ELEMENTS OF THOUGHT IN CONTEXT

DISCUSSION OF EXAMPLES

EXAMPLE 1: PROBLEM AND PURPOSE

Problem

- Uncontrolled pollution caused by disposed batteries in the context of Indonesia
- Question form:
  - *How do we improve the recycling rates of lithium-ion batteries in Indonesia?*

Purpose

- To provide a solution that solves the problem
  - *A smart recycling system for disposed batteries*

EXAMPLE 2: CONCEPTS AND INFORMATION

Concepts

- Concepts that make the solution an engineering one
  - *Robotics, machine learning, internet of things*

Information

- Key details pertaining to the concepts at hand:
  - *Training AI through reinforcement learning and human demonstration through image processing*
  - *Scanning for Structure Prediction and Material Identification*
  - *Disassembling based on the loaded battery structure*

EXAMPLE 3: ASSUMPTIONS AND IMPLICATIONS

Assumptions

- Residuals are safely disposed
- Monitoring and control systems to ensure consistent water purification

Implication

- Impact on the global market pertaining to water treatment technologies
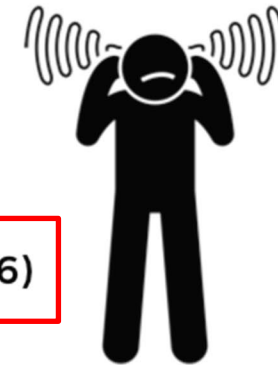
Citations and References

Loudness Level

Cannot hear bus arrival announcement?

Noisy background at bus stops?

Average noise level in Singapore bus stops - 76.8 dBA (Velasco et al., 2016)

References

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Velasco, E., & Tan, S. H. (2016). Particles exposure while sitting at bus stops of hot and humid Singapore. *Atmospheric Environment*, 142, 251–263. https://doi.org/10.1016/j.atmosenv.2016.07.054

EXAMPLE 4: IN-TEXT CITATIONS AND REFERENCES

Use APA style

In-text Citations
- These are typically in the format of (Author's Last Name, Year).

References
- This should be on a new slide at the end of your presentation, and include the author's last name, a comma, first initials, the publication year in parentheses, the title in sentence case, the journal title in title case and italicized, and the volume number also in italics.
- The issue number (if available) follows in parentheses, not italicized, and then the page range. For books, include the location and publisher.