Writing Powerful Journal Articles

A UCAR/NCAR Communicating Science Workshop for ESL Authors

February 28, 2005
10:00- Noon
ATD - Atrium

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A Typical Review of Good Science and Bad Writing

“While the results are new, interesting and worth publishing, I cannot recommend publication at this time. Major grammatical errors and unclear statements are prevalent throughout the manuscript.

“I'm going to give the authors a second chance, however, because of the language barrier.

“They should completely rewrite the paper and ensure it is in colloquial English before resubmittal. Suggest that they get help from a technical editor before resubmitting a major revision. Unless the authors can improve the readability of the paper, it should be rejected.”
Use an article (a, an, the) or other determiner (e.g., this, my) if the noun is countable.*

- If the noun the article modifies is SINGULAR (one; specific)
  - *I need the book for the class.* (DEFINITELY as to which book and class)
  - *I need a book for a class.* (INDEFINITELY—implies others exist)

- If the noun the article modifies is PLURAL AND restricts the meaning to a SPECIFIC group or subset of the noun. (Always use “the”— never “a” or “an”— with a plural noun.)
  - *The winds frequently found at this altitude are frigid.* (tells which winds)
  - *Winds may be found at any altitude in the atmosphere.* (unrestricted)

* Few, fewer and many are countable. Little, less, and much are uncountable. Some, enough, more, most and all may be either, depending on context.
THE DEFINITE ARTICLE

www.bigcats.org/abc/attacks/whattodo.html
Use the DEFINITE article (“the”):

- If a **SINGULAR**, countable noun is UNIQUE (Only one exists or is relevant.)
  - *The chinook is a type of hot, dry wind.*

- If a noun (**SINGULAR** or **PLURAL**):
  - Was PREVIOUSLY INTRODUCED, e.g., the subject of the paper
    - *The supercell developed rapidly.* (Reader knows which supercell.)
  - Represents the entire class or subset to which the noun belongs
    - *The chinook is the type of hot, dry wind chosen for this study.*
  - Is preceded by a superlative adjective (**most, least, -est**), the word “same,” or an ordinal number (**first, fourth**); or the noun is a group of years (**1960s, Sixties**)

*Note:* If a **PLURAL** noun is countable only in a general sense, do **not** use an article: *Chinooks are known by other names as well.*
Choose which INDEFINITE article ("a," "an") to use:

- If the next word begins with a consonant SOUND, use "a."
- If the next word begins with a vowel SOUND (a, e, i, o, u), use "an."
  - A house, a hospital, a holiday, a human—BUT an hour (H is silent)
  - An elephant, an emu—BUT a euphemism (EU sounds like Y)
  - An untold story, an uphill climb—BUT a university (U sounds like Y)

- With singular, countable nouns:
  - To refer to a nonspecific member of a group ("a wind in Colorado")
  - To introduce a member of a group for the FIRST time
    - "a theory that we considered"—implies other theories were considered (Subsequently use "the theory," not "a theory.")

- With plural nouns that require an indefinite article, use SOME:
  - "Some theories were rejected as unfounded."
A pronoun substitutes for a noun. Although most English nouns (e.g., rabbit, table, building) do not change according to gender, pronouns do.

Tips on Using Third-Person Pronouns:

- Use **he** (subjective case), **him** (objective case) and **his** (possessive case) when referring to a male.
  
  - *Juan is a writer so he is glad that I gave a book to him for his birthday.*

- Use **she**, **her** and **her** or **hers** when referring to a female.
  
  - *Dr. Huang is a top scientist in her field. I heard her speak: the day was hers because she spoke extremely well.*

- Use **it**, **it** and **its** when the gender is neuter, neither male nor female.
  
  - *We need meteorology—it is important and its application is evident daily. So give it more funding, George.*
Other pronouns include: (first person) I, me, my/mine; we, us, our/ours; (second person) you, you, your/yours; (third person) they, them, their/theirs; (indefinite pronouns) who, whom, whose; whoever, whomever, whose ever.

When possible, avoid gender-specific language by using plural pronouns:

- Weak: A scientist must have the skills to communicate his ideas.
- Stronger: Scientists must have the skills to communicate their ideas.

As in the above example, the connection between a pronoun and its noun antecedent must be clear. They must be the same in gender and number. No other nouns or pronouns may intervene to cloud the meaning.
Little Mistakes That Matter: Punctuation Within Quotation Marks (U.S.A. Style)

- Commas and periods come before final quotation marks:
  - “We’ll attend the meeting,” they agreed. “Let’s hope it will be brief.”

- Others (semicolon, colon, exclamation point, question mark, dash) fall outside a final quotation mark unless part of the quotation itself:
  - “The worst is over”—this is what everyone was saying before the second wave hit the island. After that it was, “Run for your lives!”
  - She asked, “Are you going to cook dinner tonight or shall we go out?”

- Single quotation marks fall within double quotation marks:

For more information, see *The Mayfield Handbook of Technical & Scientific Writing* and other references on the “Resources” page at the end of this presentation.
Writing Powerful Journal Articles

Cracking the Code of Sentence Structure

Carol Park
Sentence Structure and Diagramming Sentences

Diagramming Sentences:

A lost art and a useful tool for analyzing sentence structure and diagnosing a problem in a poorly constructed sentence—a way to debug.

“Writing demands, absolutely requires, a type of intense concentration, like chess or playing an instrument.”

(from Communicating Science, Montgomery, p. 36)
Writing requires intense concentration of a type like chess or playing an instrument.
● The basic rules for sentence structure haven’t changed.

● Trouble communicating a complex concept? Deconstruct the fuzzy sentence or paragraph and see where the problems are.

● Write with **brevity** and **clarity**.

● Watch out for common ESL hazards: Articles, antecedents, run-ons, compound sentences, parallel construction*, syntax, commas (punctuation), tense(s), repetitive words (therefore, however, etc.), unnecessary words and phrases (in order, it is apparent that, etc.), and transitions.
Parallel Construction

As its name implies, parallel construction is necessary to show a parallel relationship between two concepts of equal weight.

Raoul's QPA is higher than Ralph.
Raoul's QPA is higher than Ralph's.

Phuong Tran has wit, charm, and she has an extremely pleasant personality.

Phuong Tran has wit, charm, and a pleasing personality.
“See Spot run.”

Simple sentence or not?

http://www.straightdope.com/classics/a980814a.html
“I really do not know that anything has ever been more exciting than diagramming sentences.”

- Gertrude Stein
Resources

Books:

The Chicago Guide to Communicating Science, Montgomery
The Chicago Manual of Style
The Mayfield Handbook of Technical & Scientific Writing, Perelman
Elements of Style, Strunk & White
Elements of Grammar, Shertzer
English for Science and Technology: A Handbook for Nonnative Speakers, Huckin
Oxford Fowler's Modern English Usage Dictionary, Fowler

Websites:

- UCAR/NCAR CommSci: http://www.ncar.ucar.edu/eo//commsci/
- ESL: http://owl.english.purdue.edu/handouts/esl/index.html
- Diagramming: http://webster.commnet.edu/grammar/diagrams2/diagrams2.stm
- Diagramming: http://www.geocities.com/gene_moutoux/basicdiagrams
- Diagramming: http://webster.commnet.edu/grammar/diagrams2/diagrams2.stm
- The Mayfield Handbook: https://mit.imoa.t.net/handbook/home.htm
- AMS Style guide for journal papers: http://www.ametsoc.org/pubs/refstyl.html
Thanks for helping launch CommSci!

For a copy of this presentation and access to other resources, please visit the CommSci website:

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