

# Concept of Documentation

- Documentation is a process of
  - **keeping records** on projects or events and
  - **explaining** facts of objects, systems or procedures.
- It is also a process of
  - **accumulating** and **classifying** documents and
  - **making them available** to others.

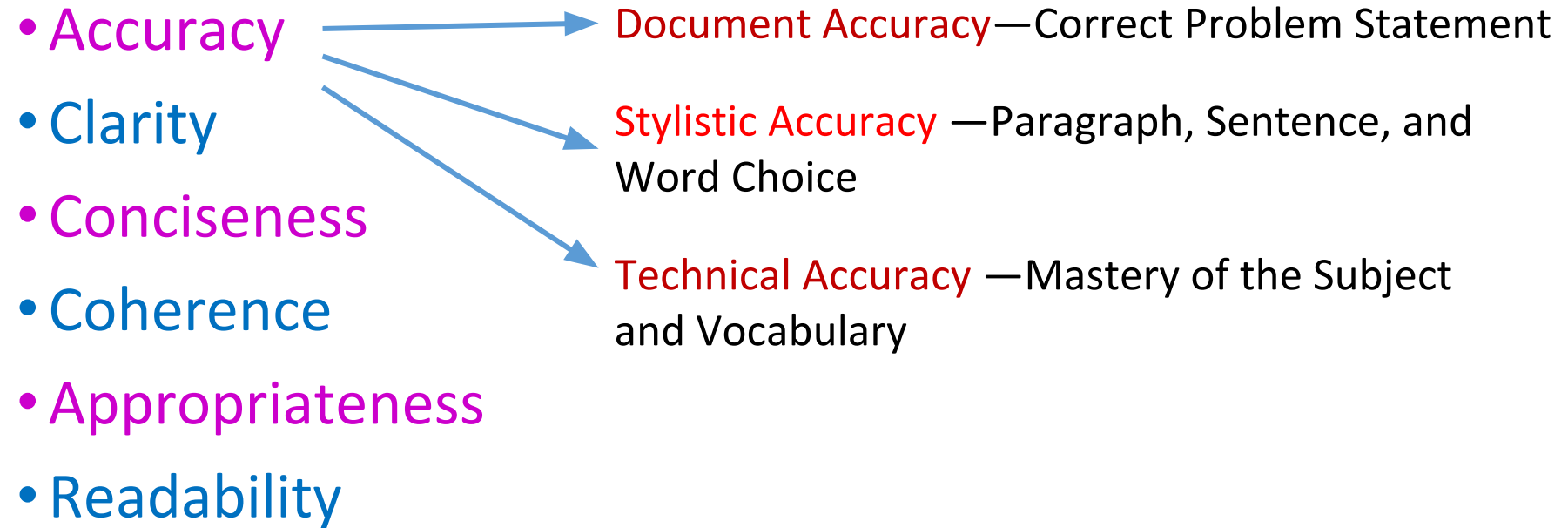
# ACCCAR

## The Characteristics of Effective Technical Writing

- Accuracy
- Clarity
- Conciseness
- Coherence
- Appropriateness
- Readability

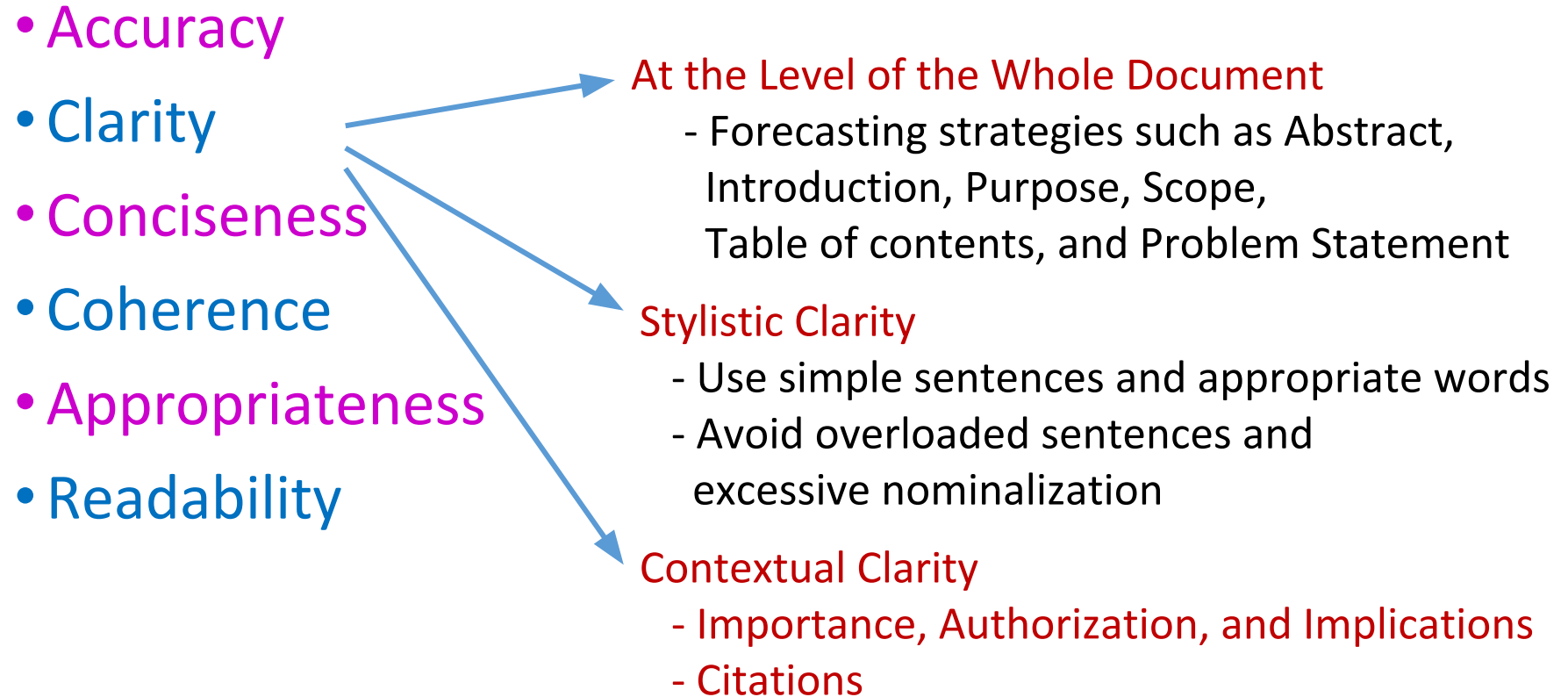
# ACCCAR

## The Characteristics of Scientific Writing




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## The Characteristics of Scientific Writing

- Accuracy
- Clarity
- Conciseness  At the Level of the Whole Document
  - Narrow down the scope
  - Use graphics
  - Avoid repetitions
  - Reduce wordiness
- Coherence
- Appropriateness
- Readability

# ACCCAR

## The Characteristics of Scientific Writing

- Accuracy
- Clarity
- Conciseness
- Coherence 
  - Make material logically and stylistically consistent
  - Organize ideas in specific patterns
- Appropriateness
- Readability

# ACCCAR

## The Characteristics of Scientific Writing

- Accuracy
- Clarity
- Conciseness
- Coherence
- Appropriateness →
  - Material relevant to the purpose of writing and to the purpose of the audience
  - Conformance to community
  - norms
- Readability

# ACCCAR

## The Characteristics of Scientific Writing

- Accuracy
- Clarity
- Conciseness
- Coherence
- Appropriateness
- Readability → - Less number of words per sentence.



# Readability Score

- **Flesch Readability (FR) Score (Rudolph Flesch, 1948)**

$$FR\ Score = 206.835 - 1.015 \left( \frac{Total\ Words}{Total\ Sentences} \right) - 84.6 \left( \frac{Total\ Syllables}{Total\ Words} \right)$$

The *FR* score ranges from 0 to 100. **The higher the score, the more readable is the text.**

- **Flesch-Kincaid Readability (FKR) Score (Rudolph Flesch & John P. Kincaid, 1976)**

$$FKR\ Score = -15.59 + 0.39 \left( \frac{Total\ Words}{Total\ Sentences} \right) + 11.8 \left( \frac{Total\ Syllables}{Total\ Words} \right)$$

*FKR* score has a lower bound of -3.40 with no upper bound.

**A syllable is a single, unbroken vowel sound within a spoken word**

**The higher this score, the less readable is the text.**

## **For Good Readability**

- Number of words per sentence should be less.

Tie' has one syllable.

'Rescue' has two syllables -

Res + cue

## FR Score

Score	School Level	Notes
100.00-90.00	5th grade	Very easy to read. Easily understood by an average 11-year-old student.
90.0–80.0	6th grade	Easy to read. Conversational English for consumers.
80.0–70.0	7th grade	Fairly easy to read.
70.0–60.0	8th & 9th grade	Plain English. Easily understood by 13- to 15-year-old students.
60.0–50.0	10th to 12th grade	Fairly difficult to read.
50.0–30.0	College	Difficult to read.
30.0–0.0	College Graduate	Very difficult to read. Best understood by university graduates.

# Tips for Good Writing

- Continuity of ideas
  - Use short sentences.
  - Use active voice.
  - Make correct use of tense.
  - Be gender neutral.
  - Write grammatically correct sentences.
  - Write sentences in positive form.
  - Define acronyms and abbreviations.
  - Avoid jargon.
  - Disambiguate.
  - Avoid slang, idioms, and colloquial phrases.
  - Avoid figurative language
  - Avoid humour, satire, and irony.
  - Omit needless words.
  - Get the report read by someone unconnected with the work
- *The overriding rule*