

Use the QR Code to access our slides and a worksheet we used in two of the tasks described in this presentation



Mahmood and Avalos-Rivera (2024). Exploring the AI Frontier: Transforming Pre-Writing and Post-Writing in EAP



Exploring the AI Frontier: Transforming Pre- Writing and Post-Writing in EAP

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University of British Columbia Simon Fraser University

AGENDA

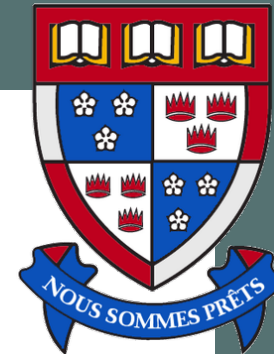
- Introduction
- Pre-Writing and Writing
 - Context
 - Learning Tasks
 - Students' POV
- Post Writing
 - Context
 - Learning Tasks
 - Student's POV
- Take-Away Message

**Dobrin, S. (2023) *AI and Writing*.
Broadview Press**



Pre-Writing

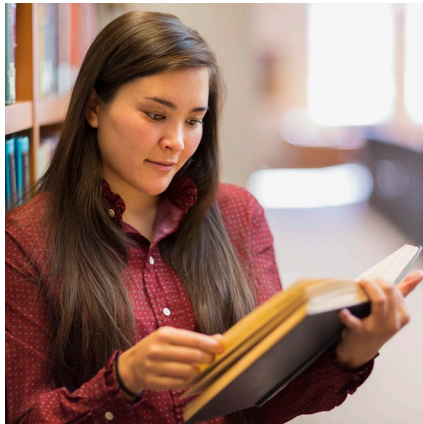
Invention Process



MIXED PROFICIENCY, MULTILINGUAL, MULTIDISCIPLINARY CONTEXT

- Introduction to English Academic Writing
- 20-30 undergraduate students per section
- Genre approach
- Swales' rhetorical moves
- Hyland's metadiscourse
- Community Practice
- Genre in study: The research article

INTEGRATING AI IN THE PRE-WRITING PROCESS



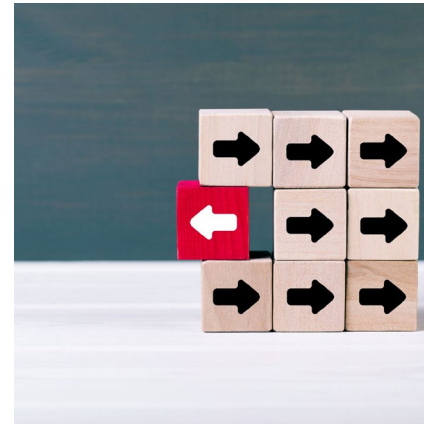
Aiding

Reading
Comprehension



Defining

Keywords



Identifying

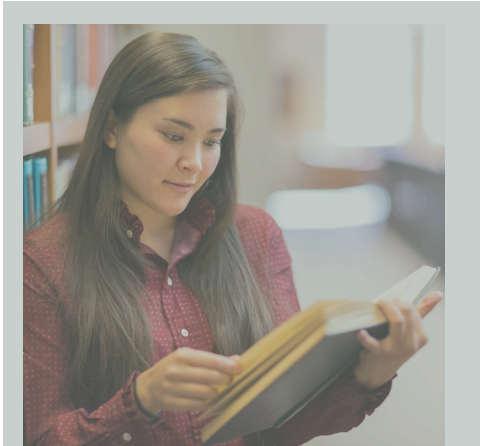
Different
Perspectives



Locating

Sources

INTEGRATING AI IN THE PRE-WRITING PROCESS



Aiding
Reading
Comprehension



Defining
Keywords



Identifying
Different
Perspectives



Locating
Sources

AA

You

Find the topic sentence in this paragraph: This chapter is about the anticipation of retrospection and the extended significance that this temporal loop has acquired in our world. I am going to approach the subject through three different meanings of the word prolepsis, or, since the primary significance of prolepsis is anticipation, three different types of the anticipation of retrospection. The first of these I will refer to as the narratological meaning of prolepsis: a term used by Genette and others to describe flashforward. Prolepsis, for Genette, is a moment in a narrative in which the chronological order of story events is disturbed and the narrator narrates future events out of turn. The narrative takes an excursion into its own future to reveal later events before returning to the present of the tale to proceed with the sequence. As Genette makes clear, this is far less common in narrative fiction than its counterpart, analepsis, or flashback, but it will be my contention here that prolepsis is the more rewarding analytical concept. For reasons that will become apparent, I will set aside the second meaning of prolepsis, which will receive a fuller treatment in a moment. The third meaning I will refer to as rhetorical prolepsis, to designate a phenomenon wellknown to classical orators and scholars of rhetoric: the anticipation of an objection to an argument. This is a technique used to preclude objections by articulating them, and even answering them within an oration, and it will be one of the trajectories of this discussion to analyse the extended scope of this device both in contemporary fiction and the world of discourse more generally. My question for this chapter then is how the rhetorical and the narratological senses of prolepsis can be linked.

**ChatGPT**

The topic sentence of the paragraph is: "This chapter is about the anticipation of retrospection and the extended significance that this temporal loop has acquired in our world." This sentence introduces the main subject of the chapter, setting the stage for the detailed discussion that follows about the different meanings and applications of the term "prolepsis."



Main Ideas

- Identify topic sentence
- Identify purpose



You

Break down this paragraph into its arguments or points:



ChatGPT

The paragraph presents several key arguments or points:

1. **Main Topic Introduction:** The chapter focuses on the concept of "the anticipation of retrospection" and its growing significance in contemporary contexts.
2. **Approach to the Topic:** The author plans to explore this subject by discussing three different meanings of the term "prolepsis," all relating to various forms of anticipation.
3. **First Meaning - Narratological Prolepsis:**
 - Definition: Prolepsis is used in a narrative sense to describe a flashforward, a literary technique where future events are narrated out of chronological order.
 - Example: Genette's concept of prolepsis as a narrative tool that disrupts the chronological flow by narrating future events prematurely.
 - Comparative Analysis: Prolepsis is less common than its counterpart, analepsis (flashback), but the author argues that prolepsis offers more analytical value.
4. **Second Meaning - Deferred Discussion:** The author mentions a second meaning of prolepsis but chooses to postpone its discussion for a more detailed treatment later.
5. **Third Meaning - Rhetorical Prolepsis:**
 - Definition: In rhetoric, prolepsis involves anticipating and addressing potential objections within an argument.
 - Application: The author intends to examine how this technique is employed in contemporary fiction and broader discourse.
6. **Connecting the Concepts:** The final objective of the chapter is to explore the linkage between the rhetorical and narratological interpretations of prolepsis.

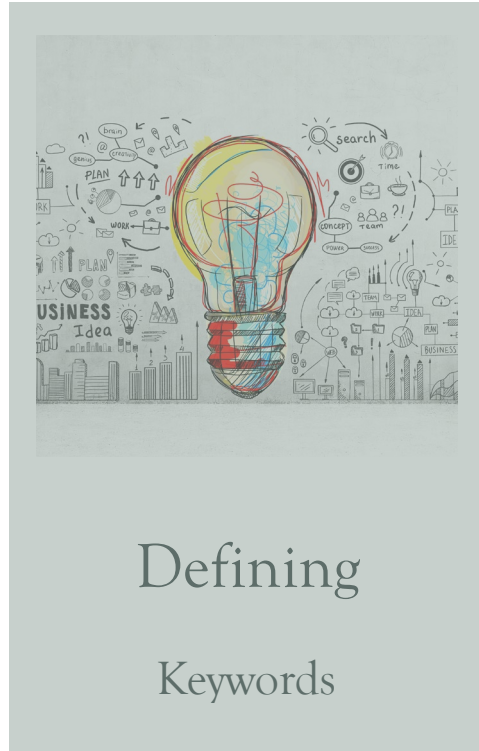
Arguments

- Identify arguments or points

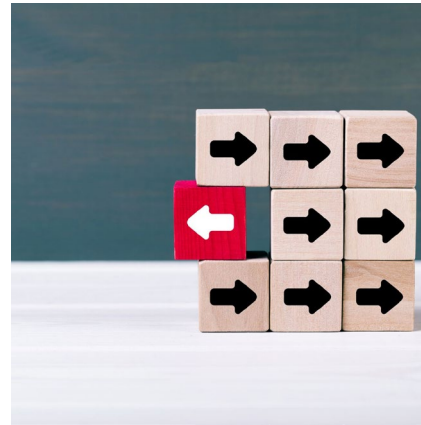
INTEGRATING AI IN THE PRE-WRITING PROCESS



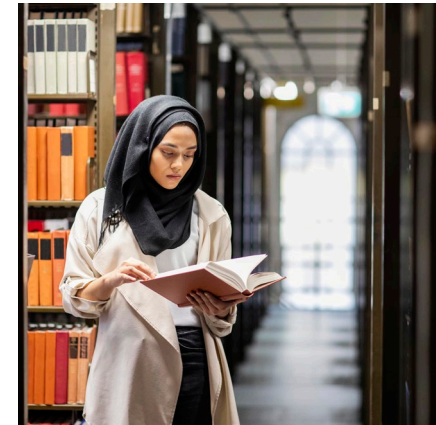
Aiding
Reading
Comprehension



Defining
Keywords



Identifying
Different
Perspectives



Locating
Sources



You

What does the word narratological mean?



ChatGPT

The term "narratological" relates to the field of narratology, which is the study of narrative and narrative structure. Narratology examines the ways that stories are structured, how they are told, and the various elements that comprise a narrative, such as plot, characters, perspective, and style. It is a discipline that spans across literature, cinema, theater, and other forms of storytelling. "Narratological" as an adjective refers to anything pertaining to or characteristic of this study of narratives. It is often used in literary analysis and criticism to discuss and dissect the way stories are constructed and interpreted.



You

Find a synonym for narratology



ChatGPT

! Error analyzing ▾

It seems that there was an issue with accessing the necessary resources to find synonyms for "narratology" automatically. However, I can provide a synonym based on my existing knowledge.

A suitable synonym for "narratology" could be "narrative theory." This term encompasses the study of narrative structure, how narratives are formed, and the various elements involved in storytelling, much like narratology. [↗]



INTEGRATING AI IN THE PRE-WRITING PROCESS



Aiding
Reading
Comprehension



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Locating
Sources

Perspectives on the study of narratology according to ChatGPT

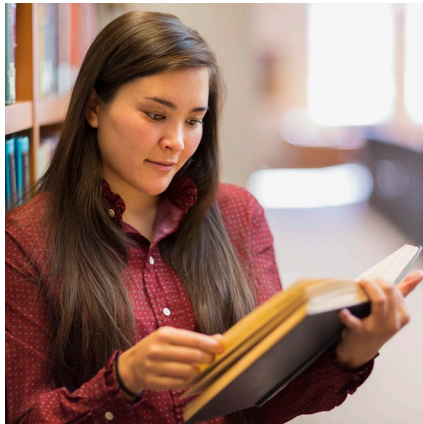
Where to go next? Consider your options

- Discard options that do not fit your purpose
- Narrow down the ideas you think can work for you.
- Find information about one perspective that seems more appropriate for your goals.

1. **Structuralist Approach:** Structuralism analyzes the underlying structure of a narrative. It focuses on the elements that make up a story — such as characters, settings, and events — and how these elements are organized. Vladimir Propp's analysis of folktales and Roland Barthes's work are prominent examples of structuralist approaches.
2. **Formalist Approach:** This approach emphasizes the form and aesthetic of a narrative. It studies the techniques, styles, and structures used in storytelling. Formalists look at narrative as an art form, focusing on literary elements like plot, character, and setting, and how they contribute to the overall work.
3. **Post-Structuralist and Deconstructionist Approaches:** These approaches question the idea of a fixed or universal structure in narratives. They argue that meanings are not stable but rather are dependent on readers' interpretations. Deconstruction, for instance, involves analyzing the contradictions and ambiguities within a text to understand how meaning is constructed.
4. **Psychoanalytic Approach:** Drawing from Freudian and Jungian psychology, this approach looks at narratives through the lens of psychological theories. It explores the psychological motivations of characters, as well as the psychological impact of narratives on readers or viewers.
5. **Feminist Approach:** Feminist narratology examines how narratives perpetuate or challenge gender roles and stereotypes. It also looks at the representation of women in narratives and explores narratives written by women.
6. **Reader-Response Theory:** This approach focuses on the reader's role in creating the meaning of a narrative. It suggests that the interpretation of a narrative is not fixed but varies from reader to reader based on their individual experiences, emotions, and cultural context.
7. **Historical and Cultural Approaches:** These approaches examine narratives in the context of their historical and cultural settings. They look at how narratives reflect, respond to, and influence the social and cultural conditions of their time.
8. **Postcolonial Approach:** This focuses on narratives from colonized or previously colonized countries, examining themes of identity, race, and power. It often explores how narratives can both reflect and resist the impacts of colonialism.
9. **Narrative Ethics:** This field studies the ethical implications and moral complexities within narratives. It considers how narratives influence our moral understanding and how ethical dilemmas are presented in storytelling.
10. **Digital Narratology:** With the advent of new media, this approach studies how digital technologies change the way narratives are told, structured, and experienced. It includes the analysis of interactive narratives such as those in video games, virtual reality, and online platforms.

Each of these approaches provides a unique lens through which to study narratives, contributing to a richer, more comprehensive understanding of storytelling and its impacts.

INTEGRATING AI IN THE PRE-WRITING PROCESS



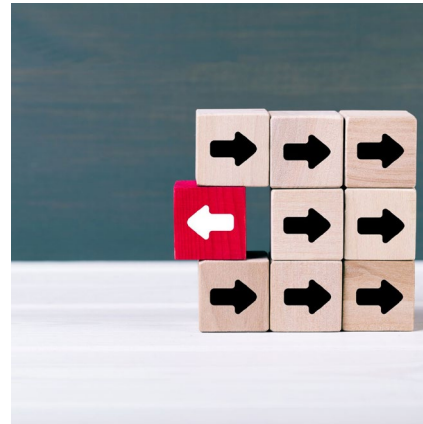
Aiding

Reading
Comprehension



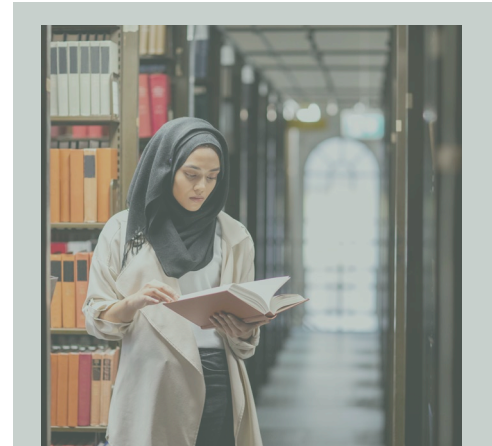
Defining

Keywords



Identifying

Different
Perspectives



Locating

Sources



ChatGPT

Narratology is a fascinating and complex field of study that focuses on the structure and elements of narrative. It's a discipline that explores how stories are told, what they have in common, and what distinguishes one narrative from another. This study includes various forms of narratives across different media like literature, cinema, and oral storytelling.

The roots of narratology can be traced back to the works of Aristotle, particularly his "Poetics," where he differentiated between the totality of events in a depicted world and the narrated plot. However, modern narratology, which emphasizes structural aspects of narrative, gained momentum in the 20th century. Influential works like Vladimir Propp's "Morphology of the Folk Tale" laid foundational models for understanding narrative structures.

Narratology examines not just the content but also the form of narratives, including aspects like perspective, time, logic, and the use of language. It has evolved to include not just traditional literary narratives but also digital and interactive forms like hypertext fiction, electronic literature, and even video games. The field continues to expand and adapt, reflecting changes in media and storytelling techniques.

For an in-depth exploration, you might find the following sources helpful:

1. Wikipedia's page on [Narratology](#) provides a broad overview of the field, its applications, and its history.
2. The Living Handbook of Narratology, available [here](#), offers detailed discussions on various aspects of narratology.
3. Britannica's entry on [Narratology](#) provides a concise summary and context.
4. Purdue University's Introduction to Narratology, which can be accessed [here](#), is another excellent resource for getting started with the basics of narratology.

Ask your AI to help locating sources for a topic



You

Find a source to read more about narratology

Where to go next?

- Consider the reliability of the suggested sources.
- Consider the level of expertise and depth of the source you need
- Explore the options (use the links)
- Ask a librarian
- Make an informed decision

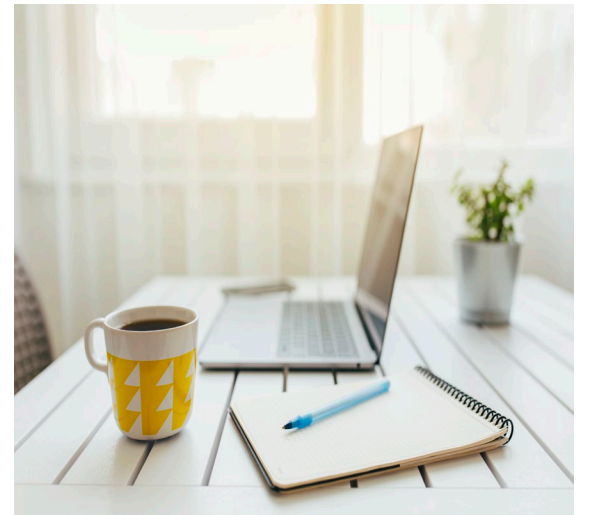


Writing

Paraphrasing

Paraphrasing with AI

- Testing different prompts to paraphrase the same text.
- Testing paraphrasing with different citation styles
- Analyzing outputs
- Identifying similarities and differences
- Evaluating applicability



SAMPLE TASK

The following passage was taken from a published research article about the rhetorical purposes of the introduction of research articles:

“At the outset, the writer of an introduction has the option of trying to establish that his or her particular area of research is of some significance”.

The authors are John Swales and Hazem Najjar. The article was published in 1987. The passage is located on page 179.

I asked ChatGPT to paraphrase the passage using different prompts. Examine the output I obtained with each prompt:

APPROACH / EVALUATION SYSTEM?

	Rationale	Prompt	ChatGPT Output
1	<p>I wanted to say the same thing with different words, without reducing the length of the text.</p> <p>I also noticed that the authors were using "he or she" making the text look binary.</p> <p>I prefer to use gender neutral expressions.</p>	<p>Paraphrase this sentence making it gender neutral: "At the outset, the writer of an introduction has the option of trying to establish that his or her particular area of research is of some significance" and cite the authors: Swales & Najjar, 1987, p. 179.</p>	<p>"At the beginning, the author of an introduction can attempt to demonstrate the significance of their specific research field" (Swales & Najjar, 1987, p. 179).</p>
2	<p>I noticed that ChatGPT had used singular and plural to make the text non-binary (gender neutral). That is acceptable, but I prefer keeping all the noun-related words in plural form.</p>	<p>Paraphrase again using plural instead of singular nouns</p>	<p>"At the beginning, authors of introductions have the opportunity to demonstrate the significance of their respective research fields" (Swales & Najjar, 1987, p. 179).</p>
3	<p>I observed that ChatGPT had used APA in-text citation. I wanted to use a different system.</p>	<p>Paraphrase again using the Modern Language Association citation system</p>	<p>"In the initial stages, authors of introductions are presented with the chance to underscore the importance of their distinct areas of research" (Swales and Najjar 179).</p>
4	<p>I was curious what ChatGPT would do if asked to change the level of formality of the paraphrase.</p>	<p>Paraphrase again making language more appropriate for a wider audience.</p>	<p>"At the start, writers of introductions have a chance to show why their research topics matter" (Swales and Najjar 179).</p>
5	<p>I tried a third citation system that would require more work from the writer.</p>	<p>Paraphrase again using the Chicago style with footnotes</p>	<p>"At the beginning, authors of introductory sections can highlight the relevance of their research areas."¹</p> <p>1. Swales and Najjar, 179.</p>

Compare outputs, analyze, make informed decisions

Phrase options for: “At the outset”

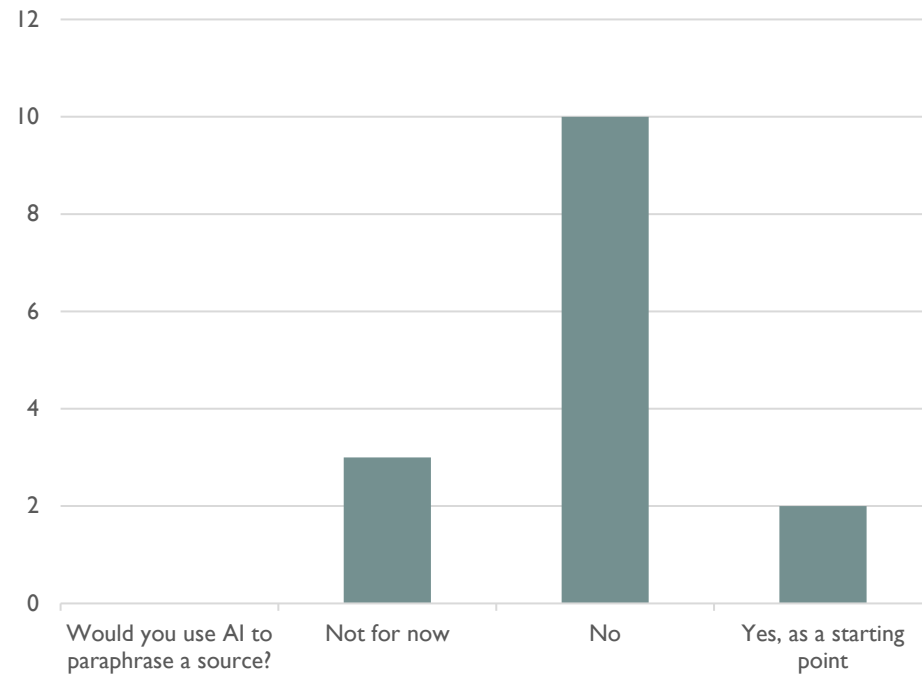
"At the beginning, the author of an introduction can attempt to demonstrate the significance of their specific research field" (Swales & Najjar, 1987, p. 179).

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STUDENTS' RESPONSES

- ***Would you use the tool to help you craft a paraphrase for your own work? Why? Elaborate your answer considering practicality, suitability of the response provided by the AI, and ethical considerations.***



STUDENT'S RESPONSE SAMPLES

I wouldn't use ChatGPT to craft a paraphrase of my own work because the AI tool will end up choosing what information is important. Some of the language might be really important in my own, which I cannot paraphrase. Therefore, there might be a situation where the tool paraphrases something and it becomes less clear.

I would maybe use this tool to help me understand the complexity of the text because the AI version uses simpler terms. This would help me create my own paraphrase afterward since I would have grasped the important points of the abstract.

I think there are cases in which AI is useful, but at this point I am not super comfortable using it. I am in school to learn, and I feel like using AI is a way around actually doing the hard work that it takes to learn.

A photograph of a classroom with several students sitting at desks. In the foreground, a woman with long brown hair and glasses is looking towards the camera. Behind her, a man with glasses and a white hoodie is looking forward. To the right, a woman with long dark hair is looking towards the camera. The background shows other students and a white wall. A teal rectangular box is overlaid on the right side of the image, containing white text.

Post-Writing Process

Problem-Solution Text



THE UNIVERSITY OF BRITISH COLUMBIA

Vancouver Campus

UBC Vantage College

- International, multilingual students
- First year undergraduates in Engineering
- Cohort based-model
- Integrated Language & Content Instruction
- Systemic Functional Linguistics (SFL) Genre-Based Pedagogy

LLED 200 - INTRODUCTION TO WRITING IN ACADEMIC & PROFESSIONAL REGISTERS

- Academic Writing Course
- Genre - Problem-Solution Text
 - Situation/Background
 - Problem
 - Solution
 - Evaluation

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- Academic Writing Course
- Genre - Problem-Solution Text
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 - **Solution**
 - Evaluation

TEXTUAL ANALYSIS - POST WRITING TASK

- **Task Purpose:** To deconstruct and analyze two sample "solution" text based on specific language features
- **Task Organization:**
 - Two Sample "Solution" Texts (Student written + AI generated)
 - Deconstruction and analysis based on specific language features
 - Organization
 - Content
 - Interpersonal Positioning
 - Reflective Task - Use of AI in academics

TEXT DECONSTRUCTION & ANALYSIS

- **Organization - How the message is organized?** (the order and sequence in which a message is presented)
- **Content - What is going on?** (the ideas we want to communicate and the words we use to express these ideas)
- **Interpersonal Positioning - Who is involved?** (how we position ourselves, our audience and our message)

TEXT DECONSTRUCTION & ANALYSIS



- Purpose
- Composition (paragraph structure)
- Description & Explanation
- Theme & Rheme (New)
- Thematic Patterns
- Nominalization
- Engagement

Student Written Text

A potential solution to this problem could be adapting the more environmentally acceptable technology known as Bio-metallurgical technology. This is a technique extracting metals from e-waste by employing microorganisms like bacteria and fungi rather than chemical solutions (Magoda & Mekuto, 2022). This technology has been used by several developed countries including Germany, Belgium, and South Korea to recover and recycle valuable materials in e-waste (Wang et al., 2013). The system could be classified into two sections: biosorption (adsorption of metals) and bioleaching. The bioleaching stage involves three microorganisms: Autotrophic bacteria, Heterotrophic bacteria, and Heterotrophic fungi. The process normally takes place under ambient circumstances, requires a lot less energy, and emits a lot less hazardous gases compared to pyrometallurgical technology that requires roasting and smelting process (Valix, 2017) or hydrometallurgical method using too much chemical reagents.

AI Generated Text

Addressing the pressing issue of informal e-waste recycling and its deleterious consequences on female laborers and neonates, as well as the environment, necessitates a comprehensive approach. Transitioning from informal to formal e-waste recycling practices, characterized by rudimentary methods and a lack of stringent regulations, stands as a foundational step. Formal recycling centers with rigorous adherence to safety and environmental standards need to be established. Furthermore, the incorporation of eco-friendly e-waste recycling technologies is paramount. Bio-Metallurgical Technology can offer promising solutions, such as bioleaching and bioaccumulation techniques, which mitigate hazardous metal exposure while enhancing resource recovery. Regular monitoring of hazardous metal contamination in the vicinity of e-waste recycling facilities should be conducted, employing Bio-Metallurgical methods for efficient detection and mitigation. Robust safety training, especially for pregnant women workers, should be provided, emphasizing the correct utilization of personal protective equipment (PPE) and safety protocols.

Student Written Text

A potential solution to this problem could be adapting the more environmentally acceptable technology known as Bio-metallurgical technology. This is a technique extracting metals from e-waste by employing microorganisms like bacteria and fungi rather than chemical solutions (Magoda & Mekuto, 2022). This technology has been used by several developed countries including Germany, Belgium, and South Korea to recover and recycle valuable materials in e-waste (Wang et al., 2013). The system could be classified into two sections: biosorption (adsorption of metals) and bioleaching. The bioleaching stage involves three microorganisms: Autotrophic bacteria, Heterotrophic bacteria, and Heterotrophic fungi. The process normally takes place under ambient circumstances, requires a lot less energy, and emits a lot less hazardous gases compared to pyrometallurgical technology that requires roasting and smelting process (Valix, 2017) or hydrometallurgical method using too much chemical reagents.

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AI Generated Text

Addressing the pressing issue of informal e-waste recycling and its deleterious consequences on female laborers and neonates, as well as the environment, necessitates a comprehensive approach. Transitioning from informal to formal e-waste recycling practices, characterized by rudimentary methods and a lack of stringent regulations, stands as a foundational step. Formal recycling centers with rigorous adherence to safety and environmental standards need to be established. Furthermore, the incorporation of eco-friendly e-waste recycling technologies is paramount. Bio-Metallurgical Technology can offer promising solutions, such as bioleaching and bioaccumulation techniques, which mitigate hazardous metal exposure while enhancing resource recovery. Regular monitoring of hazardous metal contamination in the vicinity of e-waste recycling facilities should be conducted, employing Bio-Metallurgical methods for efficient detection and mitigation. Robust safety training, especially for pregnant women workers, should be provided, emphasizing the correct utilization of personal protective equipment (PPE) and safety protocols.

TEXTUAL ANALYSIS – DISCUSSION & FEEDBACK

Student Written Text

- Text A is giving a solution
- Text A is structured in a problem-solution format.
- It starts by presenting a potential solution to the problem of environmentally harmful e-waste recycling methods and then elaborates on the specifics of the solution, including the technology used and its benefits.
- Text A uses neutral language to present facts and findings. It does not overtly address the reader or stakeholder groups, maintaining an objective tone throughout.

AI Generated Text

- Text B is more of a call for action
- Text B follows a more argumentative structure.
- It begins by outlining the issues with current informal e-waste recycling practices, especially focusing on their impact on female laborers.
- Text B engages more directly with the reader and implicitly positions stakeholders, such as female laborers, governmental bodies, and NGOs, within the narrative. It uses imperative sentences (“should be provided,” “need to be established”) suggesting a more persuasive and urgent tone.

TEXTUAL ANALYSIS – REFLECTIVE TASK

- What is your opinion about the use of Artificial Intelligence (AI) in academics? Is it a virtue or a vice?
- What unique aspects of human learning can or cannot be replicated by AI?

TEXTUAL ANALYSIS - REFLECTION

- AI in academia can be seen as **both** a virtue and a vice, depending on the way and context of its use. Its role as a tool that **supports the learning** and research process is undeniable. However, the **key to success lies in understanding its limitations** and integrating it with classical methods of learning and critical thinking. True virtuosity in using AI comes from a **balance** between technological efficiency and preserving human creativity, intuition, and deep understanding.

TEXTUAL ANALYSIS - REFLECTION

- I strongly believe AI can be used as a **double edge sword**. If AI is used to **understand** a topic that one already has little idea about it's a virtue. It does provide with knowledge and help you understand till a certain limit, but if used in a **wrong way** such as making it do homework's or essay it **causes more harm** than help in most of the cases.

TEXTUAL ANALYSIS - REFLECTION

- AI can **simulate and reproduce** certain aspects of human learning [however]essential elements such as **creative thinking, ethical reasoning, and empathetic perception** remain beyond the reach of its algorithms. The human ability for **critical thinking, forming moral judgments, and creating original ideas** are unique and irreplaceable aspects of academic practice. In this sense, AI can be understood as a **tool** that **assists** and **facilitates** but can **never fully replace** the human mind and its ability to deeply and holistically understand the world.

Take Away!



- AI can offer assistance along the entire writing process that may expand (but not substitute) support previously offered by other tools and resources, such as dictionaries, thesaurus, data bases, corpora, among others.
- AI may generate output to analyze writing organization, phraseology, lexical choices, grammatical choices, cohesion and many other language components.
- AI can be used in an ethical way to enhance students' writing without taking away their voice.

Take Away!



Raise awareness about...

- Ethical challenges
- Potential biases
- Accessibility issues
- Technical issues (hallucinations)

Thank You!



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