

秒懂英文學術文獻在公蝦毀TIPS TO BECOMING AN EFFECTIVE READER OF RESEARCH ARTICLES

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1999	美國紐約州立大學水牛城分校 英語教學碩士
2010	美國加州州立大學河濱分校 課程與教學博士
現今-2012	國立交通大學英語教學研究所/語言教學與研究中心 助理教授  ● 指導英教所研究生論文  ● 教授研究所課程 "研究生論文寫作" "質性研究" "英語教學理論與方法" 及大學部語言課程,  ● 提供英文寫作諮詢、學術英文相關講座
研究領域	第二外語課程理論與教學;社會文化理論與第二語言學習

# COMMON PROBLEMS IN READING RESEARCH ARTICLES IN ENGLISH

- ➤ I feel frustrated because there are so many unfamiliar words when reading research articles. Do I have to look up all these words in a dictionary?
- > I look up words in a dictionary, I still don't know the meaning of the word.
- ➤ I look up all the new words, but I still have no idea about the main points of the article.
- > I carefully analyze the grammatical structures in all sentences, but I still am not sure if I read the article right.
- ➤ It takes me forever to read a research article in English, how do I speed up my reading rate?

# UNRAVEL THE MYTH OF READING RESEARCH ARTICLES IN ENGLISH

- Your vocabulary knowledge doesn't guarantee your comprehension of research articles.
- > Looking up dictionary frequently and focusing on the grammatical structures in the reading process may interfere with your reading comprehension.
- Effective readers usually guess the meaning of words from context.
- Only use dictionary when a word is the key to comprehend the content.
- Since reading is the process of getting ideas from the author, you must focus on the author's thoughts, not just read the words and sentences on the paper.
- Because research articles are different from other texts (e.g., novels or newspaper stories), they should be read differently.
- Understand how information is structured in research articles will help you become an effective reader of research articles.

## **OUTLINE**

- How information is structured in research articles
- **➤** How to approach research articles
- Common scenarios in reading research articles
- > How to develop reading habits as a graduate student
- ➤ Resources for learning academic English at NCTU

# ARE ALL JOURNAL ARTICLES THE SAME?



## DIFFERENT TYPES OF JOURNAL ARTICLES

- 1. Literature reviews
- 2. Theoretical reviews
- 3. Research reports

from: Reading journal articles

### LITERATURE REVIEWS

#### Purpose

Analyze and consolidate the findings of other authors so as to give a more critical and cohesive view of a topic.

#### **Format**

Focus on analysis of research on a general topic through:

- ✓ Overview of information from previous publications
- ✓ Identification of relationships/contradictions/gaps in current knowledge
- ✓ Recommendations and suggestions for future work

## THEORETICAL REVIEWS

#### Purpose

Present new theories or challenge existing theories.

#### **Format**

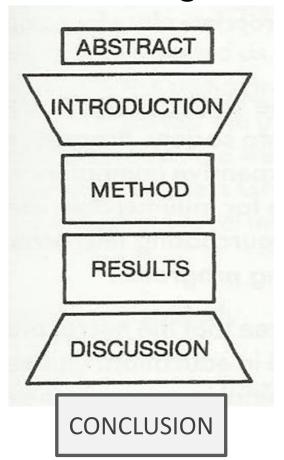
The authors usually trace a theory's development, and then expand on it, proposing their own refinements

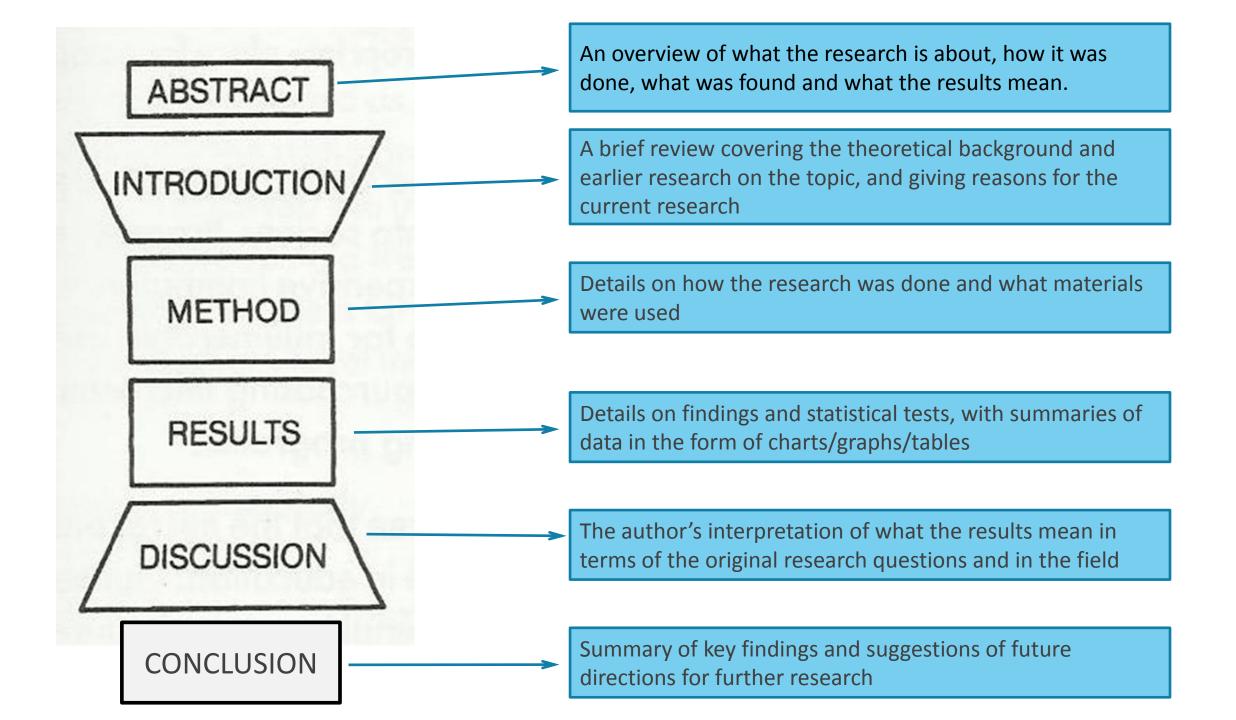
### RESEARCH REPORTS (EMPIRICAL STUDIES)

#### Purpose

Give first-hand accounts of original research.

#### **Format**





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## HOW TO APPROACH ARTICLES

- Reading a research report is not a linear process (i.e., from beginning to end).
- Depending on your reading purposes, you may have to go backwards and forwards, take notes and have multiples tabs opened in your browser.
- > The following strategies help you read research articles efficiently:
  - ✓ Identifying your reading purposes
  - ✓ Skimming
  - ✓ Re-reading for detail
  - ✓ Challenging what you read
  - ✓ Taking notes

# IDENTIFYING YOUR READING PURPOSES

➤ Read the title, key words, and abstract and decide if you should read it, file it or skip it.

- ➤Once you decide to read it, ask yourself, "Why am I reading?" and "What do I want to get out of this article?"
  - ✓ overview → skimming
  - ✓ a presentation → reading thoroughly and challenging the author's arguments
  - ✓ may need the information later → taking notes

### SKIMMING

- > Skimming helps you predict the main points and build a framework to follow the author's path.
- Quickly skim the <u>title</u>, <u>introduction</u>, <u>section headings</u>, <u>subheadings</u>, and conclusions to give you a big picture of what the author did.
- Note key terms and parts you don't understand (without looking into dictionary) for further reading.

### RE-READING FOR DETAIL

- Read the article again and ask yourself:
  - ✓ What problem is the study trying to solve?
  - ✓ What methods was used to solve the problem?
  - ✓ What are the major findings?

If you are unfamiliar with key concepts and terms, look for them in the literature/dictionary.

## CHALLENGING WHAT YOU READ

- Read with scientific skepticism by
  - ✓ Examining the assumptions (Do their results rely on any assumptions?)
  - ✓ Examining the methods (Did they measure what they claim? What was the sample size? Is it representative of the larger population?)
  - ✓ Examining the findings (Were appropriate statistical tests applied? Are the findings unique or supported by other relevant work?)
  - ✓ Examining the discussion/conclusions (Do the conclusion follow a logic follow? What other explanations are there?)
- Ask yourself "How can you apply their approach to your own work?"

## TAKING NOTES

- Taking notes helps you understand what you read and saves you effort in the future.
- Highlight major points.
- > React to the points in the paper (e.g., correlation to other work, your doubt on a statement, good quotation).
- Construct your own example to help you understand terminologies and difficult concepts.
- Summarize what you read (e.g., main points, what you've learned) in your own words.

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### SCENARIO I

- You are a first-year graduate student. You are not familiar with a research area and need background information.
- Reading Strategies:
  - ✓ Read the introduction carefully, skim the method and result sections, and then read the discussion carefully.
  - ✓ For a literature review article, focus on the overview section to understand the major findings of this area.

### **SCENARIO II**

- You have some ideas about your research area, but are not sure if the article is relevant to your research topic or not.
- Reading Strategies:
  - ✓ To gain the overview of the whole study, read the <u>introduction</u>. Focus on the end of the introduction where research purposes are presented.
  - ✓ To gain the overview of the results, read the beginning of the discussion section where the major results are presented.

### **SCENARIO III**

- You are reading a bunch of articles about the same topic and you are already familiar with the background information. Your primary goal is to learn the major findings of the particular study.
- Reading Strategies:

Read the abstract to decide if you should keep reading it  $\rightarrow$  skim the introduction  $\rightarrow$  carefully read the methods and discussion sections (main findings are usually summarized in the discussion section) $\rightarrow$ read the result section with critical skepticism, not just accept the author's interpretation.

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# HOW TO DEVELOP READING HABITS AS A GRADUATE STUDENT

- > Read daily/regularly.
- Find a nice place and good time to engage in reading.
- Establish an academic vocabulary bank and sentence pattern log.
- Take notes and organize your notes.
- Prioritize your reading list.
- ➤ Make academic reading social.

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**Graduate English Website** http://ltrc-ge.nctu.edu.tw/



#### **Courses on Graduate English**

- ✓ 句法與段落寫作/ Sentence Structure & Paragraph Writing
- ✓研究論文寫作/ Research Paper Writing
- ✓ □語討論與發表/ Oral Discussion & Presentation

#### **English Writing Consultation**

http://ltrc.nctu.edu.tw/room/announcement\_o.php?id=206

106學年度上學期 交通大學語言中心

#### 英語寫作諮詢服務

106-1 English Writing Consultation, LTRC, NCTU

活動宗旨:提升本校師生英文寫作相關知識與能力。

活動師資:本校語言中心中、外籍教師。

諮詢對象:本校教師及學生

諮詢範圍:英文學術期刊論文、英文學術簡報、英文碩博士論

文、英文讀書計畫、工作履歷及TOEFL/GEPT...等考試相關寫作

問題。

諮詢方式:一對一方式,每次25分鐘,參加者須攜帶自己擬訂之 寫作主題、段落或文章(列印為紙本一式兩份,不接受 電子檔案版)及學生證。

#### **Speech/Workshops**

- Understanding Writing and Oral Presentation English in Science and Engineering: A Scientific Analysis
- Genre analysis and self-directed learning of academic English
- Online Tools for Academic English Writing
- Writing Research Reports: Starting with the "Introduction"
- Research Writing: Methods & Procedures
- English for Presentations at International Conferences
- 英文論文寫作:如何用有限的英文力,不抄襲,順利寫出期刊論文

### SOME GOOD QUOTES

"Reading academic articles is a skillful practice: you get better the more you do it—but only if you practice effectively."

From "Reading academic articles"

"Reading a scientific paper ... should be done strategically and with a critical mindset, questioning your understanding and the findings."

From "How to read scientific papers"

#### REFERENCES

英文文獻的閱讀技巧 https://sites.google.com/site/thesisezwrite/ying-wen-wen-xian-de-yue-du-ji-giao 台大符碧真教授 如何閱讀原文書 http://ctld.ntu.edu.tw/ls/learninggate/lecture.php?index=21 台大石美倫博士 閱讀技巧 http://ctld.ntu.edu.tw/ls/strategy/lecture.php?index=67 清大彭明輝教授 期刊論文閱讀技巧 http://ocw.nctu.edu.tw/speech\_detail.php?gid=6&nid=321 交大陳昭秀教授 英文期刊論文閱讀 https://ir.nctu.edu.tw/bitstream/11536/125217/1/2009-01-001.pdf Efficient Reading of Papers in Science and Technology <a href="http://www.cs.columbia.edu/~hgs/netbib/efficientReading.pdf">http://www.cs.columbia.edu/~hgs/netbib/efficientReading.pdf</a> How to Read an Academic Paper https://www.youtube.com/watch?v=SKxm2HF -k0 How to Read and Comprehend Scientific Research Articles <a href="https://www.youtube.com/watch?v=t2K6mJkSWoA">https://www.youtube.com/watch?v=t2K6mJkSWoA</a> How to Read a Scientific Paper https://www.elsevier.com/connect/infographic-how-to-read-a-scientific-paper Reading Academic Articles https://emedia.rmit.edu.au/learninglab/sites/default/files/Reading\_academic\_articles\_accessible\_2015.pdf Reading Empirical Journal Articles https://psych.hanover.edu/classes/PSY220/ReadingArticles.htm Reading Journal Articles <a href="http://www.cdtl.nus.edu.sg/success/sl12.htm">http://www.cdtl.nus.edu.sg/success/sl12.htm</a>

Strategies for Reading Academic Articles https://writingcenter.gmu.edu/guides/strategies-for-reading-academic-articles

Reading and Highlighting Tips https://www.academictips.org/acad/literature/readingandhighlighting.html

#### **Questions and Comments**



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