

# **Composing Technical Documentation as a Form of Academic Scholarship**

**Dr. Matthew Kelly**  
**Assistant Professor & Academic Writing Consultant**  
**ORS Research & Data Analysis Lab**

# Overview

- Review role of technical documentation in academic research
- Discuss strategies for incorporating technical docs into scholarly publications

# Rethinking Technical Documentation

- “Technical documentation” is a broad term

# Rethinking Technical Documentation

- “Technical documentation” is a broad term
- Often associated with professional- or workplace-writing genres
- Instruction sets, technical descriptions, RFPs (requests for proposals), etc.

# Rethinking Technical Documentation

- *Solving Problems in Technical Communication*

# Rethinking Technical Documentation

- *Solving Problems in Technical Communication*
- 2013 collection edited by Stuart Selber and Johndan Johnson-Eiola
- Rhetoric and Composition scholars, focuses on rhetorical dimensions of technical and professional writing

# Rethinking Technical Documentation

- “[T]echnical communicators are constantly interpreting use situations and weighing possible responses” of a responsive, active audience (Johnson-Eiola and Selber, p. 3)

# Rethinking Technical Documentation

- Technical writing is a two-fold process



# Rethinking Technical Documentation

- Technical writing is a two-fold process
- Structures the design and development of new technologies

# Rethinking Technical Documentation

- Technical writing is a two-fold process
- Structures the design and development of new technologies
- Anticipates and mediates how an active audience will apply new technologies to specific use-scenarios

# Rethinking Technical Documentation

- Technical documentation  $\neq$  specific genres used in workplace writing

# Rethinking Technical Documentation

- Technical documentation  $\neq$  specific genres used in workplace writing
- Technical documentation = texts that operate at intersection of technological development and audience participation

# Rethinking Technical Documentation

- Revised definition can expand our understanding of what constitutes “technical documentation”

# Rethinking Technical Documentation

- Technical materials for using specific equipment or processes (instruction sets, patch notes)

# Rethinking Technical Documentation

- Technical materials for using specific equipment or processes (instruction sets, patch notes)
- Training materials for employees, students or researchers (handbooks, company policies)

# Rethinking Technical Documentation

- Technical materials for using specific equipment or processes (instruction sets, patch notes)
- Training materials for employees, students or researchers (handbooks, company policies)
- Teaching materials (syllabi, assignment prompts)



# Using Documentation in Research

- Researchers may not view themselves as technical writers

# Using Documentation in Research

- Researchers may not view themselves as technical writers
- Professional duties may require us to produce technical documentation
- Example: you may need to compose documents for lab equipment used by graduate assistants

# Using Documentation in Research

- How can we highlight the role of technical documentation in our publications?

# Using Documentation in Research

- If a study or experiment requires documentation, you can discuss the rationale behind these docs

# Using Documentation in Research

- If a study or experiment requires documentation, you can discuss the rationale behind these docs
- Narrate the thought process used when composing docs in particular ways
- Clarify the use-scenarios for these docs, then explain the results stemming from these docs

# Using Documentation in Research

- Hypothetical example: HR research for training employees in specific technology skills

# Using Documentation in Research

- Hypothetical example: HR research for training employees in specific technology skills
- When composing a manuscript for this research, you would consider the following questions...

# Using Documentation in Research

- What documentation was created for training?



# Using Documentation in Research

- What documentation was created for training?
- Why was this documentation written or designed in deliberate ways?

# Using Documentation in Research

- What documentation was created for training?
- Why was this documentation written or designed in deliberate ways?
- What were ideal use-scenarios for these docs?

# Using Documentation in Research

- What documentation was created for training?
- Why was this documentation written or designed in deliberate ways?
- What were ideal use-scenarios for these docs?
- Can we trace a connection between design of these docs and actual outcomes/results?

# Using Documentation in Research

- Discussing technical docs often happens in the methods section or explanation of a study's design

# Using Documentation in Research

- Discussing technical docs often happens in the methods section or explanation of a study's design
- Technical documentation exists at intersection of theory and praxis
- Explaining theoretical frameworks that shape tech docs can make it easier to see how abstract ideas are applied in real-world situations

# Using Documentation in Research

- Explaining role of technical docs can reinforce the real-world significance of your work
- Also demonstrate your ability to coordinate successful interactions between technology and users

# Issues to Consider

- Be sure to review a journal's standards for incorporating technical docs

# Issues to Consider

- Be sure to review a journal's standards for incorporating technical docs
- Some journals have appendices that include entire drafts of technical docs
- Others allow for supplementary materials to be added



# Issues to Consider

- One final note: intellectual property

# Issues to Consider

- One final note: intellectual property
- IP for research has stable best practices
- IP for technical docs may pose more questions

# Issues to Consider

- **Example: I publish on teaching and include assignment prompts**

# Issues to Consider

- **Example: I publish on teaching and include assignment prompts**
- **On the one hand, I want others to build upon my teaching practices**
- **On the other hand, I want to be attributed for my work**

# Issues to Consider

- There are no easy answers to IP questions

# Issues to Consider

- There are no easy answers to IP questions
- Ensure that all authors for all documents are properly attributed

# Issues to Consider

- There are no easy answers to IP questions
- Ensure that all authors for all documents are properly attributed
- Incorporating technical docs into research articles can make attribution more likely

# Conclusion

- Please consult the ORS Lab website for webinars and worksheets that discuss different writing strategies
- Resources dedicated to different research methods (qualitative, quantitative, and AI-assisted)
- Consultants available to discuss best practices for different research methodologies