Academic writing for graduate students

Jieun Son
School of Industrial Management Engineering
Korea University
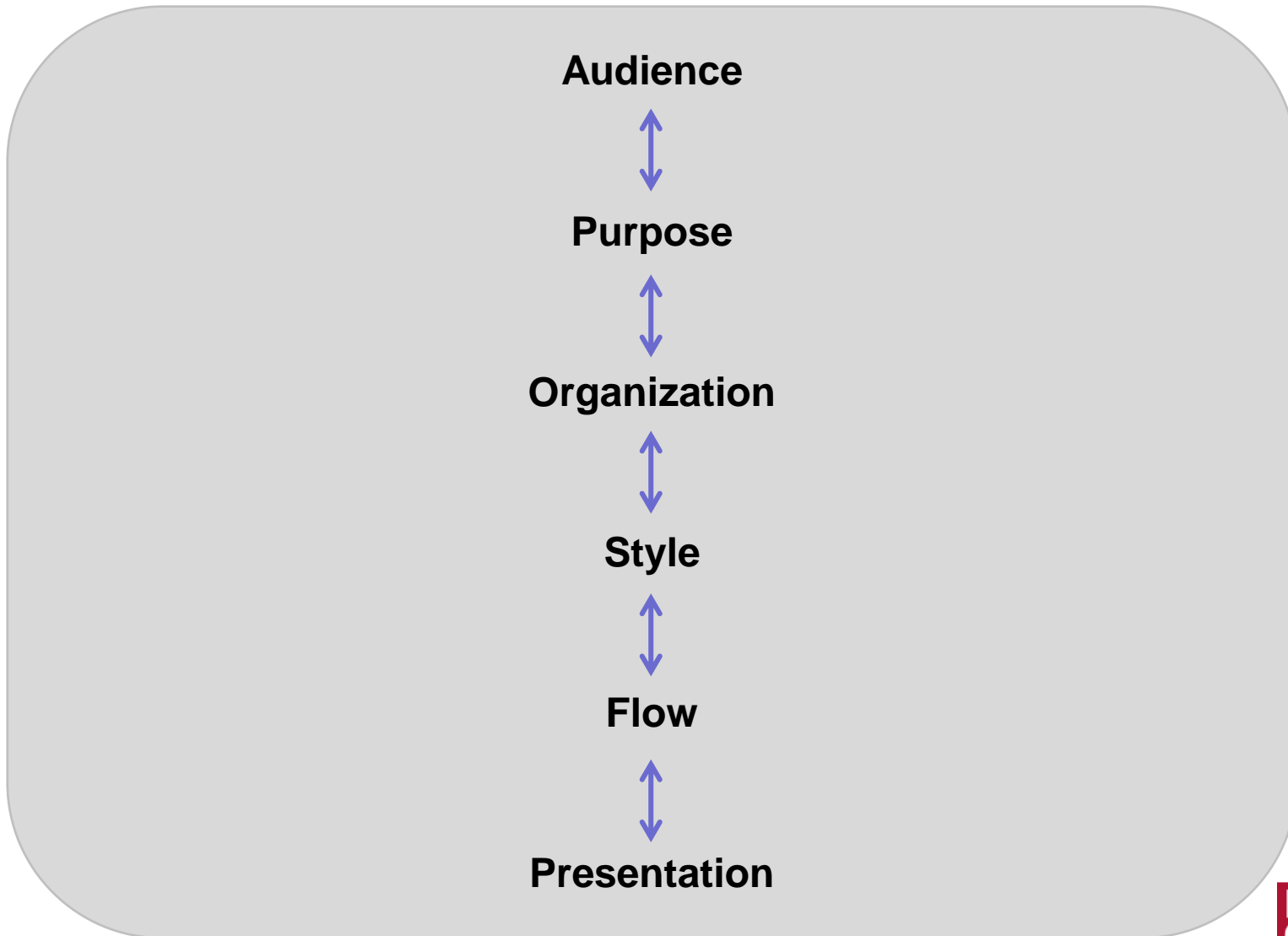
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Audience

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Flow

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Presentation

1. An approach to academic writing

Components

- ➢ **Abstract**

- ➢ **Introduction**
  - • Background
  - • Purpose
  - • Will do (Plan, Recipe)
  - • Overview
  - • Plan of structure

- ➢ **Body**
  - • Literature review
  - • Hypothesis
  - • Methodology
  - • Result
  - • Analysis
  - • Discussion

- ➢ **Conclusion**
  - • Summary
  - • Limitations
  - • Contributions
  - • Applications
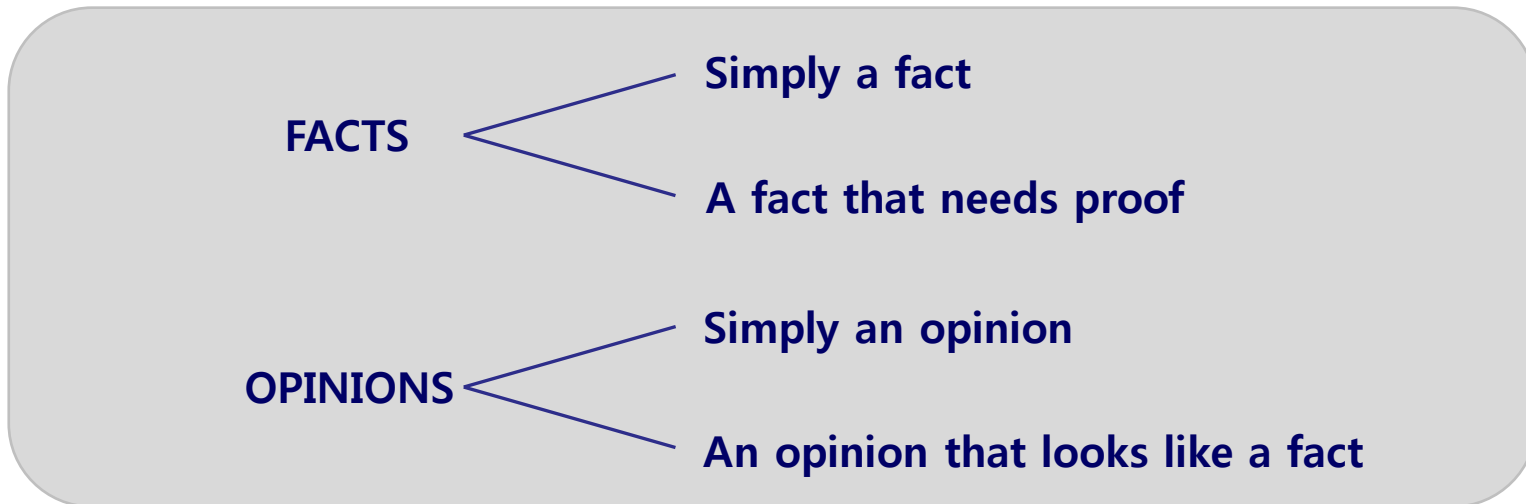
1. An approach to academic writing

Facts & Opinions

- ➢ **Facts**
    - • Objective statements of truths
    - • But some facts are not obviously or immediately true
    - • All facts need to be proven by the scientific method

- ➢ **Opinions**
    - • Personal beliefs that might be based on facts

```
FACTS ──────── Simply a fact
        ──────── A fact that needs proof

OPINIONS ──────── Simply an opinion
          ──────── An opinion that looks like a fact
```

1. An approach to academic writing

Two verbs VS Single verbs

> **Choose a single verbs to reduce the informality of the sentence**

1. Many software manufactures in developed countries put up with widespread copyright violations in less developed countries and often even offer local versions of their products.
   (put up with → tolerate)

2. Scientists at looking into innovative drug delivery systems that can transport and deliver a drug precisely and safely to its site of action. **(looking into → investigating)**

3. The purpose of this paper is to try to figure out what is lacking in our current understanding of corrosion and corrosion protection in concrete. **(figure out → determine)**

4. Researchers have come up with plug-in hybrid vehicles that can draw from two sources of energy.
   (come up with → developed)

5. Rice and aquatic products make up a major part of the diet of the people in the Mekong Delta, Vietnam.
   (make up → constitute)

6. The use of touch screen voting systems could get rid of many problems associated with traditional paper-based ballots. **(get rid of → eliminate)**

7. World consumption of pesticides has gone up to 2.6 million metric tons. **(gone up to → reached)**

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2. Annotated bibliography

Annotated bibliography

➢ **The annotated bibliography consists of two elements**
   - Citation
   - Annotation

➢ **It should have several sentences summarizing the main points or ideas found in the item It should then include your own statement evaluating the quality of the item and/or relating the item to your own research topic**

➢ **For a longer annotated bibliography, it is appropriate to divide into sections or topics**

2. Annotated bibliography

Annotated bibliography

[1] V. Vapnik. (1997). *Support-vector networks*. McGrawHill, pp.154-299.

This paper suggest The basic Support Vector Machine (SVM) takes a set of input data and predicts, for each given input, which of two possible classes forms the output, making it a non-probabilistic binary linear classifier. Given a set of training examples, each marked as belonging to one of two categories, a SVM training algorithm builds a model that assigns new examples into one category or the other. It is very famous algorithm for classification since there are high accuracy rate with an experiment.

[2] J.R . Quinlan. (1986). Introduction of Decision Tree. *Machine Learning*, 1:81-106.

'Decision Tree' is a well-known machine learning approach to automatic induction of classification trees based on training data. Applied to document classification, Decision Tree algorithms are used to select informative words based on an information gain criterion, and predict class of each document according to the occurrence of word combinations in the document. Thus, the strong point of Decision Tree is interpretable. Authors explain the mechanism of this algorithm and design the process of experiment.

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3. Summaries

Considerations before writing a summary

➢ **Always try to use your own words**

➢ **Include enough support and detail so that your message in clear**

➢ **Make sure the summary reads smoothly**

➢ **If it is impossible to you your own words, then quote the material**

3. Summaries

Summaries

➢ **To inform your understanding and guide your choice of important information from the text, you could use these questions**

- What is the issue or problem addressed in the publication?
- Why is this important?
- What was done to address or solve it?
- How does the solution or treatment work?
- Who did it?
- What about the research is different/innovative/advantageous?

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3. Summaries

Paraphrasing

➢ **Use synonym**
- Change the original words to something different

Scientists found a second species of eelpout on a voyage last month to the Kermedec Trench.

Researchers discovered a new species of eelpout on a recent trip to the Kermedec Trench.

➢ **Change the grammar**
- Rearrange the structure of the original sentence
- Combine sentences and swap their order

Researchers discovered a new species of eelpout on a recent trip to the Kermedec Trench.

A new eelpout species inhabiting waters near the Kermadec Trench has just been discovered by researchers.

3. Summaries

Paraphrasing

➢ **Cite the original source**
- This guarantees that you won't be accused of plagiarism
- You use a reporting verb to state where you got the information in your paraphrased sentence

A now eelpout species inhabiting waters near the Kermadec Trench has just been discovered by researchers

The New Zealand herald reported that a now eelpout species inhabiting waters near the kermadec Trench has just been discovered by researchers.

A new eelpout species inhabiting waters near the Kermadec Trench gas just been discovered by researchers, according to The New Zealand Herald.

In an article published in The New Zealand Herald, it was reported that a new eelpout species inhabiting waters near the Kermadec Trench has just been discovered by researchers

3. Summaries

Paraphrasing

➢ **Cite the original source**
  • This guarantees that you won't be accused of plagiarism
  • You use a reporting verb to state where you got the information in your paraphrased sentence

	Verbs and Frequency					
	1	2	3	4	5	6
Biology	Describe	Find	Report	Show	Suggest	Observe
Physics	Develop	Report	Study	Find	Expand	
Electrical Eng	Propose	Use	Describe	Show	Publish	Develop
Mechanical Eng	Describe	Show	Report	Discuss	Give	Develop
Epidemiology	Find	Describe	Suggest	Report	Examine	Show
Nursing	Find	Suggest	Report	Identify	Indicate	Show
Medicine	Show	Report	Demonstrate	Observe	Find	Suggest
Marketing	Suggest	Argue	Find	Demonstrate	Propose	Show
Applied linguistics	Suggest	Argue	Show	Explain	Find	Point out
Psychology	Find	Show	Suggest	Report	Demonstrate	Focus
Sociology	Argue	Suggest	Describe	Note	Analyze	Discuss
Education	Find	Suggest	Note	Report	Demonstrate	Provide
Philosophy	Say	Suggest	Argue	Claim	Point out	Think

4. Critiques

overview

➢ **Critique is a french word that means "a critical assessment"
(positive, negative, or a mixture of both)**

➢ **Critiques may have various structures, but the simplest is a short summary followed by
an evaluation**

Critiques in paper

➢ **To help students develop habits of analytical reading**

➢ **To give students a better sense of the scholarly expectations in their chosen field**

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5. Commentary

overview

- ➤ **Data-focused writing subtasks**

- ➤ **The data is displayed in a table, graph, figure, or some other kind of non-verbal illustration**

- ➤ **The data may come from a source or it may be the outcome of your own work**

- ➤ **In a technical report, the commentary may be much longer than published journal articles**

5. Commentary

Structure of data commentary

➢ **Data commentaries usually have these elements in the following order**
- Location elements and/or summary statements
- Highlighting statements
- Discussions of implications, problems, exceptions, recommendations, or other interesting aspects of the data

Location statement + Indicative summary

Highlighting statement in terms of a linking *as* clause

Interpretations and implications

Table 4 shows survey respondents' self-reported involvement in online misbehavior during the previous 12 months. According to the table, the most common online misbehaviors is "unauthorized downloading of film and music." As can be seen, just over three out of four students in the study have downloaded music or film more than once a year.   (…)

It is worthwhile to note that these different forms of online misbehavior seem to be patterned according to the degree of the perceived to be criminal (e.g., using someone's credit information) were less frequent than activities that, although unlawful, many do not view as criminal, such as downloading movies and music.   (…)

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5. Commentary

Location elements and summaries

➢ **Examples with active voice**

1. Table 5 shows the types of internet misbehavior common among university students.
2. Table 6 provides summary statistics for the variables used in the analysis.
3. Figure 1 plots wealth as a function of age.

➢ **Examples with passive voice**

1. The types of internet misbehavior common among university students are shown in table 5.
2. Summary statistic for the variables used in the analysis are provided in Table 6.
3. Wealth as a function of age is plotted in Figure 1.

5. Commentary

Location elements and summaries

➢ **Indicative VS Informative**

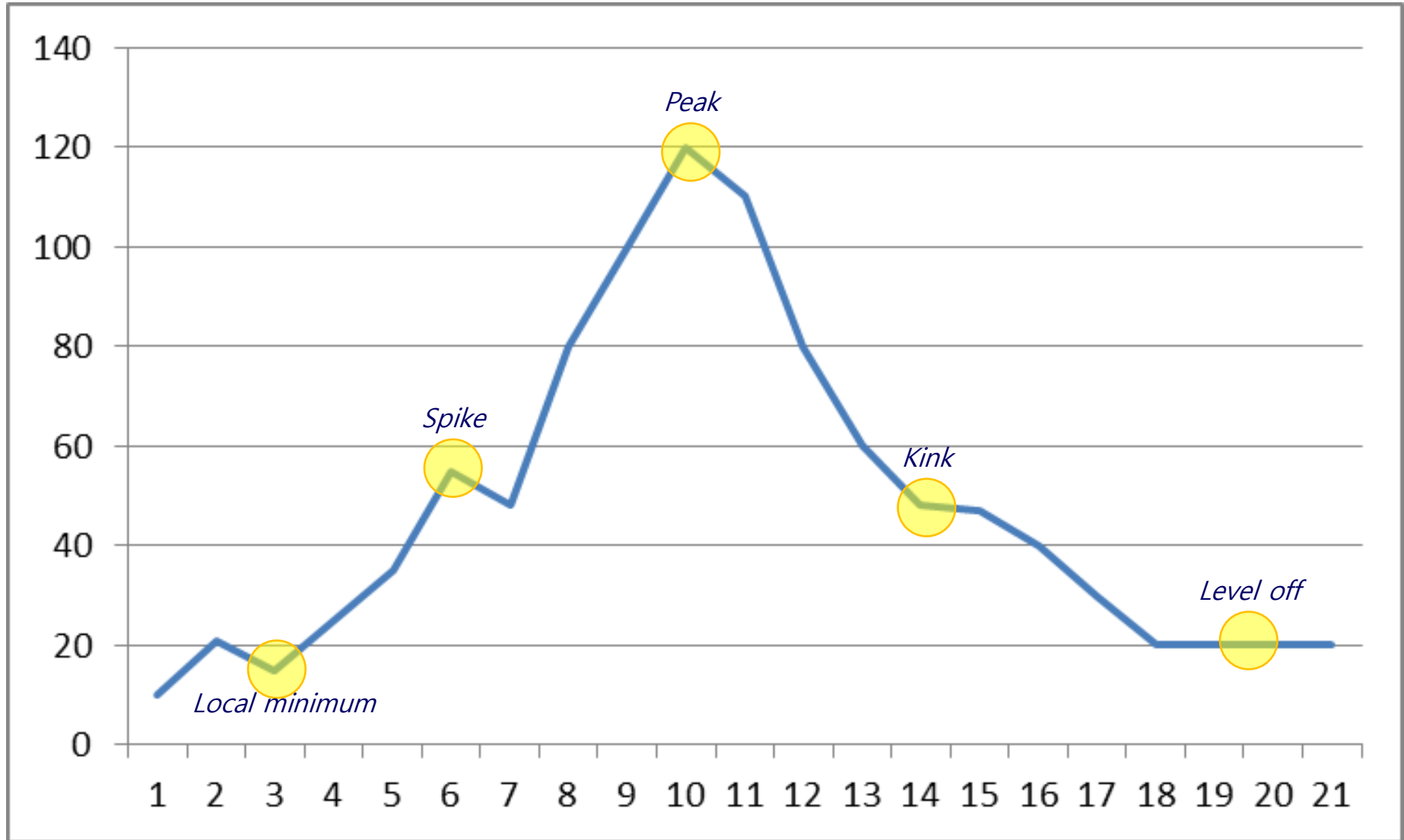|	Indicative (general summary)	Informative (highlighting a specific aspect of the data)
Display	Yes	No
Provide	Yes	No
Give	Yes	No
Present	Yes	No
Summarize	Yes	No
Illustrate	Yes	Yes
Reveal	Yes	Yes
Indicate	Yes	Yes
Demonstrate	Yes	Yes
Show	Yes	Yes
Suggest	No	Yes
Imply	No	Yes

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5. Commentary

Highlighting statements

➢ **Points that can be supported by the detail of the data**

➢ **An opportunity to show your intelligence**

➢ **An opportunity for you to demonstrate that**
- You can spot trends or regularities in the data
- You can separate more important findings form less important ones
- You can make claims of appropriate strength

➢ **Try to avoid**
- Simply repeating all the details in words
- Attempting to cover all the information
- Claiming more than is reasonable of defensible

5. Commentary

Dealing with graphs

6. Outline

Contents

A. Introduction

B. Literature review

C. Methodology

D. Analysis and Discussion

E. Conclusions and recommendations

F. References

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6. Outline

Details

A. Introduction
- ① Describe the problem
- ② Describe the importance of the problem and why your analysis is necessary
- ③ Describe jargon terms, especially if they are crucial to your paper
- ④ Outline the remainder of your paper

B. Literature review
- ① Explain the scope of the literature review you conducted
- ② Summarize the relevant literature.
- ③ Analyze the relevant literature. (Compare it. Criticize it.)
- ④ Describe how the results of your review will be applied to your research.
- ⑤ Provide the research questions you hope (hoped) to answer.

C. Methodology
- ① Identify the method you used to identify and locate data
- ② Explain the rationale you used for selecting the data to analyze.
- ③ Explain the procedures you used for analyzing your data.
- ④ Identify the criteria you used for evaluating the information you found.

D. Analysis and Discussion
E. Conclusions and recommendations
F. References

6. Outline

Details

A. Introduction
B. Literature review
C. Methodology
D. Analysis and Discussion
 ① Evidence and ideas from sources should be given and cited
 ② The concepts to which you refer should be organized by subtopics
 ③ Sources of information (citations) should be grouped by concepts; information should not be randomly given
 ④ Grouping of information (and citations) may be related to your research questions, as well
 ⑤ The validity of sources should be stated in a way that supports your answers to your research questions

E. Conclusions and recommendations
 ① Identify and synthesize findings, even if all you did was a literature review.
 ② Systematically answer your research questions, even if all you did was a literature review
 ③ Present and examine your research limitations.
 ④ Provide recommendations for: Applications, Future research …

F. References

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7. Peer review

Considerations as you review others' work

A. What is the research topic and purpose of the research paper?

B. What is the research question(s)?

C. Is that research question or those questions grounded in previous research? Has the author done an adequate review of the literature? Is the context clear to you, the reader?

D. What jargon is the author using? Can you understand all the terms and concepts that they are using?

E. What methodology and methodological framework did the author use? Can they explain it in a way that you can understand it?

F. Are you able to identify any logical fallacies that the author has mistakenly presented?

    •   Jumping to a conclusion (causality vs. correlation)

    •   Circular argumentation ("X happened because it happened")

G. Identify mistakes with citations

    •   missing citations, incorrect style of citations

H. Identify language mistakes

    •   grammar, collocations and vocabulary usage, punctuation, capitalization

I. Be very critical. It's not useful if you ignore that you're feeling confused or that something might be incorrect. Even if you're not sure, point it out and discuss it with the author. The most useless kind of feedback is "It looks great!"
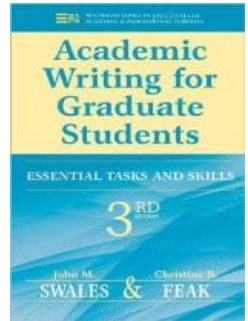
Thank you !

Appendix

- **Reference**
  - Swales, John M. & Christine B. Feak. *Academic Writing for Graduate Students: Essential Tasks and Skills* (3rd Edition), published on July 31, 2012 by The University of Michigan Press, Ann Arbor, Michigan, USA.

- **Citation information**
  - www.bethel.edu/library/research/cite-sources

- **The most useful dictionaries for Koreans**
  - Cambridge dictionaries online : http://dictionary.cambridge.org/
  - Naver dictionary : http://dic.naver.com/
  - Dictionary.com : http://dictionary.reference.com/