Clear Scientific Writing: Tools for the Writing Process

PART 2

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Writing is a Process

The Writing Process

- **Prewriting:** thinking about a topic, brainstorming, and planning
- **Drafting:** quickly putting thoughts on paper
- **Revising:** reworking the organization and details
- **Editing:** reviewing and correcting spelling, grammar, capitalization, and punctuation
- **Evaluating:** reflecting and assessing what has been written
- **Publishing:** sharing final writing with others

Editing & Proofreading are important parts of the process
Game Plan: Two Lectures

Last Time:
Higher order writing concerns

Today:
Lower order writing concerns

• Audience/Purpose
• Thesis
• Paragraph Development
• Organization

• Transitions
• Clarity
• Conciseness
• Editing
Transitions

• signal relationships between paragraphs, sentences, and words; showing the connection between the different parts.

Explicit Transitions

• Tell you “go this way” through specific words and phrases; allowing the reader to navigate your writing.
What Transitions Can Do

To show addition: again, and, also, besides, equally important, first (second, etc.), further, furthermore, in addition, in the first place, moreover, next, too

To give examples: for example, for instance, in fact, specifically, that is, to illustrate, even, namely, specifically,

To compare: also, in the same manner, likewise, similarly

To contrast: although, and yet, at the same time, but, despite, even though, however, in contrast, in spite of, nevertheless, on the contrary, on the other hand, still, though, yet

To concede: granted, naturally, of course

To generalize: as a rule, as usual, for the most part, generally, generally speaking, ordinarily, usually

To emphasize: certainly, indeed, in fact, of course

To summarize or conclude: all in all, in conclusion, in other words, in short, in summary, on the whole, that is, therefore, to sum up

To show time: after, afterward, as, as long as, as soon as, at last, before, during, earlier, finally, formerly, immediately, later, meanwhile, next, since, shortly, subsequently, then, thereafter, until, when, while, once

To show place or direction: above, below, beyond, close, elsewhere, farther on, here, nearby, opposite, to the left (north, etc.)

To indicate logical relationship (cause and effect, etc.): accordingly, as a result, because, consequently, for this reason, hence, if, otherwise, since, so, then, therefore, thus

Transition Word Chart
The concept of fairness is central to understanding plagiarism. Fairness means being fair both to yourself and others. Everybody both gives and receives their proper due, and nobody has anything to complain about. An incident involving unfairness could be taking someone else’s work and passing it off as your own. The person whose work has been taken receives no recognition or acknowledgment for their research and thinking. Writers who plagiarise are not being fair to themselves either because they are not developing their own independent academic skills. Students who do their own work with due acknowledgement of the work of others should develop their own academic skills and self-confidence far more than those who merely misuse the work of others.

(Adapted from UNE, 2010 *Avoiding coursework plagiarism and academic misconduct: Advice for students.*)
Paragraph 2 - WITH transition words

The concept of fairness is central to understanding plagiarism. Fairness means being fair both to yourself and others. Moreover, everybody both gives and receives their proper due, and nobody has anything to complain about. For example, an incident involving unfairness could be taking someone else’s work and passing it off as your own. As a result, the person whose work has been taken receives no recognition or acknowledgment for their research and thinking. Furthermore, writers who plagiarise are not being fair to themselves either because they are not developing their own independent academic skills. Therefore, students who do their own work with due acknowledgement of the work of others should develop their own academic skills and self-confidence far more than those who merely misuse the work of others.

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Active vs. Passive Voice

- In an **active voice sentence**, the subject performs the action of the main verb. In a passive **voice sentence**, the action of the main verb is done to the subject. It is important to use active voice when possible to make your sentences more clear.

Active: Volatile organic compounds (VOCs) emitted from industries and vehicle exhausts can induce a series of environmental problems, including photochemical smog, broken ozonosphere, and environmental pollution.

Passive: A series of environmental problems, including photochemical smog, broken ozonosphere, and environmental pollution, can be induced by volatile organic compounds (VOCs) emitted from industries and vehicle exhausts.
Example of Passive Voice

Make the second sentence active

• Smartphone probes are in the spotlight recently. Comparing with traditional methods which are using fixed-location sensing infrastructures, for instances, inductive loop detectors, radars or video cameras, it has lower cost, higher scalability.
Example of Passive Voice

- Smartphone probes are in the spotlight recently.

Comparing with traditional methods which are using fixed-location sensing infrastructures, for instances, inductive loop detectors, radars or video cameras, it has lower cost, higher scalability.
Example with Active Voice

- Smartphone probes have been in the spotlight recently. They cost less and scale better than traditional methods that use fixed location sensing infrastructures such as inductive loop detectors, radars, or video cameras.
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- Editing
Concision

- *Eliminate vague words*, replace with specific ones
  - Wordy: The politician talked about several of the merits of afterschool programs in his speech (14 words)
  - Concise: The politician touted after-school programs in his speech. (11 words)

- *Change phrases* into single-words and adjectives
  - Wordy: The employee with ambition... (4 words)
  - Concise: The ambitious employee... (3 words)

- *Change unnecessary that, who, and which clauses* into phrases
  - Wordy: The report, which was released recently... (6 words)
  - Concise: The recently released report... (4 words)

- *Change Passive Verbs* into Active Verbs
  - Wordy: An account was opened by Mrs. Simms. (7 words)
  - Concise: Mrs. Simms opened an account. (5 words)
CONCISION

• Edit for efficiency

• Learn CPR:
  Concision
  Precision
  Revision
**CONCISION**

**Concision** - begin by cutting the needless and virtually meaningless words
Examples: ‘in a variety of ways’ ‘in terms of’

**Precision** - the key to making a paragraph’s meaning more precise is to choose clear, meaningful, representative nouns place them at the head of each sentence, and follow them with verbs that describe each noun’s meaning in the sentence.

**Revision** - once you have made the writing more concise and precise, revise the work
Increasing foreign competition and technological change, in a variety of forms, are now, as they always have been, disrupting various well-established patterns in terms of industrial organization. An apparent growing quality in the upward movement of economic change is also causing geographers’ interest in regional adjustment problems to grow as well: problems that often focus concern on regional economic decline in a context of low rates of national productivity improvement, on loss of international competitiveness in sectors such as automobiles and primary metals.
Recently, increasing foreign competition and technological change have disrupted well-established patterns of industrial organization. This acceleration in economic change has heightened geographers’ interest in regional adjustment problems, drawing attention to regional economic decline in such sectors as automobiles and primary metals. Regional economic decline often manifests itself through low rates of national productivity improvement and a loss of international competitiveness.
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Editing

• Take a break before reading
• Read out loud slowly
• Print it out (or expand on screen)
• Read it backwards sentence-by-sentence
• Ask someone to read out loud for you while you read silently
• Use Grammarly
• Make a writing consultation
Recognize Patterns of Errors

1. Avoid Nominalized Verbs – use of a verb, adjective, or adverb as a noun makes the sentence more wordy

Nominalized sentence: *The experience of children with respect to being at school for the first time is common.*
Non-nominalized sentence with subject and verb at front of sentence: *Many children experience worries when they go to school for the first time.*

2. Avoid the misuse of colons – colons connect two independent clauses (where you could replace the colon with the word because); or they connect an independent clause with a list

*Example:* *He got what he worked for: he really earned that promotion*
*Example:* *You may be required to bring many things: sleeping bags, pans, utensils, and warm clothing.*
Use Resources

There are several great grammar resources available to students who are native and non-native English speakers.

The OWL at Purdue has lots of mini-lessons and quizzes once you have identified your pattern of error.

https://owl.english.purdue.edu/exercises/
Conclusion

• Incorporate these 5 tools into your writing process
  – Transitions
  – Clarity: Active vs. Passive Voice
  – Concision: Learn CPR
  – Editing (punctuation, spelling, grammar)
    identify patterns of error, practice with resources
• Learn how to self-assess a piece of writing
• Examine your writing process
Additional Assistance
Sign up for a writing consultation at http://writingcenter.uh.edu/