Benvenuti al curso Technical English

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Agenda

1. Description and presentation of diagrams in a scientific context
   - General principles
   - Stylistic markers
   - Examples

2. Description and presentation of tables / matrices / graphs
   - General principles
   - Stylistic markers
   - Examples

3. Technical process description
   - General principles
   - Describing properties and process modifications
   - Examples

4. Important Aspects of Technical Communication

Technical Communication – Diagram Description

Specific Stylistic Markers

- Purpose/usage phrases – is used for, serves
- Location phrases – in the centre, to the right of...
- Referencing phrases – as can be seen / the diagram clearly shows...
- Sequence markers - first, next, finally...
- Defining phrases / structures – known as, so-called, a “tool/device”, which...
- Passive voice
- Present tense
- Neutral, factual, objective tone – no evaluative or personal phrases
- “Good vs efficient for

Technical Communication – Defining Technical Terms

(device, tool, system, component/part, method/technique which...

<term> is a/n <category> which <main characteristics>
Let me now show you how the system works by following the route of an email message from Los Angeles to Barcelona.

- give a concrete example how the system works
- explain the main functions
- name the main components and define technical terms where necessary

This diagram shows how the relay satellite is used to function as, is responsible for, or acts as the main component (part of the system). The system consists of three main components.

In the center of the diagram you can see the main component/part of the system. The system consists of three main components.

Let me now show you how the system works by following the route of an email message from Los Angeles to Barcelona.
Technical Communication – Graph Description

Specific Stylistic Markers

- Referencing phrases – as can be seen / the diagram clearly shows …
- Sequence markers – at first, in the first phase, next, finally …
- Phrases referring to change – increase, decrease …
- Passive voice
- Present tense or present perfect with certain time-related conjunctions > specific field
- Past tense when referring to developments on a past timeline
- Neutral, factual, objective tone – no evaluative or personal phrases
- Interpretation phrases – this may well indicate, the conclusion to be drawn is, the evidence suggests …

Graph Description – Vocabulary 1

- fall ↓ decrease ↓ slip back ↓ stay level →
- climb ↑ drop ↓ go down ↓ double ↑
- rise ↑ improve ↑ remain stable → halve ↓
- even out ↓ deteriorate ↓ increase ↑ stay the same →
- decline ↓ pick up ↑ slump ↓ go up ↑
- hit a low ↓ reach a peak ↑ soar ↑ bottom out ↓
- recover ↑ advance ↑ gain ↑ fluctuate ↓
- reach a trough ↓ remain constant → hit a low ↓ plunge ↓

Graph Description – Vocabulary 2

- UP
  - Verb phrases: to increase by/to rise by/to go up by/to increase of/to rise of/to go up of
  - Noun phrases: an increase of/to rise of/to go up of
- Down
  - Verb phrases: to drop by/to go down by/to decrease by/to drop of/to fall of/to decline of
  - Noun phrases: a decrease of/to fall of/to decline of
- Others
  - to stand at
  - To reach a peak
  - To bottom out
  - To remain constant

Graph Description – Vocabulary 3

- Adjectives/Adverbs indicating the speed or rate of change Fast/faster/fasted
- Adjectives/Adverbs indicating the size of change Considerable

Graph Description Example Oil Price Development

Real Price of Crude Oil in Austria

Graph Description: Example Internet Traffic

Source: American University of Technology, Washington DC
The first quadrant shows the characteristics of the diode when it is forward biased. When the voltage is increased, at first the current remains constant. When the voltage reaches about 600mV there is a rapid rise in current. The current continues to rise as the voltage increases but eventually a point is reached where the diode would be destroyed by heat.

The third quadrant shows what happens when the diode is reverse biased. There is no current flow. The reverse current is constant until what is known as breakdown voltage. At this point there is a sharp increase in the reverse current. This sudden increase is called the Zener effect.

Technical Communication – General Principles

- **Functional**: focused on information for a specific purpose for a specific audience
- **Audience-sensitive**: level of detail and complexity dependent on intended readers
- **Channel-sensitive**: choice of medium and text type
- **Logical**: in arranging information and guiding readers
- **Accurate**: exact facts, precise terms, concrete language
- **Standardised**: conforms to conventions of grammar, punctuation etc.
Technical Communication – Evaluation Criteria

- Clarity
  - Content/overall structure
  - Technical terms
- Coherence
  - "Red thread"
  - Relationship among parts and paragraphs
  - Relationship within paragraphs
  - Conformity with overall purpose
- Consistency
  - Usage of technical terms
  - Capitalization
  - Neutral, objective tone
- Conciseness
  - Elimination of superfluous wording
  - Clarity and compactness of sentence structure

Technical Communication – Audience

- Experts
  - Advanced knowledge and skills in their field
  - Understand technical information and language within that field
  - Handle theory and practical application with ease.
- Technicians
  - Understand technical information and language within that field
  - Handle theory and practical application with ease.
- Professionals/Non-experts
  - Have the education and ability to read and understand difficult and technical information
- Lay (general) audience
  - Have no specialized education but need practical information
  - May or may not be highly motivated to read information in full.

Technical Communication – Organisation Principles

- Order of location
  - Ex: planet system - from farthest to nearest
- Order of increasing difficulty
  - Ex: computer manual - from simple to complex aspects
- Sequential order
  - Typical of process descriptions
- Chronological order
  - Ex: graph description with reference to a timeline
- Problem/solution
  - Ex: experiment set-up
- Inverted pyramid
  - Essential message followed by facts in order of decreasing importance
- Deductive order
  - Generalization - detailed facts
- Inductive order
  - Facts in detail - generalization
- List

Conclusion

K Keep
i It
S Short and
S Simple

“If you can't state your position in eight words or less, you don't have a position.”

Seth Godin