

Chapter 1 : An Engineer's Guide to Technical Communication by Sheryl A. Sorby

For those who teach short courses on technical communication for engineers, or for engineers who want a short, self-teaching aid to improving communication on the job, Richard Arthur's new book.

Writing is a challenge for many technical professionals, but following a few simple steps and taking the time to practice can make writing easier. Is it another engineer, your manager, a customer, or someone else? Crafting that first draft can present a lot of questions. Does this sentence need a comma? When should I use a semicolon or colon? Is the verb the right tense? Let the writing flow. Start the editing process after you finish your first draft. Take a Fresh Look Distancing yourself from the piece often provides insight, Livingston says. That can be difficult when the deadline is pressing, but taking a break for even a few hours, she says, allows you to look at the document with fresh eyes. Just as with coding, having someone review your work can reveal areas that need clarity or more detail. The rewriting process itself, Livingston says, serves as a great learning tool and confidence builder. Reading is Essential House and Livingston recommend that engineers read as much and as broadly as possible. House suggests reading newspaper articles, blog posts, and novels to learn different storytelling techniques. This strategy not only broadens your perspective, and vocabulary, but also helps you understand how different authors write for their audiences. You can also review engineering documents to see how others communicate similar ideas. And, of course, it never hurts to read textbooks and other materials geared toward better writing, like *The Engineering Communication Manual* and classics such as *The Elements of Style*. The IEEE Professional Communication Society has resources for engineers on its website, covering reports, presentations, podcasts, and other communication tasks. Practice Makes Perfect The formula is simple: A lot of engineers find that with practice they actually get quite good at writing. And becoming a good writer, he says, is important. IEEE membership offers a wide range of benefits and opportunities for those who share a common interest in technology. If you are not already a member, consider joining IEEE and becoming part of a worldwide network of more than , students and professionals.

Chapter 2 : Five Ways Engineers Can Improve Their Writing

The engineer's guide to better communication Abstract: For those who teach short courses on technical communication for engineers, or for engineers who want a short, self-teaching aid to improving communication on the job, Richard Arthur's new book may be just the thing.

Knowing your style, and the style of others can be a significant benefit in life. This month we continue our theme of communication, by examining different styles of communication. Have you ever found that there are some people you just cannot click with? This can be a massive problem, especially if the person is part of your team, or is one of your clients. Different people have different styles of communication. Understanding the difference between our style and the style of others can help us to be more effective communicators. More effective communication leads to more success. Hippocrates â€” BC developed the four temperaments to describe differences in behaviour. These, and other approaches have been used by many to understand themselves and others. More effective communication leads to more success For me, there is one approach that stands out from the rest. This is an approach called social styles. It originated in the s from a pair of industrial psychologists called David Merrill and Roger Reid who wanted to see what they could learn from analysing observable behaviour. It stands out because: It is based on observable behaviour only, ie, what people say and what they do. It is not based on psychology and does not analyse personality. It is based on statistical analysis of real data, rather than a theory. It is very easy to grasp. It is powerful and effective. Merrill and Reid took a massive data set of observable behaviour from individuals and used some groundbreaking at the time factor analysis. They identified two independent axes that they called responsiveness and assertiveness to describe the style of social interaction. Essentially, responsiveness indicates the extent to which people control emotions or allow space for emotions, and assertiveness indicates the tendency for a person to assert themselves by asking questions, or by directly stating. The two axes create a diagram of four quadrants that characterise four very different styles of communication behaviour. The key differences in the styles are: Faster pace, goal-focussed, serious and formal. Faster pace, focus on generalities, casual and informal. Slower pace, focus on relationships, casual and informal. Slower pace, focus on detail, serious and formal. Once we know our style, and the style of others, we can work out how to tune our style to get the best out of any conversation or dialogue. This is where the social styles approach plays its trump card. Using the same observable behaviour data, Merrill and Reid identified a third axis called versatility. This is a measure of how well a person can adapt their style to meet the style of others. There is one final trick up the sleeve of the social styles approach. We are not necessarily well positioned to comment on our own behaviour, because we cannot see ourselves objectively. This can give a more accurate indication of our style and versatility. Secondly, it is a rich opportunity to learn from any differences between how we see ourselves, and how others see us. If you find that there are some people you can get on with better than others, then perhaps the social styles approach might be worth a look. Article by Jamie Cleaver Freelance trainer and facilitator, IChemE course leader on Mentoring for Chemical Engineers Jamie Cleaver is a chemical engineer who works as a freelance trainer and facilitator, helping engineers and scientists to develop professional skills related to communication. He runs workshops on various aspects of communication, creativity and mentoring for companies and universities. He also specialises in explaining chemical engineering to non-chemical engineers. In his spare time, he lectures chemical engineering to undergraduates.

Chapter 3 : Guide: Communicating as an Engineer

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Chapter 4 : 5 ways for engineers to improve their communication skills | The Engineer The Engineer

A systems engineer who carries out these activities effectively may better accomplish the project objectives, and lead to a more collaborative relationship with the customer [1, p. 2]. Best Practices An approach to developing effective communications and influencing sponsor interactions is shown in Figure 1.

Chapter 5 : How Architects and Engineers Can Improve Communication

An Engineer's Guide to Communication. Communicating well will make you a better engineer, and a better person. It's certainly not easy. But it's important that you try, even if it'll.

Chapter 6 : Your Guide To Communicating With Upper Management

The IEEE Guide to Engineering Communication is a handbook developed specifically for engineers and engineering students. Using an argumentation framework, the handbook presents information about forms of engineering communication in a clear and accessible format.

Chapter 7 : Style Guide: Tune Your Communication for Better Results - Features - The Chemical Engineer

5 ways for engineers to improve their communication skills By 25th March pm 20th February pm Whether you're applying for a job or conducting a public meeting, communication is a vital tool for engineers to master.

Chapter 8 : What skills do I need to develop to become an effective engineer? | TryEngineering

Jamie Cleaver is a chemical engineer who works as a freelance trainer and facilitator, helping engineers and scientists to develop professional skills related to communication. He runs workshops on various aspects of communication, creativity and mentoring for companies and universities.