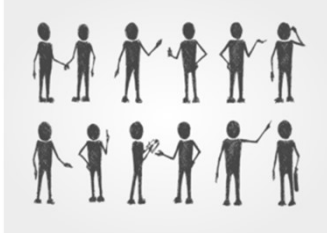# COMMUNICATION SKILLS

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Technical Communication

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Technical communication is the process of transmitting facts and information to a defined audience for a specific purpose.

"Writing for Understanding"

▶ Technical writing → information in science and technology or other technical areas on a professional level, backed up by data facts, so that information is complete and accurate.

▶ Focused and clear writing → clear advantage

WHAT IS TECHNICAL COMMUNICATION?

2

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1

- Communicating *about* technology
- Writing about technology
- Writing about scientific subjects
- Writing highly detailed information for specific audiences
- Writing *user-centered* documents
- Training people to use technology

WHAT IS TECHNICAL COMMUNICATION?

3

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- 'The practical application of knowledge especially in a particular area'[1]
- Objects used to make life 'easier'
- Computers and machines that use them
- Knowledge specific to a technical field
- Often used with modifiers (*medical, information, educational…engineering, pharmacy*)

WHAT IS 'TECHNOLOGY'?

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Communication Timeline

- ▸ Communication is part of our existence
- - Hunter gatherers
- - Ancient civilizations
- - Cave Paintings
- - Pictographs

Smoke Signals   Carrier Pigeon   Morse Code

Fax   Telephone   Wireless Radio

Mobile Telephone   Internet   E-mail

What Next?   Handheld Devices

COMMUNICATION HISTORY

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navigation
familiarity
consistency
error prevention
feedback
visual clarity
flexibility & efficiency
usability   simply accessible.

- ▸ **Accessible**
  - ▸ Logical location and format
  - ▸ Appropriate to users
  - ▸ Complete yet lucid
- ▸ **Usable**
  - ▸ Efficient
  - ▸ Easy to use
- ▸ **Relevant**
  - ▸ Addresses correct information
  - ▸ Correct purposes

Usability

TECH-COM: CHARACTERISTICS

What you want to say.   What they're interested in.

Relevance

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- ▸ Paper/print
- ▸ Web pages
- ▸ Graphics
- ▸ Sound
- ▸ Databases
- ▸ Embedded help
- ▸ Oral presentations/training
- ▸ 'Hands on' or self-guided training

COMMON MEDIA

7

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- ▸ Writers
- ▸ Editors
- ▸ Engineers and consultants
- ▸ Researchers
- ▸ Web designers
- ▸ Graphic artists
- ▸ Developers
  - ▸ Informational
  - ▸ Instructional
- ▸ Project Managers

WHO COMMUNICATES?

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- ▸ Engineering firms
- ▸ Software corporations
- ▸ Training and education
- ▸ Universities
- ▸ Law firms
- ▸ Consultants
- ▸ Government divisions
- ▸ Development and Communication
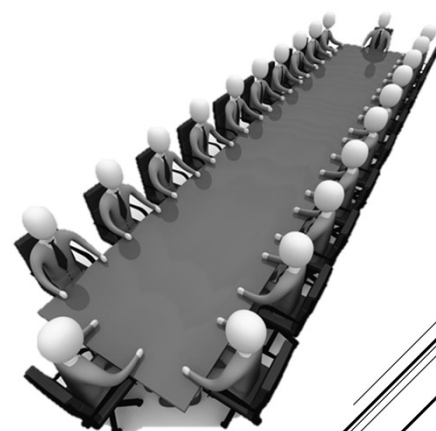
WHERE DO TECH-COMS WORK?

9

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- ▸ **Team oriented approach**
  - ▸ Between engineers/subject experts and public
  - ▸ Between technical experts and managers
  - ▸ With writers, editors, usability specialists, artists, publishers, lawyers, experts - other professionals...
- ▸ Under tight deadlines
- ▸ Emphasis on cost benefits
- ▸ Emphasis on logic
- ▸ Emphasis on ethical value system
- ▸ Societal dimensions

HOW DO THEY WORK?

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- ▶ Technical writers must consider before beginning any type of technical communication.

- ▶ These are
  - ▶ **Audience**
  - ▶ **Purpose**
  - ▶ **Format**
  - ▶ **Style**

purpose
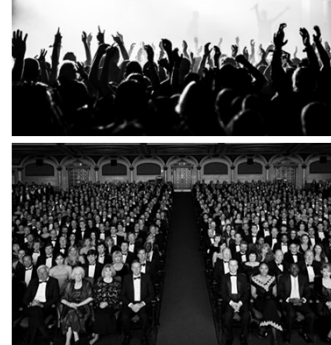
FACTORS GUIDING TECHNICAL COMMUNICATION

11

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The **purpose** of a technical document could be

- ▶ to inform
- ▶ explain
- ▶ describe or record actions

PURPOSE AND AUDIENCE

- ▶ The **Audience** could consist of managers, co-workers, customers and clients, the general public, or any combination.

- ▶ They will have different levels of understanding and different information needs that require specific formats and styles of communication.

Audience

Content
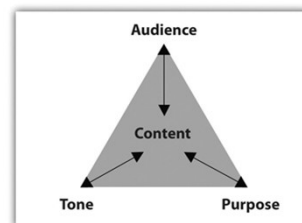
Tone   Purpose

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Writing Style

▸ The style (language, organization, and layout) of a document depends on the audience, purpose, and format

Got Style?

FORMAT AND STYLE/ TYPE

✓ Reports or documents, such as personals, lab reports, product specification, or quality-test results, research papers, monographs, books.

✓ Records-keeping forms, such as service reports, TA forms, or troubleshooting logs.

✓ Instructions, such as user guides, online help, FAQ and training manuals.

✓ Correspondence, like letters, memos, and emails.

✓ Presentations, such as multi-media, interviews, marketing calls, or training seminars

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▸ The document might not need visible clues for structure, such as casual emails or memo focused on only one topic

▸ The document might need visible structure of headings and subheadings or even chapters to identify the flow of information

▸ The layout can consist of condensed paragraphs that fill the pages of the document,

▸ It can provide lots of white space, with examples, charts, or graphics to illustrate points and bulleted or numbered lists to highlight main points.

You see...
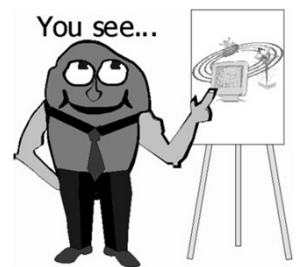
PRESENTATION STYLES

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▸ Generally people who read technical information prefer sentences that get straight to the point.

▸ They prefer words that are functional, exact, and clear.

▸ They prefer paragraphs that are short, with each paragraph focused on only one (Function, usage instruction, etc.)
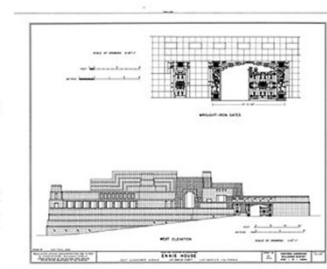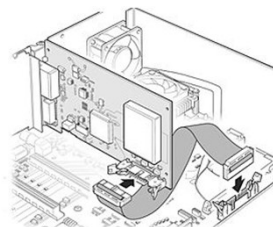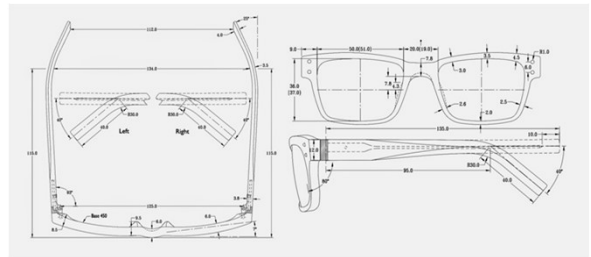
PREFERENCES OF TECHNICAL READERS

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First step → writing technical communication → focus on the audience.

Because of different mental level, knowledge, background, audience can be categories in the following

▸ Technical
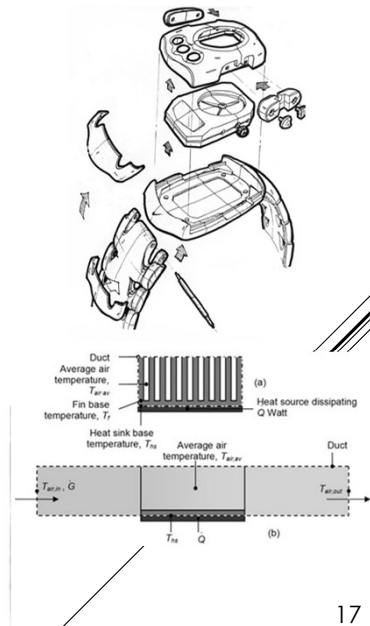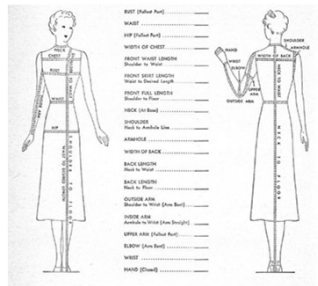▸ Semi technical
▸ Non technical

TYPE OF AUDIENCE

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- **A technical audience** understands fundamental concepts and jargon without definitions or background information The Reader expects the writer to use technical language efficiently and appropriately.

- **The semi-technical audience** needs some explanation of concepts, abbreviations, and jargons. Writers user technical terms only if they are common in the company or industry.

- **Non-technical audience**: general public, and unknown audience, or any combination of technical, semi-technical and non-technical readers, including customers, clients etc.

TYPE OF AUDIENCE

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People read technical information for a purpose.
- Sometimes that purpose is simply for general interest.
- Other times audience want to follow the a procedure, solve a problem, or make a decision, or getting specific information on a toic

Writers must anticipate expectations/ questions and provide the requisite information in the level, format, style this audience needs

The audience, whether technical or general, might want only the highlights of the information. For example, a manager might want bottom-line information, such as total cost, time frame, or budget impact.

Or the audience might want detailed information, including all the background, procedures used, visual aids, data tables and your conclusions.

PURPOSE AND INTENT: MOST CRITICAL

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- Assumption: my audience speaks and reads English well.
- Fact: Only some % know good/high level English.

- Assumption: My audience will read the complete report or manual
- Fact: people normally don't read long documents.

- Assumption: My audience will remember what I tell them.
- Fact: Studies shows that people forget up to 50 % of what they hear within 10 min and memory declines even more subsequently.

AUDIENCE: FACTS AND FICTION

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- Getting Savvy
  - Clarity of thoughts
  - Clear purpose
  - Sound knowledge

THANK YOU

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