



TECHNICAL REPORT WRITING FOR ENGINEERS

TECHNICAL REPORT WRITING AND YOUR CAREER

Maurice Poole, Operations Maintenance Engineer, London Underground:

Undergraduates need to realise that they are green behind the ears in all aspects of what they're doing, and what they've learnt at university isn't what the real world is all about. So they need to read some really good reports and read some bad reports, and from that start to realise what a good report is all about, how it should be assembled, and what a bad report actually can look like, and what the results can be from that.

Jane Healey Brown, Associate Director, Arup: I will regularly select who I'm recruiting by a view on their written work. And the reason we emphasise that is experiences in the past of staff that haven't had the ability to write well. And that becomes very difficult because it puts the onus on other members of the team to redo work, and that's not cost-effective, and it's not good for team morale, as well. So we have had instances where we've had to provide further training to staff, but more importantly, we now embed that in our recruitment process, as well.

So when we recruit people, we ask for written applications, we ask for CVs. But if you are shortlisted to interview, you are required to bring written work. And often, particularly at graduate stage, there is also a written test paper that is done, as well. And that written test paper is not usually to test your knowledge, it's to test your ability to write, your ability to communicate your thinking through that written work.

Ronald Gulliver, Chartered Civil Engineer, Kier Construction: There have been occasions in the past where graduate engineers I've been mentoring or supervising engineer to, or other colleagues working in my team, have not shown the ability to write their thoughts down technically in a good format. That has delayed their personal development within the business, and on occasion has made them unsuitable to put into a new position.

Dr Ziad Azar, Technical Project Manager/Design Engineer, Siemens: I think if you can't make clear and sharp reports, that's when you can't reflect your good work. Then your managers, who normally maybe have no time to chat with you, to know how nice you are or how good you are, they will only know how good you are by reading your report or seeing your presentation. So it's very important for you to



reflect your capabilities to your managers, and as well as colleagues, by doing good reports. Clear and nice reports.

Professor Elena Rodriguez-Falcon, Professor of Enterprise and Engineering Education, The University of Sheffield: Writing good reports has made a great difference to me. It's something that has allowed me to not only disseminate the work that I've done, it's allowed me also to learn from others. It's allowed me also to be able to communicate more effectively. And communication is something that, again, we do quite a lot as engineers. And we have to do it in a written manner, we have to do it in a verbal manner, but we have to also be precise in what we say. So writing good reports makes a lot of difference.

Rick Arnell, Materials Application Engineer, Rolls Royce: It's enabled me to find my feet quickly in the business and circulate round reports quickly, and really capture my thoughts. And I'm quite an introvert person, and so being able to write a good technical report is my way of communicating information that maybe I wouldn't within a meeting. So it helps me to structure my thoughts and then get them across.

I think 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.

Professor Mike Hounslow, Vice President & Head of Faculty (Engineering), The University of Sheffield: My experience, both as an engineer writing for others and then as an engineer receiving reports from others, is that writing well is a very important skill. And the best evidence I think is, when you get a report that's not well-written, and in fact I read a report just two weeks ago by someone who I thought was pretty able, the report was poorly done. The tables weren't labelled, the terms weren't defined, and it didn't follow a set of sections I could recognise. And not only did that person drop in my estimation, I also didn't believe the conclusion.

I do think people in that situation risk at best slowing their careers down and probably at worst limiting them. So my top tip is learn to write a report. It's not that difficult, it'll be good for you, and it'll be very good for the people you work with.