Chat GPT in second language writing: Student strategies with an eclectic language tool

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ULB Langues

Context

- MA Psychology: Filière approfondie
- 8 (mostly) aspirant PhD students
- Developed in 2020/21
- EMI : English Medium Instruction
- Adjunct CLIL
- Psychology teacher & language teacher: concurrent language/content focus





Course structure





Self-reflection: English level & significance; career plans; professional pathways; (L2) learning strategies







English Medium Instruction The challenges of academic writing

- subject specific vocabulary &
- grammatical structures;
- cultural differences in academic writing style;
- cohesive devices and strategies;
- text organisation;
- writing anxiety;

(Fitria, 2021; Hyland, K., & Hyland. F, 2012).

 often no English language teaching or specialist Chat GPT: Advantages and constraints in second language writing

- generation of new ideas;
- immediate feedback on grammar and vocabulary;
- enhanced self-correction;
- more 'academic behaviour'
- reduced writing anxiety

(Curle 2023, Tang, 2023).

- ineffective text;
- problematic text;
- incorrect referencing;
- plagiarised content.

(Kleinemann, 2023)



https://github.com/ahmetbersoz/chatgpt-prompts-for-academic- writing/blob/main/README.md	
IMPROVING LANGUAGE	
Rewrite this paragraph in an academic language: [PARAGRAPH]	C
Paraphrase the text using more academic and scientific language. Use a neutral tone and avoid repetitions of words and phrases	. 0
Correct the grammar: [PARAGRAPH]	D
What do you think of how this paragraph is written?: [PARAGRAPH]	Q
What 3 points would you suggest to improve this paragraph?: [PARAGRAPH]	C

- suggested prompts for improving content
- suggested prompts for improving language





Student X: Mindfulness meditation and the perception of time



Where could this student benefit from the use of Chat GPT to improve their text? What prompts might they write?

Mindfulness meditation is already known to reduce anxiety, increase presentmoment awareness and also modulate attention (Bodhi, 2000 ; Kabat-Zinn, 2003). Moss & al. (2022) underlied the impact on emotional regulation ; These findings are related to the changes Mindfulness practice bring to the brain, in a functional and a structural way (Hözel & al., 2011). It is hypothesized that those previous factors are linked to the way human are perceiving time, then, that Mindfulness meditation can impact time perception (Sylvie Droit-Volet & al., 2018, 2019 ; Eva Schötz & al., 2015 ; Robin S. S. Kramer & al., 2013). Thus, they settled experimentations to explore that relationship. For example, Robin S. S. Kramer & al. (2013) worked with Temporal Bissection task, and showed main effect of the meditation on performance. Mindfulness lead to underestimate short periods of time (due to attentional frameworks), and reduce the overestimation of longer period's tendancies by reducing the arousal level.







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tense/aspect

X1: Correct the grammar for this text (input text **A**).

X2: Generate an abstract for a scientific paper based on this information (input text **B**).

X3: Summarise the text in simpler and easier to understand terms (input text **B**).

X4: Explain how mindfulness meditation impact human perception of time as an analogy

X5: I'd like to remind you an information from a past conversation. You don't need to respond to this (input river analogy) Chat GPT: Amended text B

Chat GPT: Scientific abstract C

Chat GPT: Simplified text D

Chat GPT: Analogy of a camera lens, a clock, "tune your mental lens"

Chat GPT: adds information (from a previous chat GPT?) with an analogy of a river "attuned to the rhythm of the river"

X6: Write a sensational press release for this research *(input text B)*.

X7: What do you think of how this paragraph is written *(input text B)*.

X8: Improve the organisation and structure of my paper *(input* text *F)*.



Chat GPT: Press release E

Chat GPT: 'This paragraph effectively presents a summary of the research findings on mindfulness meditation....however the structure could be improved for clarity and flow. Here's a revised version **F**

Chat GPT: It's important to present information in a logical sequence: introduction, hypothesis on time perception, experimental investigations, conclusion. Here's a revised version with improved organisation : **G**





X9: Give 3 variations of this sentence: *To investigate this hypothesis, experiments were conducted, such as the Temporal Bissection task by Robin S.S. Kramer et al. (2022), revealing that mindfulness meditation led to underestimation of short time periods and reduced overestimation of longer intervals, possibly due to changes in attentional frameworks and arousal levels (taken from F)*

Chat GPT: 3 alternative sentences

X10: The same but in this context *(input full text F)*.

Chat GPT: 3 further alternative

sentences



X11: Proofread the following text for spelling and grammatical errors and rewrite it with corrections (*input text* **A**)

Chat GPT: Amended text H

X12: Proofread the following text for spelling and grammatical errors and rewrite it with corrections and considerations for the APA 7th edition's norms (*input text* **A**).

Chat GPT: Amended text **H**, with referencing adjusted



Student X: Final submission What has Chat GPT improved?

Mindfulness meditation is already known to reduce anxiety, increase presentmoment awareness, and modulate attention (Bodhi, 2000; Kabat-Zinn, 2003). Moss et al. (2022) emphasized the impact on emotional regulation. These findings are related to the changes mindfulness practice brings to the brain, both functionally and structurally (Hözel et al., 2011). It is hypothesized that these factors are linked to the way humans perceive time, and thus, that mindfulness meditation can impact time perception (Droit-Volet et al., 2018, 2019; Schötz et al., 2015; Kramer et al., 2013). Consequently, experiments were conducted to explore this relationship. For example, Kramer et al. (2013) utilized the Temporal Bissection task and demonstrated a main effect of meditation on performance. Mindfulness led to the underestimation of short time periods (due to attentional frameworks) and reduced the overestimation of longer periods' tendencies by lowering arousal levels.



What did Chat GPT do well?

Lexis:

Moss & al. (2022) underlied emphasized the impact.... ...they settled experimentations... experiments were conducted

Grammar/punctuation:

...changes Mmindfulness meditation..... changes mindfulness practice brings to the brain...

Rephrasing

in a functional and a structural way – both functionally and structurally

Referencing

...those these previous factors

Connectors

....then and thus, that mindfulness meditation can impact time perception

Articles

...show <mark>a</mark> main effect of...

<u>Spelling</u>

Mindfulness lead led to....

Academic referencing Sylvie Droit-Volet



Where was Chat GPT not so effective?

Grammar/punctuation errors:

Temporal <mark>B</mark>issection task

Odd phrasing left uncorrected

.... the overestimation of longer periods' tendencies by lowering arousal levels.

Spelling left uncorrected

Bis<mark>s</mark>ection

Inappropriate connectors

It is hypothesised that mindfulness meditation can impact time perception (refs). Consequently, experiments were conducted....

Disrupting sense and logic

<u>Chat GPT:</u>mindfulness meditation led to underestimation of short time periods and reduced overestimation of longer intervals<mark>, possibly due to changes in attentional frameworks and arousal levels.</mark>

<u>Student X:</u>....mindfulness meditation led to underestimation of <mark>short periods of time (due to attentional frameworks)</mark> and reduced the <mark>overestimation of longer periods' tendencies by lowering arousal levels.</mark>



Where was Chat GPT not so effective?

Incorrect timelines:

Press release E: "Led by a team of esteemed scientists<mark>, including</mark> Moss et al. (2022) and Kramer et al. (2013), this research has sent shockwaves through the scientific community."

Improved for structure and flow F: "Recent research by Moss et al<mark>. (2022)</mark> has emphasized its profound impact on.... Building on this understanding, researchers have hypothesised a connection between(2018, 2019, 2015, 2013)"

Misplaced evaluation

Chat GPT: This paragraph **effectively** presents a summary of the research findings regarding mindfulness meditation and its potential impact on various aspects of mental functioning....**However** the structure could be improved for clarity and flow.

Redundant advice

'Revised' structure was a paraphrase of the existing structure

Explicit instructions needed

The incorrect academic referencing travelled all the way through to text 12.

English academic style

'We I conclude that...'



Content, argument, cohesion and

<u>coherence</u>

am not sure I see how this two parts of the sentence are related. I do not really see how this sentence is related to the previous one. Is this correct?

Mindfulness meditation is already known to reduce anxiety, increase presentmoment awareness, and modulate attention (Bodhi, 2000; Kabat-Zinn, 2003). Moss et al. (2022) emphasized the impact on emotional regulation. These findings are related to the changes mindfulness practice brings to the brain, both functionally and structurally (Hözel et al., 2011). It is hypothesized that these factors are linked to the way humans perceive time, and thus, that mindfulness meditation can impact time perception (Droit-Volet et al., 2018, 2019; Schötz et al., 2015; Kramer et al., 2013). Consequently, experiments were conducted to explore this relationship. For example, Kramer et al. (2013) utilized the Temporal Bissection task and demonstrated a main effect of meditation on performance. Mindfulness led to the underestimation of short time periods (due to attentional frameworks) and reduced the overestimation of longer periods' tendencies by lowering arousal levels.

By who?

What does this mean? Put this into words. If this is the explanation, then you do not need to say that it was a main effect.



What do we do next time?

- Powerful tool for English Medium Instruction
- More explicit entry points: lexis, sentence, paragraph, coherence, cohesion
- Prompts to highlight changes
- Prompts in other languages?
- Worked investigation of Chat GPT textual changes
- Conceptualisation of the reader



References

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