Our Discipline).....118

Dave Kmiec, Olga Menagarishvili, Bernadette Longo

Evaluation of Engineers' Public Speaking Using Work Sampling Technique.....130 *Nikhil Kewal Krishna Mehta* 

An Overview of Research Methods in Technical Communication Journals (2012–2016).....138 *Chris Lam, Ryan Boettger* 

Braving Waves: Fusing the Digital Humanities and Social Sciences in Public Discourse.....142

Adrienne Lamberti. Lee Tesdell

A Systems Approach to Project Management Pedagogy: Situating Competencies and Relationships to Constellate Emerging Technical and Professional Communication Practice.....144 *Benjamin Lauren, Joanna Schreiber* 

Optimizing a Genre Analysis Framework to Investigate Engineering Literature Reviews.....150 *Joshua B. Lenart, Catherine G.P. Berdanier* 

Confronting Intercultural Awareness Issues and a Culture of Disengagement: An Engineering for Social Justice Framework.....156

Jon A. Leydens, Jessica Deters

Communicating in New Contexts: A Case Study of a Cross-Cultural Electronic Roadshow.....163 *Shuwen Li* 

Bad News First: How Optimal Directness Depends on What is Negated.....168 *Alan Manning, Nicole Amare* 

Data Visualizations: A Literature Review and Opportunities for Technical and Professional Communication.....178

Lisa Meloncon, Emily Warner

Seeing and Strategizing Diversity in Engineering Classrooms and Labs.....187 Traci Nathans-Kelly, Emily Farrar, Funmi O. Adebayo

Meshing Goals: Bringing a Computer-Aided Engineering Course with Biomedical Applications, Engineering Communications, and FDA Reporting Guidelines into Alignment Towards Stronger Student Outcomes.....188

Traci Nathans-Kelly, Rick Evans, Ashim K. Datta

We WOVE, We Designed, We Conquered: Assessing Engineering Self-Efficacy in a Mechanical Engineering Communication Initiative--Instructor and Student Perspectives.....195

Traci Nathans-Kelly, Rick Evans, Lauren Klein, Jiahao Zhang

Teach Presentations Anywhere: Strategies for Success in Teaching Online Presentations.....203 *Christine G. Nicometo* 

Emerging "Cyber Hygiene" Practices for the Internet of Things (IoT): Professional Issues in Consulting Clients and Educating Users on IoT Privacy and Security.....204

Jo Ann Oravec

Developing Empathy and Expertise in Online Health Forums.....209 *Susan L. Popham* 

Operational Metrics Reporting Processes at Scientific User Facilities: Comparing a High-Energy X-Ray Synchrotron Facility to a Supercomputing Facility.....218

Sarah Read, Michael E. Papka

Storytelling: The Effects of Corporate Stories on the Appreciation of Organizations.....224 *Anique Scheerder, Joyce Karreman, Menno de Jong* 

Visual Methods for Gathering Post-Test User Feedback: Pilot Testing the Picture Card Sort Deck.....232 *Abigail Selzer King, Kylie M. Jacobsen, Jack T. Labriola* 

Use of Collaboration Assignments to Support Online Learning Communities.....236 *Darina M. Slattery, Yvonne Cleary* 

Extended Abstract: Scripting the Context of Care: A Script-Theory Approach to Designing Patient-Centered Heath Communication.....241

Kirk St. Amant

Tidal Wave of Fake News Ruins Thousands of Student Projects!: Navigating Technical and Professional Writing in the Misinformation Age.....243

Sarah Summers, Bill Riley

Extended Abstract: Hard- and Soft-Sell Marketing in White Papers.....245 *Kim Sydow Campbell, Jefrey S. Naidoo, Sean M. Campbell* 

Returning to Academia from Industry: Four Case Studies from Iceland.....247

Saemundur E. Thorsteinsson, Kristinn Andersen, Helgi Thorbergsson, Karl Gudmundsson

How Disciplinary and Professional Commitments Condition Approaches to the Practice of Information Architecture as Taught in the Classroom.....254

Brian Traynor, Gil Wilkes

Trump Typhoon: A Rhetorical Analysis of the Donald's Twitter Feed.....264

Anneliese Watt, Caroline Carvill, Richard House, Jessica Livingston, Julia M. Williams

Putting Engineering Judgment in Conversation with Engineering Communication.....271

J. Scott Weedon

An Ethnographic Study of a Workplace through a Communication Lens.....279 *Peter Eliot Weiss, Rex Wu* 

Reversing the Tide of Industry-Academia Understanding: Engaging the Professional Sphere in Professional Communication Assignment Design.....284 *Lydia Wilkinson, Alison McGuigan* 

Extended Abstract: Assigning Reflection Essays in a Chemical Engineering Product Design Course.....292

Elaine Wisniewski, Laura Hirshfield

Wednesday Nite @ The Lab: Sharing the Sagas of Science and Scientists.....294 *Tom Zinnen, Sandy Rotter*