



TECHNICAL REPORT WRITING FOR ENGINEERS

TECHNICAL REPORT WRITING: WHY DOES IT MATTER?

Professor Mike Hounslow, Vice President & Head of Faculty (Engineering), The University of Sheffield: When I was a student, we wrote our reports in a biro on a pad of paper. When I graduated, we wrote our reports with a biro on a pad of paper, then gave it to a secretary, who typed it. We then took scissors and sellotape and we cut it up into pieces and rearranged it.

That sounds unbelievably ancient. But what I've seen in having gone from biro and pad to a word processor and PDF is I'm not doing anything different at all. Perhaps I'm more relaxed about which order the sentences will go in because I can move them, but each sentence still needs the same structure. The sections still have the same purpose. The graphs still need to have the axes labelled. So I do think writing a report is a lifetime skill, and it won't matter how technology changes.

Professor Elena Rodriguez-Falcon, Professor of Enterprise and Engineering Education, The University of Sheffield: When you are reporting on something that is important, that may make a big difference to your company, to your employer, to society, and you don't report correctly, it has consequences. And not only to yourself and your particular job and your career and how you might progress, sometimes, more importantly, it has a huge impact on people's lives.

Maurice Poole, Operations Maintenance Engineer, London Underground: Many years ago, there was a tragic event on the railways. And the report that came from that, one of the best that I've ever read, was a combination of engineers giving the technical aspects of what had gone wrong, and then that being absorbed into a report that then was written by a QC, that actually did get published by government. And it's led to the industry today even using that report today to benefit the way in which they write the standards for report writing, and how the actual industry tackles in the railway itself doing installation and testing of the systems that keep the railways safe.

Jane Healey Brown, Associate Director, Arup: Having the ability to write a good technical report is vital not only to delivering a job, but actually to securing a job in the first place. In the work that I do, being able to produce high-quality work is so important that that is something that all people through the recruitment process are tested on. If they aren't able to deliver the basics, then they probably won't get an



interview, or they certainly wouldn't be appointed. So in order to secure a position at a company you want to work at, you need to make sure that you can write well.

Jerin Rajan, Electronics Systems Engineer, Jaguar Land Rover: Writing a report is key in any organisation, especially with people or anyone who wants to move ahead in their career. If you have the ability to actually explain things, technical things, in simple English, then, I mean, managers would be always happy about it. And it's always a positive thing, and they would be really impressed with you.

Rick Arnell, Materials Application Engineer, Rolls Royce: Being able to write a good technical report gives you really good credibility within the company. If you can write a good report and then get it across well, I think that's really beneficial and stands you in high regard. And a key part of getting your chartership in engineering, which is the next big step after you graduate, is being able to communicate effectively. This is a great way of capturing that and saying, look, here's a report I've written, it shows I can communicate well.

Dr Ziad Azar, Technical Project Manager/Design Engineer, Siemens: If you have passion to be escalating up in your career, the only way to express your good work and good contribution is by learning how to make good reporting.

Professor Mike Hounslow: If you cannot communicate to your colleagues, your clients, your boss, your subordinate what you've done, what you think, and why you think it, then you cannot be a good engineer. And I'm not overstating that. I do personally believe that the capacity to communicate is the highest-level skill for engineers, and communicating in writing has a very big place in that.