

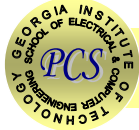


Professional Communication Skills

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Revising Documents for Accuracy and Coherence *

- Revising Sentences
 - Revising Paragraphs
 - Revising Lists - Parallelism
 - Revising Whole Documents
- *Based on information in L. Perelman, J. Paradis, and E. Barrett, *The Mayfield Handbook of Scientific and Technical Writing*. Mountain View, California: Mayfield Publishing Company, 1998.



Revising Sentences for Accuracy

- Stacked Modifiers and Nouns
 - Avoid using long strings of modifiers or nouns. Add a few words (usually prepositions or conjunctions) to make the relationships between nouns clear to the reader.



Revising Sentences for Accuracy

- Unacceptable:
 - *We have analyzed low-energy, interplanetary-charged, sun-sourced particle flux time series.*
- Acceptable:
 - *We have analyzed the time series of fluxes of low-energy interplanetary charged particles, whose ultimate origin is the Sun.*



Revising Sentences for Accuracy

- **Wordiness**
 - Conciseness is desirable in ALL writing, but especially so in technical writing.
 - Wordy writing results from excessive use of the passive voice, excessive nominalization, unnecessary repetition, and fillers.



Revising Sentences for Accuracy

- **Passive verbs de-emphasize or eliminate mention of the performer of the action conveyed by the verb.**
 - **Passive voice:**
 - Three experiments were performed by the authors.
- **Active verbs make for concise prose.**
 - **Active voice:**
 - The authors performed three experiments.



Revising Sentences for Accuracy

- Nominalizations (turning verbs into nouns)
 - *Weak:*
 - *Regeneration of the resin bed is achieved by a calcium chloride solution.*
 - *Strong:*
 - *The resin bed is regenerated with a calcium chloride solution.*



Revising Sentences for Accuracy

- Unnecessary Repetition
 - Green in color
 - Completely eliminate
 - Round in shape
 - Maximize as much as possible



Revising Sentences for Accuracy

- Unnecessary Words and Phrases
 - Weak:
 - *Are the detection systems periodically performance testable to verify operability in the event that they are called upon to function?*
 - Strong:
 - *Can the detection systems be performance-tested periodically?*



Revising Sentences for Accuracy

- Sentence Fragments
 - A sentence fragment is missing a subject, a verb or both, but is punctuated as if it were a complete sentence.
 - To repair a sentence fragment, add the missing element or merge the fragment with a clause that does contain a subject and a verb.



Revising Sentences for Accuracy

- Fused Sentences
 - When two independent clauses run together without a conjunction or punctuation between them, they result in a fused sentence.



Revising Sentences for Accuracy

- Stringy Sentences
 - When several clauses that would be easier to read and understand if they broken into separate sentences are joined together, they result in a stringy sentence.



Revising Paragraphs for Coherence

- Paragraph Structure
 - Topic sentence
 - Supporting sentences
 - Concluding sentence



Revising Paragraphs for Coherence

- Devices to Enhance Coherence
 - Transitional words and phrases
 - Key words
 - Demonstrative pronouns followed by nouns
 - Manageable-length paragraphs – 75-125 words



Revising Lists for Coherence

- Lists
 - Lists work well in conveying information that can be enumerated or expressed in a sequence; lists also enhance the coherence of a discussion.



Revising Lists for Coherence

- Advantages of turning a paragraph into a list:
 - It forces you to look at the big picture.
 - It forces you to examine the sequence of the items.
 - It forces you to create a clear lead-in sentence.
 - It forces you to tighten and clarify the prose.



Parallelism

- Parallelism
 - Items in a list should be parallel:
 - Unacceptable:
 - *Possible mechanisms of change*
 - *Do fissures widen due to tectonic stress?*
 - *Permeability from increased microcracking*
 - Acceptable:
 - *Mechanisms of change*
 - *Widening of fissures due to tectonic stress*
 - *Permeability from increased microcracking*



Parallelism

- Parts of a sentence that are the same in function should be the same in structure:
 - Unacceptable:
 - The instructor carefully explained how to start the engine and shifting gears.
 - Acceptable:
 - The instructor carefully explained how to start the engine and how to shift gears.



Parallelism

- Words or phrases joined by coordinating conjunctions should have the same form:
 - Unacceptable:
 - *Job opportunities are increasing in electrical engineering and will decrease in architecture.*
 - Acceptable:
 - *Job opportunities are increasing in electrical engineering and decreasing in architecture.*



Revising the Whole Document for Coherence

- Document Checklist
 - Have you left out anything in turning your outline into a draft?
 - Have you included all the elements your readers expect to see?
 - Are all the elements presented consistently?
 - Is the emphasis appropriate throughout the document?
 - Are the cross references accurate?