

THE IN-HOUSE TRAINING COMPANY

Effective technical writing

Overview

The aim of this programme is to help attendees create better quality technical documents in an organised and efficient manner. It will give those new to the topic an appreciation of how to approach the task professionally whilst those with more experience will be able to refresh and refine their skills.

The programme comprises three complementary one-day modules:

- Module 1: Essential skills for technical writers
- Module 2: Creating better specifications
- Module 3: Writing better technical reports

The programme presents a structured methodology for creating technical documents and provides a range of practical techniques that help delegates put principles into practice. Although not essential, it is strongly advised that delegates for modules 2 and 3 have already attended module 1, or another equivalent course.

Learning objectives

This course has will help you:

- To explain the qualities and benefits of well written technical documents
- To present a structured approach for producing technical documents
- To review the essential skills of effective technical writing
- To demonstrate practical methods to help create better documents
- To provide tools and techniques for specification and report writing
- To review how technical documents should be issued and controlled

Who should attend?

This course is designed to help those involved in creating technical documents such as reports, manuals, specifications and user guides.

Format

Each module comprises a mix of tutorials and practical case study sessions geared to the client's business environment. The tutorials cover the key principles and practical methods for writing specifications while the case study sessions illustrate how the principles can be applied.

The structure is highly participative and session timings may be adapted to match the particular training needs and pace required by each group.

Special features

The three modules in this programme can be taken as stand-alone workshops or in any combination to create a 1-, 2-, or 3-day programme. The programme can also be designed to meet the specific needs of your organisation.

Expert trainer

John is an independent consultant specialising in project and change management. He established his consultancy practice in 1990, following 20 years of industrial management experience, and provides clients with a wide range of project management and team development programmes. He also provides facilitation and consultancy services to help clients deal with current issues or to assist in developing management practices and procedures.

John's client base includes leading organisations in Engineering, Manufacturing, Construction, Defence, IS/IT and Education. He is an associate with Loughborough Business School and is a senior consultant and course director with a number of well-known training organisations. Whilst his work is centred in the UK, he frequently works internationally with current assignments in Europe, the Middle East and Asia.

Before setting up his consultancy and training business, John was a senior engineering manager with Ilford Limited, a leading manufacturer of specialist photographic products. Having starting with the company as a development engineer, he progressed through technical and team leadership roles and was appointed manager of engineering development in 1980. During the early 1980's he was heavily involved in the company's restructuring programme whilst managing a diverse portfolio of multi-disciplinary engineering projects. His project management role subsequently grew to include managing a number of business projects including manufacturing improvement programmes and the development and introduction of new products. John was also involved in co-ordinating international technology transfer activities and in strategic business development studies within the Ilford Group.

Prior to joining Ilford Limited, John trained in the automotive industry and gained an honours degree in Applied Physics. He went on to conduct post-graduate research in cryogenics at Oxford University for which he was awarded an MSc in Engineering Science. John is a member of the Institution of Mechanical Engineers, The Institute of Physics and The Association of Project Management.

See what people have said about his training:

'Clear notes to take away; exercises were really helpful'

'Good to have examples to work through individually / in groups'

'Well presented; sections flowed well. Good amount of reflection and consolidation'

Workshop outline

Note: the content of each module as shown here is purely indicative and can be adapted to suit your particular requirements.

MODULE 1: ESSENTIAL SKILLS FOR TECHNICAL WRITERS

1 Introduction to the programme

- Aims and objectives of the module
- Introductions and interests of participants

2 Creating effective technical documents

- What is technical writing? How does it differ from other writing?
- Key qualities of an effective technical document
- Communication essentials and the challenges faced by technical writers
- The lessons of experience: how the best writers write
- The five key steps: prepare – organise – write – edit – release (*POWER*)

3 Preparing to write

- Defining the document aims and objectives; choosing the title
- Understanding technical readers and their needs
- Getting organised; planning and managing the process
- Integrating technical and commercial elements
- The role of intellectual property rights (IPR) e.g. copyright

4 Organising the content

- The vital role of structure in technical documents
- Deciding what to include and how to organise the information
- Categorising information: introductory, key and supporting
- Tools and techniques for scoping and structuring the document
- Creating and using document templates – pro's and con's

5 Writing the document

- Avoiding 'blinding them with science': the qualities of clear writing
- Problem words and words that confuse; building and using a glossary

- Using sentence structure and punctuation to best effect
- Understanding the impact of style, format and appearance
- Avoiding common causes of ambiguity; being concise and ensuring clarity
- Using diagrams and other graphics; avoiding potential pitfalls

6 Editing and releasing the document

- Why editing is difficult; developing a personal editing strategy
- Some useful editing tools and techniques
- Key requirements for document issue and control

MODULE 2: CREATING BETTER SPECIFICATIONS

1 Introduction

- Why editing is difficult; developing a personal editing strategy
- Some useful editing tools and techniques
- Key requirements for document issue and control

2 Creating better specifications

- The role and characteristics of an effective specification
- Specifications and contracts; the legal role of specifications
- Deciding how to specify; understanding functional and design requirements
- Developing the specification design; applying the principles of BS 7373
- Getting organised: the key stages in compiling an effective specification

3 Preparing to write a specification

- Defining the scope of the specification; deciding what to include and what not
- Scoping techniques: scope maps, check lists, structured brainstorming
- The why / what / how pyramid; establishing and understanding requirements
- Clarifying priorities; separating needs and desires: the MoSCoW method
- Useful quantitative techniques: cost benefit analysis, QFD, Pareto analysis
- Dealing with requirements that are difficult to quantify

4 Organising the content

- The role of structure in specifications
- Typical contents and layout for a specification
- What goes where: introductory, key and supporting sections
- Creating and using model forms: the sections and sub sections
- Detailed contents of each sub-section
- Exercise: applying the tools and techniques

5 Writing the specification

- Identifying and understanding the specification reader
- Key words: will, shall, must; building and using a glossary
- Writing performance targets that are clear and unambiguous
- Choosing and using graphics
- Exercise: writing a specification

6 Editing and releasing the document

- Key editing issues for specifications
- Issue and control of specifications

MODULE 3: WRITING BETTER REPORTS

1 Introduction

- Aims and objectives of the day
- Introductions and interests of participants
- The 'POWER' technical writing process for technical reports

2 Creating better reports

- What is a technical report? types and formats of report
- The role and characteristics of an effective technical report
- Understanding technical report readers and their needs
- The commercial role and impact of technical reports
- Getting organised: the key stages in compiling a technical report

3 Preparing to write reports

- Agreeing the terms of reference; defining aims and objectives
- Being clear about constraints; defining what is not to be included
- Legal aspects and intellectual property rights (IPR) for reports
- Preparing the ground; gathering information and reference documents
- Keeping track of information: note making, cataloguing and cross referencing
- Tools and techniques for developing a valid and convincing argument

4 Organising the content

- The role of structure reviewed; some typical report structures
- Who needs what: identifying the varied needs of the readership
- What goes where: introductory, key and supporting sections
- Creating and using model forms: the sections and sub sections
- Detailed contents of each sub-section
- Exercise: applying the tools and techniques

5 Writing the report

- Planning the storyline: the report as a journey in understanding
- Recognising assumptions about the reader; what they do and don't know
- Converting complex concepts into understandable statements
- Presenting technical data and its analysis; the role of graphics
- Presenting the case simply whilst maintaining technical integrity
- *Exercise: writing a technical report*

6 Editing and releasing the report

- Key editing issues for technical reports
- Issue and control of technical reports

Any questions?

Please just give us a call on **01582 463463** – we're here to help!
Or visit www.theinhousetrainingcompany.com