

English Technical Writing

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Fall 2023 (112-1)
Class 10

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Feedback

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Only a couple responses

- “Everything is perfect”
- Nothing is ever perfect

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Complete Description

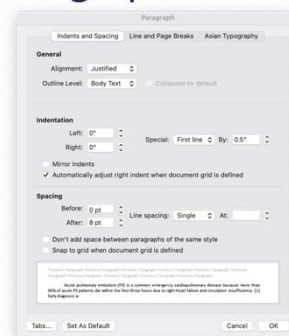
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Excellent job

- Good understanding of components
- Good understanding of support
- Not all corrections made
 - Especially early in course (Introduction)
 - Improving as time went on

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Paragraph format: Check



← First line indent

← Line spacing

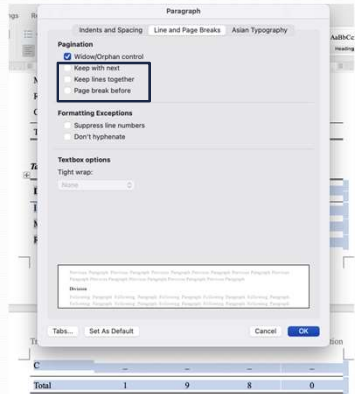
← Space before/after

← Snap to grid

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Tables

- Keep with next
- Keep lines together



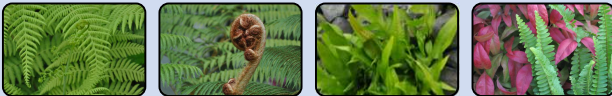
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Unexpected results

- Do not simply say “we did not find what we expected”
- Suggest an explanation:
Why might it be different in your field?

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Planning your Writing

Principles
of WritingArgument
Structure
OutlineAI Tools
Work Time

Assignment

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Variations on a theme

Section 10.1



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All academic writing

- Is (should be) structured as an argument
- Same components as research articles
 - Thesis, Conference paper
- Some components of research articles
 - Review articles
- Different components
 - Email, Resumes
- Benefit from following exemplars

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Planning for success

Section 10.2

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Evaluate your understanding

(10.1) How can adding a one-sentence summary of an article to a document you are writing improve your memory of that article?

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Difficulties: Motivation

- You may not know why the topic is important
- Remember:
 - The importance does not change from paper to paper
- Therefore:
 - You can borrow ideas (not sentences) from other papers

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Difficulties: Necessity

- You will need to read over 50 articles
 - Hard to remember each
- Suggestion:
 - Each time you read an article, write a summary
 - Make connections to other articles
- Therefore: we will write an 'Introduction'
 - Primarily you will write about 'Need'
 - Connections between, advantages and limitations

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Difficulties: Research goal

- You may not have a research goal yet
- Finding a goal is an important part of research
 - Essential for PhD
 - Find a gap/need
- Cannot be written in final form until your work is done
 - "We have achieved ..."
 - But you must have a tentative direction to start

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Difficulties: Foundation

- Purpose:
 - Allows others to understand your paper
 - Without reading previous articles
- How much do you need to include?
 - More if not well-known or multiple sources
 - More if closely related to your work – to clearly separate

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Difficulties: Research Details

- Details are important
 - But hard to remember
- Suggestion:
 - Write details of research and testing as you go
 - Clearer as you do it than later
 - Will have to be rewritten, but details are recorded

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Difficulties: Testing

- You must choose:
 - Which data to include
 - Order of presentation
- Lay out structure of argument first
 - Main point(s) you want your readers to know
 - What order would be easier for them to read?
 - May not be the same order you did the work
 - May not include all the tests you did or all the data

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Goal, Audience, Criteria

Section 10.3

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Evaluate your understanding

(10.3) Why should you consider your goals, audience(s), and the criteria by which your work will be judged?

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Goal

- Short term: graduate
- Long term: how does this contribute to future career?

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Audience

- How much do they know?
 - Thesis – almost everything
 - Conference – almost nothing
- How can you catch their attention?
 - Importance
 - Novelty

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Criteria

- Two audiences
 - Reviewers
 - Readers
- Reviewers
 - Within scope of journal/conference
 - Connection with past research
 - Clarity of method/design
 - Contribution/novelty

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Planning your Masterpiece

Section 19.1



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Evaluate your understanding

(19.1) What is the purpose of prewriting?

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Why prewrite?

Being a writer is a very peculiar sort of job:
it's always you versus a blank sheet of paper
(or a blank screen)
and quite often the blank piece of paper wins.

Neil Gaiman

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Painting: Different techniques

- Different media (type of paint)
- Different styles (e.g. how realistic)
- Different subject (landscape, city, people ...)
- Different artists

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Same basic order

- Sketch (amount of detail differs)
- Base layer (for at least part of the picture)
- Main elements (section by section or color by color)
- Details

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Stages in Painting – Simple



Base Layer Main Elements Details

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Stages in Painting – Complex

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Stages in Painting – Complex

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Stages in Painting – Complex

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Big picture

Exemplars → Research article

- Introduction
 - Components 1, 2, 3, (4)
 - 'Relatively' fixed order
- Process/Methods
 - Components (4), 5, (6)
 - 'Relatively' fixed order
- Testing/R&D
 - Components (6), 7, 8, 9
 - May cycle
- Conclusion
 - Component 10

- Brainstorm
 - What do I need to include
 - What do I already know
 - What to I need to find/do
- Linearize
 - Order within section
- Write
 - Start wherever easiest
- Rewrite
 - Organization, Clarification, Finalization

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Evaluate your understanding

(19.3) What methods can be used for brainstorming?

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Big picture – Brainstorming

Introduction How have others talked about this? Process

- Importance (think **borrow**)
 - Importance: society
 - Importance: field
- Need
 - Gray 2017
 - Black 2015
 - White 2015
 - Brc
 - Remaining problems
- Research goal (specify)

- First element (design 1)
 - First thing I did
 - Second thing I did
 - Third thing I did
- Second element (design 2)

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Big picture – Linearizing

Linearizing

- Topic sentence 1
- Topic sentence 3
- Topic sentence 2
- Topic sentence 4

Evaluate:
Does the order
make sense?

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Big picture – Linearizing

Linearizing

- Topic sentence 1
- Topic sentence 2
- Topic sentence 3
- Topic sentence 4

That's better!

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Big picture – Writing/Rewriting

Writing

- Topic sentence 1
 - Paragraph 1
- Topic sentence 2
 - Paragraph 2
- Topic sentence 3
 - Paragraph 3
- Topic sentence 4
 - Paragraph 4

Rewriting (Organization)

- Split or combine paragraphs
- Reorder paragraphs (again)
- Move sentences
- Add material
- Cut material

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Big picture – Rewriting

Rewriting

- Topic sentence 1
 - Paragraph 1
 - Topic sentence 2
 - Paragraph 2
 - Topic sentence 3
 - Paragraph 3
 - Topic sentence 4
 - Paragraph 4
 - Topic sentence 5
 - Paragraph 5
- Clarification
 - Make connections
 - Strengthen argument
 - Finalization
 - Grammar etc.
 - Format

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Argument structure outline

Section 19.2

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Evaluate your understanding

(19.4) Why is it useful to consider various organizational strategies before beginning to write?

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Which exemplar should I follow?

- Which is the best example for your writing?
 - Which journal (if from more than one)?
 - Which is most like your research?
 - Which is the best written?

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Presentations

11/14	Planning your writing (Ch 10, 19.1-2) Exercise 19.1 Argument structure outline	Charles
11/21	Brainstorming and linearizing (Ch 18, 19.3-4) Exercise 19.3 Topic sentence outline	Tran
11/28	Writing and organizing (Ch 20, 21) Exercise 21.1, 2 Coherence and conciseness	Neo
12/5	Clarifying your argument (Ch 22) Exercises 21.1, 2, 3 Connection and connotation	Hai
12/12	Final revision and final parts (Ch 23, 26.1-3) Exercises 26.1, 3 Abstract and title	Charleen

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Goal

- Rough section outline based on best exemplar
- See Table 19.1 and Exercise 19.1

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Argument structure outline

- Section 19.2, Exercise 19.1 (modified)
- Based on your best exemplar, plan your writing

Note change from textbook

Table 19.1 Argument structure outline based on the article Spatial Cognition and Integrity

Div.	Section Title	Length (Words)	Paragraphs / Components	Citations		
I	1 Introduction	800-1200	1 1a, 1b	0		
			2 2b	5-10		
			1 3b	0		
			1 Org.			
	2 Related Work	500-800	5 2b	20-25		
P	3 Preliminaries	400-600	2 4a	0		
			4 "My New Algorithm"	3500-4500	20 5d	0
			5 "Using the Algorithm"	800-1200	10 5c	0
T	6 Experiments	1500-2500	1 6a	0-5		
			4 7a, 8e	5-10		
			1 7a, 8d	0		
			6.1 Experimental Settings	1	6a	0-5
	6.2 "New vs. Old Algorithm"	4	7a, 8e	5-10		
	6.3 "Practical Application"	1	7a, 8d	0		
C	7 Conclusions	100-300	1 10a, b	0		

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Evaluate your understanding

(19.2) How does creating an outline based on argument structure of exemplars differ from a traditional content outline?

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AI Tools



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ChatGPT/Bard

- Summarize articles
- Suggest related articles
- Explain writing errors and suggest ways to revise
- ChatGPT – more creative
- Bard – connected to the Internet, more current

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ChatGPT prompts

- 一般批改文章指令(如需批改後版本,可要求給 corrected version)
- Edit the following article, showing revisions in a table, including the original text, the revised version, and a detailed explanation in Chinese for the modifications.
[Attach the article].
- Other Prompts for ChatGPT
 - ✓ Find grammatical errors and incorrect expressions
 - ✓ Correct
 - ✓ Edit
 - ✓ Refine

Provided by 余綺芳老師

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Bard prompts

- Summarize the parts of the following article that relate to [our topic], and highlight the parts of the article the information comes from
[copy and paste article]
- Find recent articles relating to the topic you just summarized

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Work Time

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Work time

- Talk with your partner about your plan
 - Which exemplar(s) are most like your research
 - Which exemplar(s) are easiest to read (why?)
- Work individually on Argument outline (Ex. 19.1)
 - Add paragraphs expected, citations/component
- Check one another's outline
 - Compare with exemplar description

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Try the AI tools

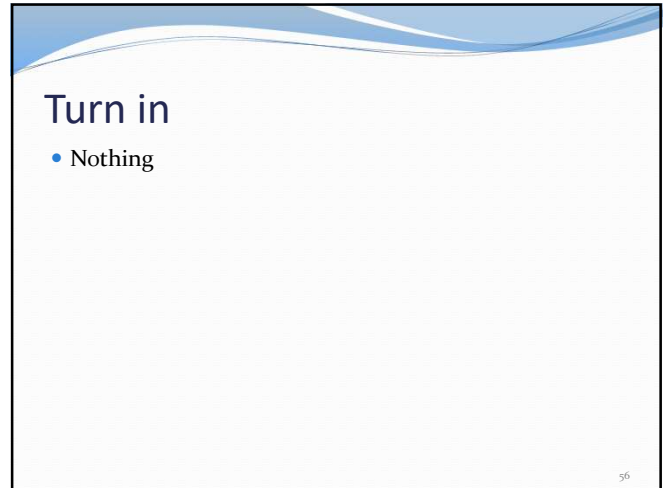
- Try Bard (or ChatGPT)
 - Find the newest articles on a topic
 - Find articles with research similar to a key article
 - Summarize the content of new articles you find
 - “as it relates to this topic”

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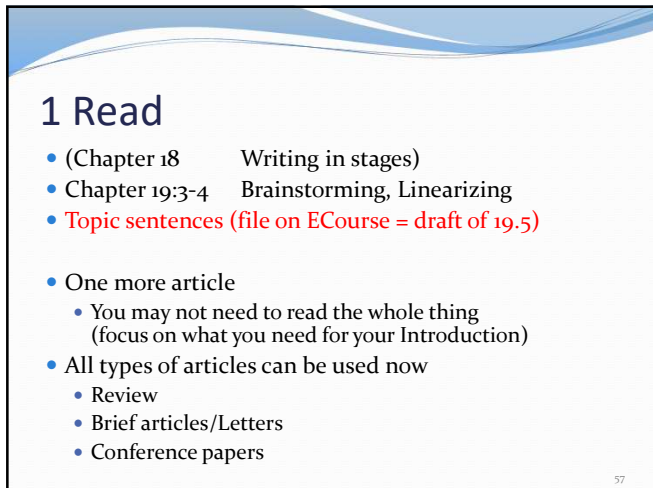
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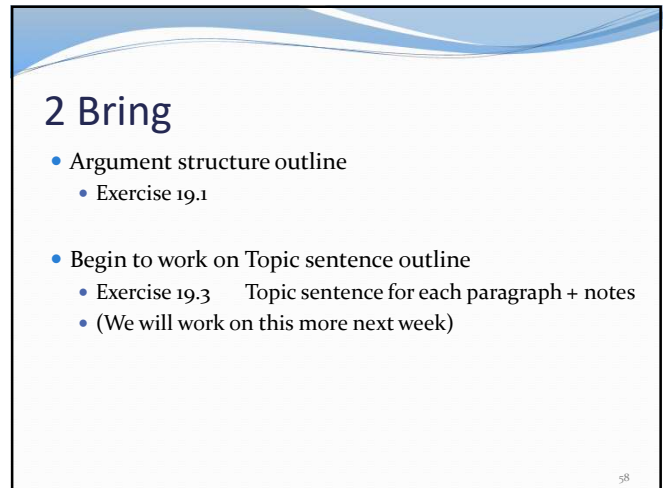
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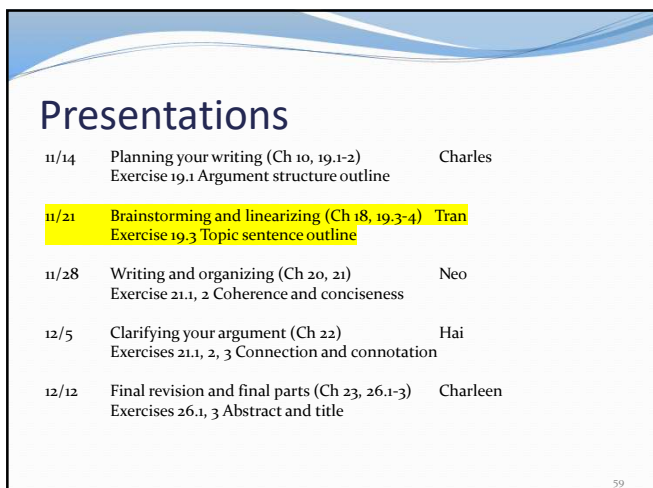
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