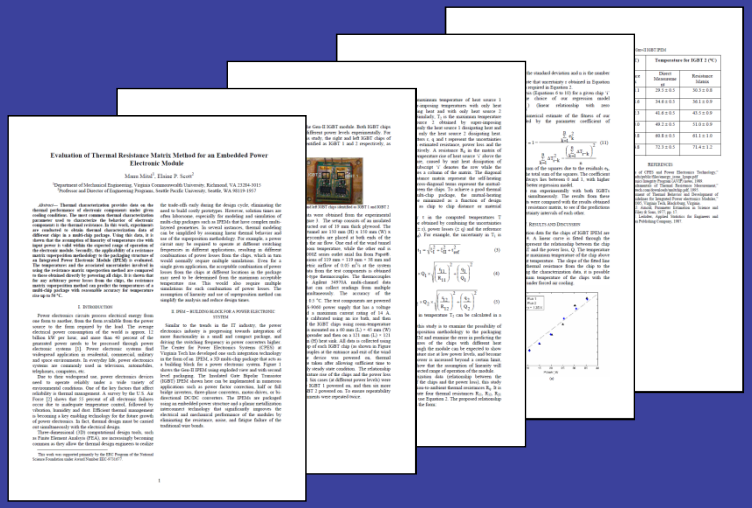


Written Communication in Technical Fields

A brief overview

Learning to writing in the engineering environment

Technical Writing: What is it?

There are six major components to technical writing…

Basic Literacy

Grammar, spelling, organization
Does your writing make sense?

Technological Literacy

Are you using the correct formatting?
Are you using figures and tables effectively?

Critical Literacy

Do you understand the power structures involved in your application and have an idea how to help those in need within the constraints of these structures?

Rhetorical Literacy

Are you addressing your audience(s)?
Do you understand your viewpoint relative to the audience?

Ethical Literacy

Can you explain your choices for this term paper topic/thesis?
Have you considered all who are invested in the term paper?

Social Literacy

Direct (coauthoring) -- the executive summary
Indirect -- brainstorming, discussion, etc

How do I make technical writing easier?

Start with the Five-Minute Miracle Conversation …

It is a conversation in your mind between you and your reader

What are you trying to tell your reader?

If you have to struggle to find the significance of your information for that reader, you are probably choosing the wrong main message.

You could **UNDERWHELM** or **OVERWHELM** your reader

Now, let the "reader" ask you two critical questions

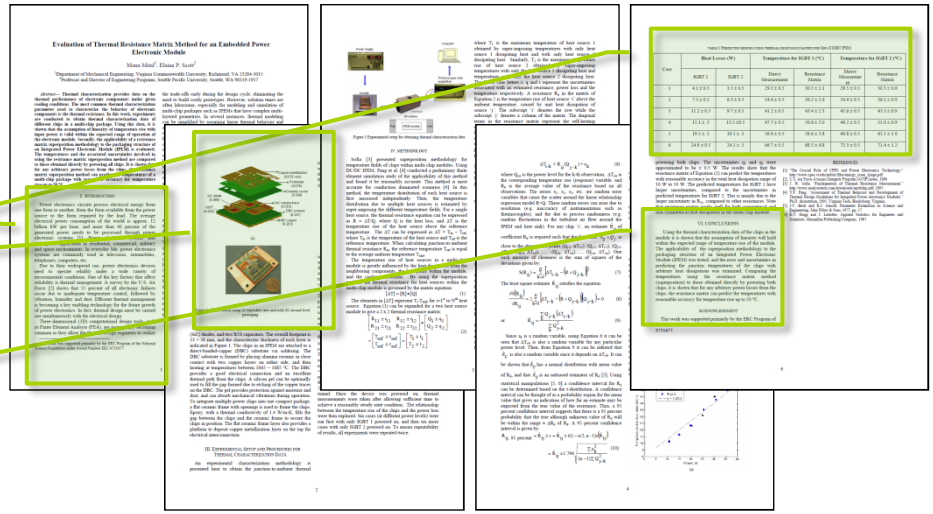
Think: What are the questions?

Example questions…

- Why did you do this?
- What is the significance of the results?

Pair: How are you going to answer the questions in your paper?

- *Formulate rationale*
- *Identify key figures & tables*
- *Highlight significance*



Share: Ask colleagues to review – *did you answer the questions?*

So, you are still having problems getting started – some helpful hints…

You started writing and have no direction

- ALWAYS START WITH AN OUTLINE!
- Write down primary ideas and sub-ideas for each primary idea
- Convert this informal list to an outline

You are bored with your topic

- CHANGE IT!
- Talk to someone about how to make your topic more interesting

You don't want to write

- GET OVER IT! (Fix your motivation)
- Use some anxiety reduction strategies

So, you are still having problems getting started – some helpful hints…

You are anxious

- Use known strategies to reduce your anxiety (music, breathing exercises, etc.)
- Consciously stop non-productive comments in your head
- Focus your energy on rehearsing what the writing will feel/look like in your head once you get started
- Reward yourself for small steps

You are so stressed out, you can't generate a single word

- Stretch, exercise, do something different (for a little while)
- Breathe deeply, focus on relaxing
- Use calming images, any known technique for relaxing yourself
- Reduce distractions