# Lecture 7

WRITING PROCESS 4:

THE PROTOTYPE - WRITING THE FIRST DRAFT; SELF-REVIEWING

Lecturer: J. Lawrence

### Focus statement

The writing of the first draft of your scientific research paper requires your unwavering commitment to creating an original masterpiece. In order to attain this you, **MUST** follow the instructions provided for this important assignment, adhere to the rules that guide scientific writing as well as the conventions of the APA documentation style.



Scientific writing, like compositions in other disciplines requires a basic structure.

Start the writing of your collaborative research paper with the end in view.

❖ Begin with a very clear idea of your destination, so that the steps you take will lead you to right direction. Instructions for the creation of your prototype

Your team's 1500 word research paper will be done in a minimum of two drafts, and according to the APA documentation conventions. It must show evidence of 6-10 credible and reliable sources including a minimum of four scholarly sources (for example journal articles, book chapters). Make every effort to find sources that meet these requirements. The word count, which must be printed at the end of the paper, does not include the reference list. A soft copy of the paper must be uploaded to Turnitin before the hard copy is handed in to your instructor.

Both formats must be submitted on time in order for a grade to be assigned.

# Some features of scientific writing

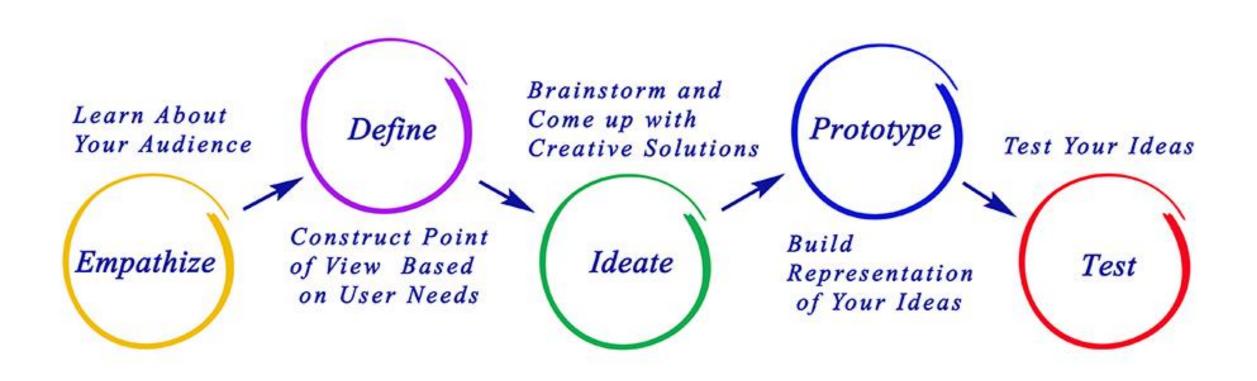
- ❖Before you start composing the first draft of your scientific research paper, there are some important points that you should remember:
  - ❖ "In scientific writing, keep things as simple as possible, yet no simpler"(Einstein, as cited in Alley, 2018, p. 15).
  - Scientific writing requires balance in terms of precision and clarity (Alley)

# Some features of scientific writing (cont'd)

- ❖Good scientific writing requires composers to connect ideas (Alley, 2018).
- Accessible scientific writing does not use jargon unnecessarily.
- Good scientific writers provide explanations/definitions for jargon.
- Scientific writing is presented in different parts/sections.
- Scientists avoid using quotations in their writing.

#### From the outset you were instructed to use the

## Design Thinking Process



# Since the course started you have:

- decided on the audience for whom you are designing your prototype (i.e.your scientific research paper).
- defined your narrowed topic.

engaged in the ideation process (generated ideas).

# Writing the first draft

By now you should have done the following:

- Established the focus of your scientific research paper.
- Identified, evaluated and selected relevant evidence from reputable sources.

# You may also have:

- written the introduction to your paper;
- formulated an allencompassing thesis
  statement (which you typed
  at the end of the introductory
  paragraph;
- decided which pattern(s) of organization you will use in your paper.



write the first draft of your scientific research paper by:

developing the body paragraphs

writing the conclusion.

Let us examine what is required for the development of the body paragraphs.

First Heading

# Discussion



- You will create a section called Discussion- in which you will present your original ideas, supported by evidence you garnered from your research on your narrowed topic.
- Then, create sub-headings for each of the three (or four) claims you will develop.

N.B. You **must connect** your discussion to the narrowed topic and the claims.



- Develop your body paragraphs chronologically based on the order in which you presented the **three main ideas** you included in the thesis statement.
  - **⋄Main Idea I (first)**
  - **♦ Main Idea II (second)**
  - **♦ Main Idea III (third)**
  - (Main Idea IV- fourth\*)
    - \*optional

See the following colourcoded suggested structure for developing **six** body paragraphs: **Claim I: Transition from introduction** 

**Sub-heading** 

Para. 2: Start developing the first main idea in this paragraph.

- Begin the paragraph with your idea/voice (using an appropriate topic sentence).
- Make reference (s) to source (s) only after you have established your voice.
- End the paragraph with your analysis of the information that you used from other sources.

**Transition** 

Para. 3: Continue developing the first main idea in this paragraph.

- Begin the paragraph with your idea/voice (using an appropriate topic sentence).
- Make reference (s) to source (s) only after you have established your voice.
- End the paragraph with your analysis of the information that you used from other sources

**Claim II: Transition from Claim I** 

**Sub-heading** 

Para. 4: Start developing the second main idea in this paragraph.

- Begin the paragraph with your idea/voice (using an appropriate topic sentence).
- Make reference (s) to source (s) only after you have established your voice.
- End the paragraph with your analysis of the information that you used from other sources

**Transition** 

Para. 5: Continue developing the second main idea in this paragraph.

- Begin the paragraph with your idea/voice (using an appropriate topic sentence).
- Make reference (s) to source (s) only after you have established your voice.
- End the paragraph with your analysis of the information that you used from other sources

**Claim III: Transition from Claim II** 

**Subheading** 

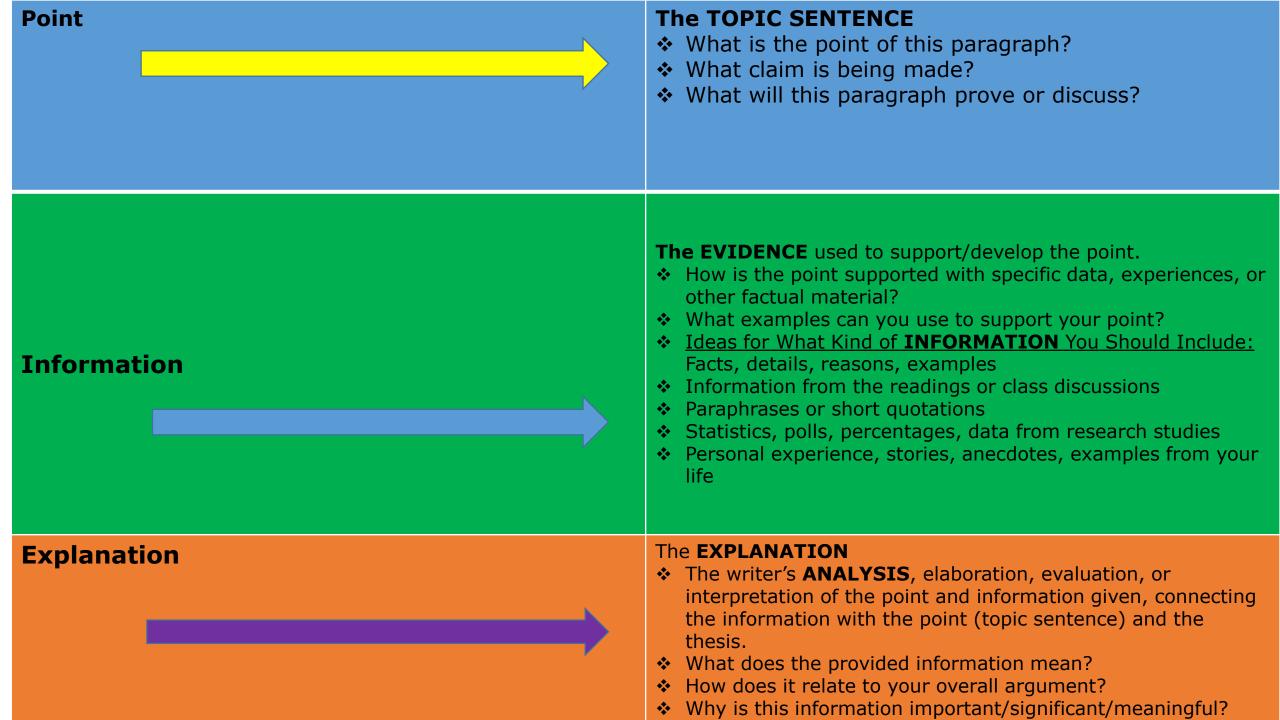
Para. 6: Start developing the third main idea in this paragraph.

- Begin the paragraph with your idea/voice (using an appropriate topic sentence).
- Make reference (s) to source (s) only after you have established your voice.
- End the paragraph with your analysis of the information that you used from other sources

### **Note very carefully:**

- The suggested structure is recommended for your FOUN1014 collaborative research paper <a href="mailto:only.">only.</a>
- ❖You should try other possibilities for shorter or longer essays you may be required to write for other courses.

❖You are encouraged to try the PIE strategy as described by Ashford University (2013), for the development of each body paragraph. See the following:



### Pay keen attention to analysis

❖Analysis is an important characteristic of academic writing (Alley, 2018; Thonney, 2016; Milson-Whyte, 2015).

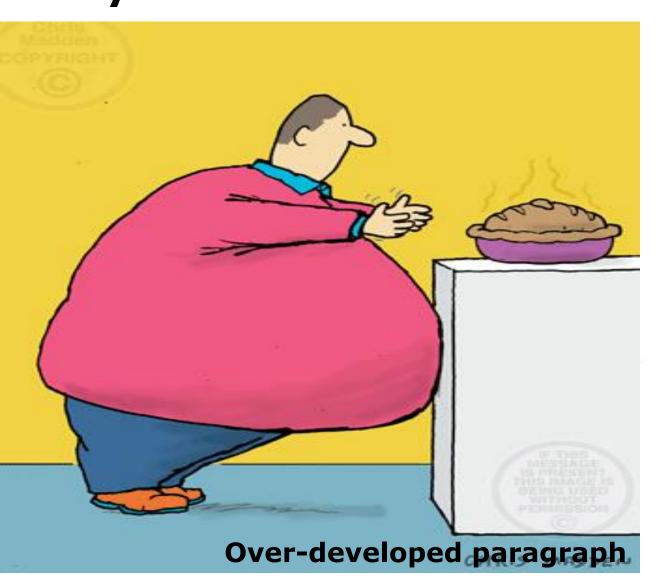
Analysis is the breaking down of a subject-to determine how the parts are related or how they combine to achieve a purpose (Thonney).

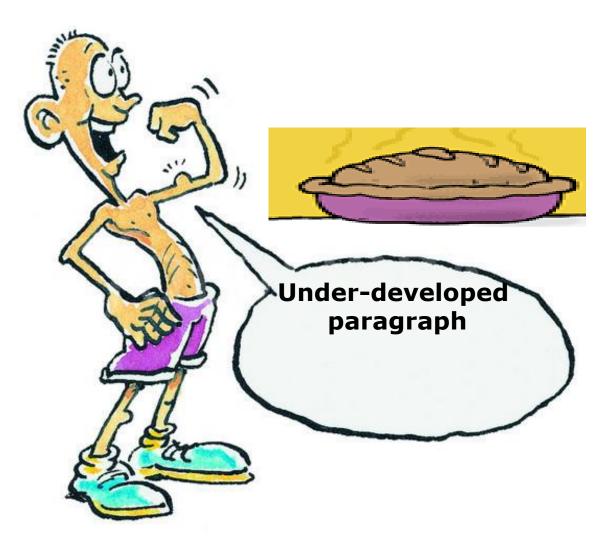
The PIE strategy for developing paragraphs works well for budding scientific writers.

#### Developing the body paragraphs the PIE way

- Use your voice (i.e. your own words) to introduce the main POINT you intend to develop in each body paragraph in a clear and comprehensive declarative sentence.
- Integrate sound, relevant and reliable INFORMATION - evidence from experts to support the development of your idea.
- Include EXPLANATION for the information that you integrated from sources.

# Try PIE but make sure to avoid these scenarios





#### **Analysis**

- When you try PIE, remember that critical analysis should be predominant in your body paragraphs.
- A useful way to check the balance in your team's paper is to use two colours to differentiate your thoughts from the relevant ideas your selected from your credible sources.

You need to make sure that the colour that represents your team's voice/critical analysis is dominant in your collaborative scientific research paper.

#### **ACTIVITY**

- Read the following body paragraphs and say what you observe about:
- The use of sub-headings
- The topic sentence
- The use of sources
- The PIE strategy

#### **PIE** paragraph Example

Excessive use of smartphones and impaired cognition

Excessive use of smart phones by adolescents affects their sleep pattern and mental prowess. A longitudinal study of 1,886 Australian high school students aged between 12 and 18 reported that poor-quality sleep associated with late-night texting or calling was linked to a decline in mental health (Vernon, Barber & Modecki, 2015). Therefore, when adolescents use their smart telephones throughout the night, it causes them to become mentally drained. It can also be extrapolated from the findings that adolescents who tend to leave their smart telephones turned on at night so that they do not miss incoming text messages and calls, compromise their cognitive functions during sleep time. Their minds are distracted and as a result they are exhausted during their wake-time, which means that they cannot function optimally and this has negative implications. implications.

#### **PIE** paragraph Example (cont'd)

The overindulgence in the use of smart telephones at night by adolescents has two further negative implications for their cognitive health. Firstly, since the brain is the control centre of the body, it regulates functions including thought processing, memory and speech (Aboitiz, 2018; American Association of Neurological Surgeons, 2018). These functions are central to adolescents' performance in mental engagements including their ability to perform at school. Brains that are overworked cannot sufficiently engage in mental processes such as critical thinking and writing which are essential to learning transactions. The critical reading and writing skills that are required for composing a research essay are apt examples.
Secondly, brains that are not sharp cannot adequately concentrate to make informed decisions such as those required for daily living, like solving problems and making the right choices from possible options. Therefore, the excessive use of smart phones by adolescents has the potential of reducing the quality of their academic outcomes and social lives.

#### **Observations**

- ❖The writer typed the sub-heading before starting the paragraphs for each claim.
- \*(Remember that the claims are the main points proposed in the thesis statement situated at the end of the introduction.)
- ❖Notice that the writer utilized the PIE strategy for the writing of the body paragraphs
- ❖Note very carefully that the writer did not over depend on information from the sources.
- The writer chose relevant information; integrated it succinctly and analyzed it.

### Remember to include balanced perspectives

Remember that in developing each paragraph, you **MUST** remember:

No body paragraph should be over developed

No body paragraph should be under-developed



# Integrating Source Informatic

• APA 7<sup>TH</sup> EDITION DOCUMENTION STYLE

---Some guidelines for integrating sources in the body paragraphs---



# Integrating information from sources the APA way

**❖Example 1-** in-text citation in body of the paragraph- one author:

Robb (2017) uses the term screenagers to refer to adolescents who send long uninterrupted hours on their smart telephones and other electronic devices.

**Example 2-** in-text citation parenthetical-one author:

One researcher uses the term screenagers to refer to adolescents who spend long uninterrupted hours on their smart telephones and other electronic devices (Robb, 2017).

# Integrating information from sources the APA way (cont'd)

**❖Example 3-** in-text citation in body of the paragraph-two authors:

Aboitiz (2018) and the American Association of Neurological Surgeons (2018) noted that the brain regulates the thoughts, memory and speech of human-beings.

**❖Example 4-** in-text citation parenthetical-two authors:

The brain regulates the thoughts, memory and speech of human-beings (Aboitiz, 2018; American Association of Neurological Surgeons, 2018).

# Integrating information from sources the APA way

❖If there are more than two authors, all in-text citations include the name of the first author followed by et al. ( meaning and others). There is no full stop after "et," but there is a full stop after "al."

# **Example 5 -in the body paragraph** three or more authors:

Vernon et al. (2015) reported that poorquality sleep is associated with late-night texting or calling was linked to a decline in mental health.

## **Example 6- parenthetical - three or more authors:**

Poor-quality sleep is associated with latenight texting or calling was linked to a decline in mental health (Vernon et al., 2015).

#### As your team writes the first draft remember to:

- stick to your narrowed topic (Your content should be relevant).
- Ink the content you are creating to the thesis statement.
- present the headings (Write appropriate content under appropriate headings).
- organize your line of reasoning (It should be logical).
- use your voice (It should be objective.)
- write explanations to illustrate your ideas (They should be clear.)
- construct sentences effectively (They should be precise but detailed.)
- consider economy of word use (Write ideas concisely, yet comprehensively.)
- structure and present balanced perspectives

#### **Consider economy of words**

- Avoid redundancy by using as few words as possible to express your ideas.
- For example, the phrase "due to the fact that" can be consolidated to a single word, "because."
- ❖Another way to reduce redundancy is to consider the precise meaning of words.
- For example, because "unanimous" means endorsed by everyone, it is redundant to use the phrase "completely unanimous.

#### **Consider:**

writing focused sentences

\*keeping sentences 10-25 words in length (on average)

developing unified paragraphs

❖keeping paragraphs ¼ - ½ page long (on average)

# Final Heading

# Conclusion

### Conclusion

- Create a sub-heading- Conclusion- before you start your concluding paragraph.
- ❖ Your conclusion should be a synthesis of main ideas that you developed in your paper. You might wish to make recommendations in this paragraph if you used the problem solution strategy.
- Write this final paragraph in such a way that it helps your intended audience to understand why you wrote your scientific research paper.
- ❖ Pay close attention to what you wish for them to think about after they have read your paper.
- **❖ N.B. Do not include/cite sources.**

# Compile a list of references

See the APA documentation resource that is posted in the FOUN1014 container on OurVLE

#### OR

Consult the 7<sup>th</sup> edition of the APA documentation manual.

❖Also, see slides #43 & #44 for an example:

# In the end, your draft should have the following sections: (Approximately) Eight (OR ten) paragraphs:

- ❖Introduction-1 paragraph-which should end with the thesis statement
- ❖Discussion- 6-8 body paragraphs-2 paragraphs for each of the three (OR four main points.
  - This section should be presented under sub-headings created based on the main ideas presented in the thesis statement (See Slide #13)
- ❖Conclusion- 1 paragraph- there should be no in-text citations in your conclusion
- References (on a separate page)

Individual self-review of scientific research paper

 Each team member will work independently on the self-review, discuss your review with other team members and collaboratively revise the draft, based on mutual observations and decisions.

# Selfreviewing

- Some of the purposes of doing careful self-review of your scientific research paper are:
  - to provide opportunities for you to own your writing
  - to promote self-regulation of your writing
  - to test if you have developed your prototype as proposed in the plan you designed
  - to identify gaps in your writing
  - to get you to decide why and how you should fill the gaps

# Self-Reviewing (cont'd)

- to help you determine whether you have used information from sources in an acceptable manner
- to identify omissions
- to check if you have critically analyzed information you have cited from sources
- to self-identify and self-correct errors in interpretation, grammar etc.
- to get you to determine if you have satisfied the word limit
- to double check the quality of your sources

### **Self-reviewing**

Your tutor will provide guidelines for you to follow for the self-reviewing of your team's scientific research paper

Also, please see information that is posted on the course web site

# Final thought

To achieve the best outcomes for their scientific research paper, FOUN1014 students should follow the instructions provided and adhere to the principles that guide scientific writing. They should also pay keen attention to the conventions of the APA documentation style and exemplary academic writing done in the field of science.

#### References

- Ashford University (2013). Good paragraph development: As easy as PIE. https://awc.ashford.edu/essay-dev-pie-paragraph.html
- Aboitiz, F. (2018). A brain for speech. evolutionary continuity in primate and human auditory-vocal processing. *Frontiers in Neuroscience*. doi.org/10.3389/fnins.2018.00174
- Alley, M. (2018). The craft of scientific writing (4th ed.). New York: Springer.
- American Association of Neurological Surgeons. (2018). The anatomy of the brain. https://www.aans. org/Patients/Neurosurgical-Conditions-and-Treatments/Anatomy-of-the-Brain
- Mei, X., Zhou, Q., Li, X., Jing, P., Wang, X. & Hu, Z. (2018). Sleep problems in excessive technology use among adolescent: a systemic review and meta-analysis. *Sleep Science and Practice*, 2(9). doi.org/10.1186/s41606-018-0028-9
- Milson-Whyte, V. (2015). *Academic writing for Creole-influenced students*. Kingston, Jamaica: The University of the West Indies Press.
- Pal, P. (2016). What is design thinking and design thinking process? https://think360studio.com/what-is-design-thinking-and-design-thinking-process/

#### References contd.

- Robb, M. B. (2017). Screenagers: Growing up in the digital age. *Journal of Children and Media* 11(3),1-4. doi: 10.1080/17482798.2017.1341121
- Thonney, T.(206). Academic writing. New York: Oxford University Press.
- Vernon, L., Barber, B. L. & Modecki, K. L. (2015). Adolescent problematic social networking and school experiences: The mediating effects of sleep disruptions and sleep quality. *Cyberpsychology, Behavior & Social Networking*, 18(7), 386-392. doi:10.1089/cyber.2015.0107.

N.B.Graphics used in the presentation were retrieved from https://www.google.com