

READING SKILL for SCIENTIFIC PAPER

(my writing)

Why?

- Reading SP is one the most important to begin research idea to make sure at first yourself that your idea will be become “a kind of research”
- Menjadi standart “not good ... good” research at first yourself before discussion with supervisor atau group discussion
- Sehingga faktor waktu penting diperhatikan, baca SP 3-5 years latter (up to date)

- Used to be called Secondary Background Research
- Secondary BR involves the collection of information from studies that other researchers have made of a subject
- The easiest and quickest way to access secondary sources are libraries or the internet

- Primary research involves the study of a subject through firsthand observation and investigation
- Primary BR sources:
 - Relevant people, Researcher observation, Researcher experience, Historical records/texts, Company/organisation records, Personal documents (diaries, etc), Statistical data, Works of art, Film/video, Laboratory experiments

Scientific Paper

- SP adalah tulisan ilmiah yang mengandung ilmu pengetahuan
- SP biasa terbagi berdasarkan bidang ilmu pengetahuan sehingga institusi pengelolanya juga berbeda-beda
- SP dapat berupa jurnal ilmiah, prosiding konferensi, laporan penelitian (Skripsi, Thesis, Disertasi, Laporan PKM, artikel majalah ilmiah, etc)

- Untuk informatika, ex:
 - Web (termasuk web science) → ACM WWW, IEEE Web Intelligent
 - Information Retrieval → ACM Sigir, IEEE IR
 - Database → ACM Sigmod, ACM KDD, IEEE Data Engineering
 - Jurnal Sistem Informasi → MITI UI
 - Garuda
- Sebagian portal SP ada di link riset di blog's course

- The others:
 - Research books
 - Research reports
 - Journal articles
 - Articles reproduced online
 - Scientific debates
 - Critiques/ analysis of literary works/art

Choosing SP

- Lihat tahun SP
- Memperhatikan kualitas SP dari kualitas institusi pengelolanya
 - International → ACM, IEEE, Springer
 - National → lihat akreditasi dari jurnal (A,B...), kualitas penyelenggara konferensi (ITB,ITS,UI...) atau kualitas reviewernya
- Lihat authornya (termasuk riwayat penelitiannya)

Reading SP

- Read abstract, introduction, background → obtain idea, novelty, research questions
- Direct to methodology → obtain approach of research
- Skim result → obtain goodness of result
- Conclusions → obtain any open idea or next work
- If, you really like the paper extend reading the bibliography to more understand

Reading Strategies **(source: “Approaches to** **academic reading and** **Writing”, several reading tutorials** **and my editing)**

Main points

- Strategically and selectively
- Purposefully
- Quickly
- How we read depends on what we already know and what we want to learn.

Purposefully

- The most important question you can ask yourself in relation to academic reading is – **why am I reading this?**
- The way you read a particular item will depend on your purpose for reading it
 - Am I looking for background information, quotations or support for my own arguments?
 - If the topic or material is new you may need to spend some time developing a basic understanding of the new subject area before you read in depth

Step 1. Setting

- Pre-Read
 - Quickly – getting a sense of the features of the text
 - Skim first and last paragraph to see where it's going
 - Check headings
- Fast-Read
 - Read entire piece quickly
 - Look up definitions of key terms you don't know
 - Flag the structure
 - Don't get bogged down

Step 2. Understanding

- Facet Two – Understanding
 - Re-read entire article VERY CAREFULLY
 - Correct or add to previous flagging
 - Take lots of notes
 - To rephrase
 - To understand author's point of view
 - To diagram major moves
 - To work out/create/write a summary

Step 3. Evaluating

- Facet Three – Evaluating
- Fix any mistaken flagging or notes
- Write down anything new that you discover
 - Is every conclusion well-defended
 - Are there alternate conclusions
 - Are there counter-examples?
 - Is there a conflict between what I believe and what the author says?
 - Are there points the author did not consider?

Strategies

- **Scanning**: To find specific information to answer a question/solve a problem. Use your knowledge of how information is organised to quickly find relevant content (e.g., abstract, introduction, conclusion, summary, tables, etc.)
- **Skimming**: To establish usefulness or obtain an overview (gist). Browse, survey the content, dip into different parts of the book/chapter.

- **Reading topic sentences:** Do this before in-depth reading. Also useful when reading dense texts or new content. Read the topic sentence of each paragraph. This will provide an overview of the key ideas.
- **Reading for detail:** Re-read the dense/main parts of the text after you have identified the main argument so as to extract any supporting evidence, or to evaluate the content. Read slowly, paying attention to detail

Active Reading

- Active reading techniques relate to ways in which you engage with the text. To improve your concentration
 - underlining/highlighting key ideas;
 - varying your pace as you read;
 - summarising as you read (using your own words when making notes);
 - annotating the text; and
 - stopping at strategic points to review
 - and consolidate what you've read (before reading further)

Read difficult material

- Break it up into chunks if U have a lot to read
- Read first for what you do understand and don't get caught up in the difficult parts.
- Skim the material by reading the introduction and conclusion to try to get an overview.
- Even if you don't understand every word, try to get the overall sense of what the author is trying to say.
- Look at headings and sub headings to gain some idea of the structure of the article/chapter.
- Look at the diagrams/ figures/charts to gain a better understanding of the material.
- Try to explain, using your own words, what you believe the reading is about.

- **Look up any unfamiliar words** in a dictionary. Some words have very specific meanings in a particular discipline area so it may be useful to find a glossary of terms or subject specific dictionary for your discipline.
- **Try and find a simpler text on the same subject so that you can grasp the main concepts** being discussed before you attempt to read the more difficult text again.
- **Discuss** the reading with other students or with your lecturer/tutor
- Try to find supporting source

Add Tips

- Reading in academic purpose just like a vice versa of writing in academic purpose
- Its included the detail
- Writing :
Idea → writing
- Reading :
writing → idea