



## Two Cases of AI Use in the Higher Education Language and Communication Classroom

Marissa Kwan Lin E & Misty So-Sum Wai-Cook

### Abstract

In this brief report, we describe two cases of AI use in the language and communication classroom. The first case involved the use of Consensus, an AI-driven platform, as part of efforts to teach first year undergraduates how to use research databases to search for relevant research sources for an oral presentation assignment to pitch a proposal for a small-scale research study. In this first case, we show how, using an example of student work and response, the use of Consensus can, with its AI-driven capabilities, provide students with an alternative search platform for academic sources, and facilitate critical thinking when it comes to honing information literacy skills for first year undergraduates in terms of comparing the usefulness of different platforms to search for research literature. In the second case, ChatGPT was introduced to a group of graduate students. The purpose of this task was to teach them how to utilize ChatGPT appropriately to assist them in the writing process. This was done by raising students' awareness about the capabilities and limitations of using ChatGPT in writing. When students were asked to apply the writing and evaluative skills that they learned in the course to assess a critique, they were able to highlight the strengths and weaknesses of AI-written text based on the content, organization, and language usage. Subsequently, students reported in a survey that they would not use ChatGPT to develop the content of their essay or organize the content but use it for checking the accuracy of language in writing their own argumentative synthesis. Both cases show the potential of AI platforms to facilitate the research and writing process in the academic writing classroom.

**Keywords:** Generative AI, language and communication, information literacy skills, critical thinking, critique writing, research skills

Received: October 15, 2024  
Reviewed: October 25, 2024  
Revised: November 4, 2024  
Accepted: November 8, 2024

Corresponding authors

**Marissa Kwan Lin E**  
*Centre for English Language  
Communication, National  
University of Singapore*  
elcmari@nus.edu.sg

**Misty So-Sum Wai-Cook**  
*Centre for English Language  
Communication / College of  
Alice & Peter Tan, National  
University of Singapore*

Additional information is  
available at the end of the  
article

©2024 The Author(s).  
Published by the UST  
Department of English,  
University of Santo Tomas  
Manila, The Philippines

## Introduction

The introduction of Generative AI (henceforth referred to as ‘GenAI’) has caused language educators to rethink the ways we teach and how our students learn (Kohnke et al., 2023). In Law’s (2024) extensive review of the current literature on the use of GenAI in the language classroom, he mentions how these studies have focused on the “value of incorporating GenAI in language classrooms to value support language acquisition, improve language skills and offer personalized learning experiences” (p. 4). He also observed how researchers have highlighted the potential of GenAI tools to “[enhance] various aspects of education, including language skills, content generation, personalized learning, and assessment” (p. 4).

These enhancements are varied. For example, as of now, GenAI tools can explain feedback given to students (Barrot, 2023; Inglely & Pack, 2023). Students can also find definitions, conceptualize ideas, enhance clarity and coherence, and improve grammar, syntax, and writing styles (Inglely & Pack, 2023). Furthermore, GenAI tools have the power to prompt and refine student work in creating content, structuring information and improving language accuracy (Guo et al., 2022).

However, GenAI tools are still not able to mimic many aspects of writing because they lack emotional depth and life experiences (Hartwell & Aull, 2023). As the tools cannot critically reflect and assess the quality of writing which require higher-order thinking skills, GenAI cannot produce contextualized text. Consequently, text produced from such tools cannot contribute to authors’ distinctive voice in writing (Hartwell & Aull, 2023). It has also been reported that GenAI tools cannot construct sophisticated arguments in academic writing, link concepts coherently, provide content specificity, produce sufficient evidence, and use appropriate words to capture technical content (Casal & Kessler, 2023).

While much has been written about the potential and limitations of GenAI to facilitate development and assessment of student writing and speaking skills (e.g., Dong et al., 2024; Liu, 2024; Voss et al., 2023), less work has been done on how the technology can be used to help students in other areas that play a role in language learning, for example, idea generation, information literacy skills and critiquing writing. These areas typically fall under the category of higher-order thinking skills. We take the position here that awareness of the benefits and limitations of GenAI use can be categorized as information literacy since the user would have to determine if the output (information) generated by GenAI platforms has utility. This is also an area where few studies have been done.

Moreover, the immediate relevance of GenAI to the facilitation of writing and speaking skills has meant that much of the research has focused on language learning for students with lower levels of proficiency (Law, 2024). However, we argue that it is necessary to take into account the learning needs of students with higher levels of language proficiency, but who may nonetheless need help with developing academic literacies focused on the type and level of argumentation and academic writing demanded at the higher education level where there is a concomitant objective involving content learning of a particular discipline (Walkinshaw et al., 2017).

## The Context of Academic Writing in NUS

At the Centre for English Language Communication (CELC) at the National University of Singapore (NUS), students typically attend language and communication courses developed with an eye towards training them not only to communicate effectively in both verbal and written genres, but to demonstrate critical and analytical thinking, and basic research skills as well. English language proficiency is not the only focus in the Centre's overall objective to develop students' English language and communication skills. The Centre also aims to develop student competencies in the use of English as a language to communicate diverse types of content, engage in higher-order thinking skills, and construct new knowledges that enable effective social and professional functioning in a highly complex and increasingly technologized world.

### Case 1: Using Consensus to teach Students how to search for Sources

In this paper, we first describe a use case of an AI-driven platform, Consensus, to help students ideate, critique and learn information literacy skills relevant to the research process. Students can use Consensus to conduct meaningful searches for relevant research papers using a variety of inputs like yes/no questions or a typical research question, compare the results of their Consensus search with searches on traditional databases like JSTOR and take first steps into the research process that is potentially less overwhelming for them since Consensus does not just present titles and abstracts of research papers but provides parts of the papers presented as results of the search that are relevant to the query (Figure 1). Students can then decide, based on this information, whether they should take the next step to read the papers' abstracts and access the full paper via their university libraries, or exclude the paper from their research.

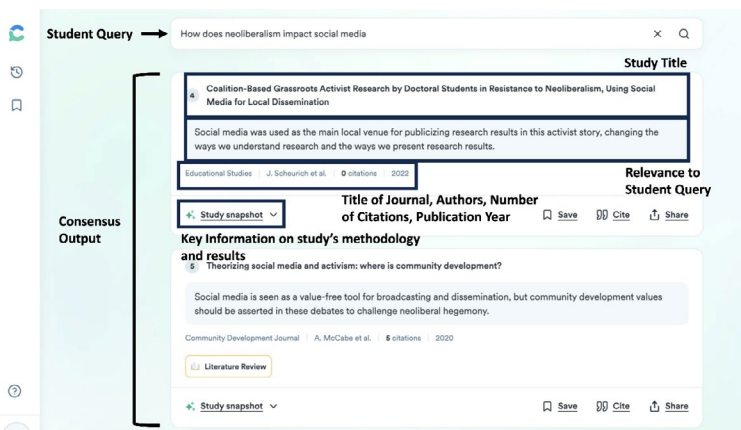


Figure 1: Student Query and Consensus Output

Consensus is an academic search engine powered by AI. It utilizes large language models and purpose-built search technology that captures both meaning and purpose to search for relevant sources from the Semantic Scholar database and produce output in response to a search query. While Consensus is not strictly a GenAI platform because it does not generate new content in direct response to a prompt, it has various functionalities that mimic that of GenAI platforms like ChatGPT. For example, it has a function called ‘Co-Pilot’ that can provide a relevant, synthesized response to a search query input into the platform by the user based on its search of the scientific literature relevant to the query (Figure 2). This synthesized response includes key insights on the topic. So, in the case of the query in Figure 2 ‘How does neoliberalism impact social media’, we get key insights that focus on three areas: influencers and marketization, subjectivity and inequality, and self-development discourse. These key insights would potentially be useful for helping students flesh out their ideas on a topic, as well as helping them narrow the focus of their research study from a broad question like ‘How does neoliberalism impact social media’ to something more targeted.

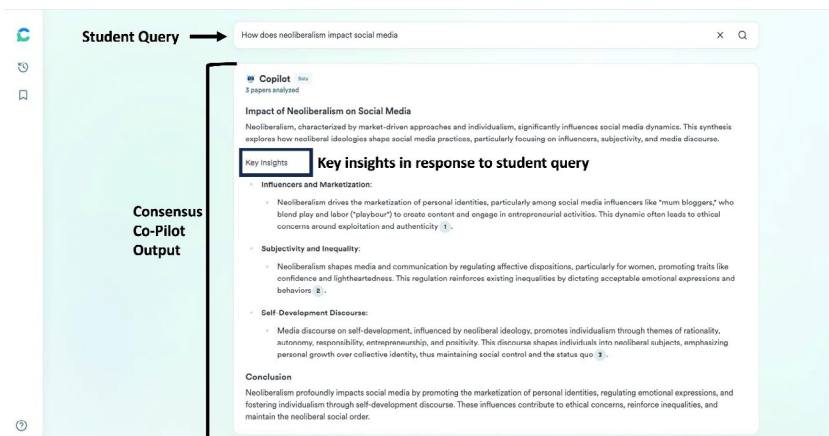


Figure 2: Consensus Co-pilot Output

In the case of Consensus use described here, students were enrolled in a course that focused on the teaching and learning of academic reading and writing skills in a Content-Based Instruction (CBI) setting. This course used neoliberalism as a topical focus and is part of a larger academic writing programme that has a common assessment framework directed towards the achievement of common learning objectives focusing on academic writing and scholarly argumentation. Students were first year undergraduates from various disciplines in the sciences, engineering, computing, business, social sciences and humanities.

Students in the course were first introduced to Consensus via an uploaded video on the library guide (‘LibGuide’) curated specifically for the course. A ‘LibGuide’ is a web-based guide constructed and resourced by an assigned librarian who may work closely with the course lecturer to develop required learning material for students. LibGuides have been

used to provide instruction on library-relevant skills, e.g., information literacy skills, and have been shown to have pedagogical benefits (Bowen, 2014). In the video, students were shown how to use Consensus to search for sources relevant to their proposed research topics. The teacher also repeated this information in a face-to-face class that had time set aside for a research workshop where students could explore Consensus, as well as other databases like Google Scholar and JSTOR to search for relevant research sources for their proposed research topic. Videos on how to use Google Scholar and JSTOR had also been uploaded to the LibGuide for students to view prior to the research workshop.

Students were then given time during the workshop to conduct their searches and consult with the teacher on their search results. They were also provided with a set of guiding questions to help them plan their study. Students were not required to submit their responses to these questions as they were meant primarily to help students with the process of ideation prior to class, which would likely make in-class time with the teacher more productive since students could readily consult the teacher on the feasibility and suitability of their preliminary topic ideas.

In addition, students were also asked to fill in a handout with the search queries they had used on the different databases they had used, their assessment of the helpfulness of each database for their purposes, the relevant sources they had managed to obtain from the databases, as well as their initial thoughts on how they could use these sources for their proposed study and, finally, a brief reflection on their experience using the different databases of Google Scholar, the university library database (which included JSTOR) and Consensus. There were two simple prompts given for this brief reflection. The first prompt asked students to decide which of the databases worked better for their purposes, and the second prompt asked students to come up with a reason for why a database, or databases, might have worked better than the other(s). This brief reflection was meant to help students think critically about their usage of the different databases and inform their choices when they use these databases for future work.

The provision of the abovementioned guiding questions and handout for search queries, together with the videos in the LibGuide, were meant to scaffold the process of ideation for students as they worked towards completing a conferencing handout that would be used as a basis for a one-to-one consultation with the teacher on their research study plans and process. In this last handout, students are required to submit an 80- to 100-word summary of their research study, two to three academic sources they intend to use, as well as a detailed plan of how they intend to flesh out the eight different rhetorical moves of their research pitch, which is an 8-minute oral presentation that aims to present the key elements of a student's intended research study. These eight moves are the listener and content orientation, rationale, research purpose statement, theoretical perspective or lens, method and data, results, implication and termination. These moves have been adapted from the framework proposed by Hu and Liu (2018) for three-minute thesis presentations as an academic genre. The objective of this pitch is for students to show the feasibility of their intended study and its relevance for the course. We thus have, with the guiding questions, handout for search queries and conferencing handout, a sequence of scaffolded activities where students are guided to

ideate and plan for their intended research study. This scaffolding was deemed necessary since, as first year undergraduates, the students in the course would likely be unfamiliar with such skills (Huddleston et al., 2019).

Figure 3 shows part of a completed search query handout from one of the students in the course. In the handout we can see how the student has used Consensus and Google Scholar as part of his search process, including the search queries he used for both platforms [A]. Besides noting down the sources found that are relevant to his topic [C], the student also provided rationale and detail about the relevance and usefulness of these resources [B, D]. For example, he mentions how the source given by Consensus features interviews that would ‘allow [him] to create context and better frame the stance [he] intends to take for [his] paper’. He also mentions, for the sources (not all sources shown in the image) he obtained from Google Scholar that these sources ‘contain a lot of rich material regarding [b]odybuilding, care hustling and linking neoliberal themes to the sport’. ‘Neoliberal themes’ here refer to six key concepts in the topic of neoliberalism that students are taught as part of the course. These are commodification, competition, marketization, profit-loss rationality, self-responsibilisation and government-as-facilitator-and-regulator (of markets). Thus, we can see, in the case of this student, how he is able to involve what he has learnt in class as part of his research process, specifically with utilizing information literacy skills for research purposes.

| Your Topic: [Bodybuilding and Neoliberalism]   |   |  |  |
|--|---|--|--|
| Database/AI<br>What is the search query and/or keywords you used?<br><br>Did you have to refine the search query or change your search query to get better search results?   | Usability<br>Is the database helpful? Why/why not?  | List the sources relevant to your topic that you managed to get from the database/AI<br>Insert the full APA7 reference <sup>1</sup> so you can find the source again after today's class   | Purpose: What can you use these sources for?<br>Indicate the purpose so you'll remember why you made the effort to note down these sources in this graphic organiser                     |
| A  | B   | C  | D  |
| <p><b>Consensus.ai</b><br/>["How are neoliberal themes in prevalent in bodybuilding culture?"]</p> <p>To access the Consensus AI platform, use this <a href="#">link</a></p> | <p>Not very useful, AI had difficulty finding topics related to my question</p>                                   | <p>Linder, F. (2007). 11fe as art, and seeing the promise of big bodies. <i>American Ethnologist</i>, 34(3), 451–472. <a href="https://doi.org/10.1525/ae.2007.34.3.451">https://doi.org/10.1525/ae.2007.34.3.451</a></p>  | <ul style="list-style-type: none"> <li>Interviews with bodybuilders of all forms allow me to create context and better frame the stance I intend to take for this paper.</li> </ul>      |
| <p><b>Google Scholar</b><br/>["Bodybuilding and Neoliberalism", "Neoliberalism and fitness", "Self-Care and Neoliberalism"]</p>  | <p>Useful Database but a lot of material is locked behind a paywall. Forced to search again on NUS libraries.</p> | <p>Hiramoto, M., &amp; Lai, Y. (2017). Building a body of followers: Neoliberalism and online discourse of fitness and masculinity. <i>Journal of Language and Sexuality</i>, 6(2), 262–291. <a href="https://doi.org/10.1075/jls.6.2.03hir">https://doi.org/10.1075/jls.6.2.03hir</a></p> | <ul style="list-style-type: none"> <li>The following sources contain a lot of rich material regarding Bodybuilding, care hustling and linking neoliberal themes to the sport.</li> </ul> |

<sup>1</sup> You can use Zotero bibliography (<https://zlib.org/>) to format the references into APA7 format for you.

**Figure 3: Extract from completed handout**

In Figure 4, we see an extract taken from the same student’s conferencing handout. This figure shows his intended bibliography which formed part of the final reference list for his research study. In this figure, we can see how the student has built on his initial search for sources as shown in Figure 4. He has added more sources and provided clear justification (see ‘Rationale’ column) for why each source is useful for his study. The term ‘rationale’ here refers to justification for the usefulness of each source for the proposed research study

and is different from the ‘rationale’ rhetorical move referred to earlier. While the student has removed the Linder (2007) study he had sourced from the Consensus platform (Figure 3, [C]), he has replaced this with other sources. Furthermore, the student has also added justification (under the ‘Rationale’ column) for why each source would be useful for his study. So, even though the student did not ultimately make use of sources from Consensus, we can argue that it formed a useful part of his ideation and planning process since he had to critically evaluate the usefulness of Consensus as a platform for the purposes of his research study. Excerpt 1 shows his brief reflection where he appraised each platform in terms of usefulness for his ideation and planning process.

| No. | Academic Work  | Rationale   |
|-----|--|---|
| 1   | Hiramoto, M., & Lai, Y. (2017). Building a body of followers: Neoliberalism and online discourse of fitness and masculinity. <i>Journal of Language and Sexuality</i> , 6(2), 262–291. <a href="https://doi.org/10.1075/jls.6.2.03hir">https://doi.org/10.1075/jls.6.2.03hir</a>   | To Justify that the study is based on previously conducted research and aims to go deeper on it within a more specific niche.                     |
| 2   | Hakim, J. (2016). ‘Fit is the new rich’: male embodiment in the age of austerity. <i>Soundings: A journal of politics and culture</i> 61, 84–94. <a href="https://www.muse.jhu.edu/article/609287">https://www.muse.jhu.edu/article/609287</a> .   | To assist in drawing the connection between fitness and social value  |
| 3   | Kotzé, J., & Antonopoulos, G. A. (2021). Boosting bodily capital: Maintaining masculinity, aesthetic pleasure and instrumental utility through the consumption of steroids. <i>Journal of Consumer Culture</i> , 21(3), 683–700. <a href="https://doi.org/10.1177/1469540519846196">https://doi.org/10.1177/1469540519846196</a> | Supports the argument that at the extremes of bodybuilding, the use of steroids is both common and necessary to progress                          |
| 4   | Tod, D., & Edwards, C. (2015). Relationships among muscle dysmorphia characteristics, body image quality of life, and coping in males. <i>Journal of Science and Medicine in Sport</i> , 18(5), 585–589. <a href="https://doi.org/10.1016/j.jsams.2014.07.015">https://doi.org/10.1016/j.jsams.2014.07.015</a>                   | This could be a possible source to use in the implications section of the modes. Where a broader discussion regarding body dysmorphia is invoked. |

**Figure 4: Extract from student conferencing handout – Selected bibliography with rationale for selecting the source**

**Excerpt 1: Student Reflection**

*NUS Libraries Databases and Google Scholar worked best for my topic.*

*Consensus had difficulty understanding my topic regardless of how I rephrased my statement. The other two mediums also felt vaster and user friendly in comparison.*

*I learnt that a lot of the databases store similar articles but [the university’s] libraries’ one ups them by providing free access to a lot of content.*

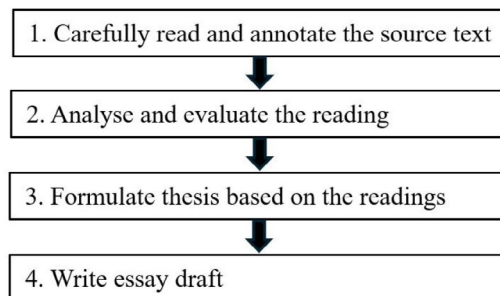
It is clear, from this described example, that the use of Consensus to help students with searching for research sources had somewhat mixed results, with the student finding the platform less helpful. So, while such AI-driven platforms may offer functionalities like a synthesis of findings from collated search results, or research query-based searches (as compared to keyword searches), they would need to be complemented by other traditional platforms like Google Scholar or university libraries' databases since these AI-driven platforms are constantly in the process of being developed, and may not be able to offer full access to the vast array of research resources available. Nonetheless, providing students with experience using such AI-driven platforms would be useful to add to their arsenal of research skills and tools since this experience would not only offer them exposure to such platforms but also require them to assess the suitability of these platforms for their specific purposes, as shown in the abovementioned case example.

## Case 2: Using Generative AI to teach Critique Writing

In the second case, the instructor introduced ChatGPT in a writing task. The purpose of this task was to teach students how to appropriately utilize ChatGPT in a writing process. In this writing process, students were taught how to write a critique and then apply their skills to evaluate two critique essay samples—one was written by ChatGPT, and the other was written by a human. The steps below describe how students were taught to write a critique.

### Step 1: Teaching students the critique writing process

In this course, students were taught how to write a critique by analyzing the content of the original article that they should critique, and evaluating the credibility of an author's claim in the article based on the reasoning, evidence, flow of information, and style of the text (Figure 5).

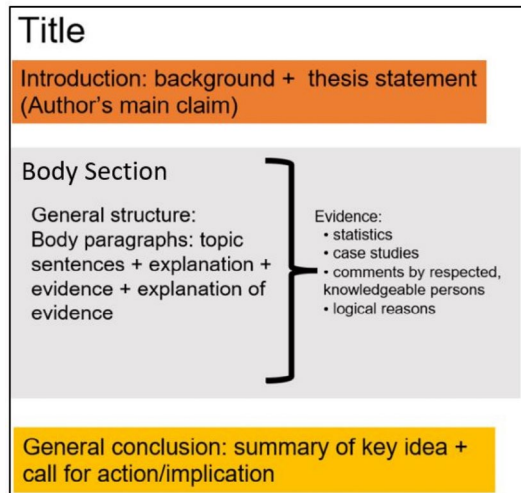


**Figure 5:** *Chart summary of the critique writing process*



### Step 2: Teaching students how to organize a critique and develop ideas in a critique essay

Students were taught how to organize a critique essay into three sections: introduction, body paragraphs with key ideas, and conclusion. This was followed by an in-class discussion on how to develop and present the content using an example of a critique essay (Figure 6).



**Figure 6: Overall organization of a critique essay**

### Step 3: Explanation of assessment criteria

Students were given a list of assessment criteria to evaluate the quality of a critique essay based on content, organization, and language (Appendix A).

### Step 4: In-class evaluation task

Students were then asked to evaluate two critique essay samples based on the essay sample given and the assessment criteria. Unbeknown to the students, the Sample 1 critique essay is written by a human (Appendix B) and the Sample 2 critique essay is written by ChatGPT (See Appendix C).

The analyses of students' comments revealed that they were able to identify the strengths and weaknesses of each sample. In the good example of a critique essay (Figure 7), students were able to identify the flow of the introduction with good background information and a thesis statement, body paragraph with a key idea that links to a thesis statement, and evidence that supports the key idea, and a conclusion with summary of the key points.

Critique of "A Meatless Diet Is Better for You—And the Planet"

Hull (2023) argued that people need to change their meat diet which will cause health problems into a meatless diet. Hull (2023) also argued that all meat diets cause cardiovascular disease, which is a crucial question for the meat diet debate. Hull (2023) has the best intentions, but the desire to advocate for people to apply to a meatless diet is based on a wrong assumption, that all meat diets are unhealthy. However, the white meat diet represented by fish is healthy. Therefore, this essay argues that people should consider having a healthy fish diet rather than a total meatless diet.

Although a meatless diet can be healthy, eating some meat like fish can be healthy. Hull (2023) tried to convince people that red meat diets and processed meat diets are not good for people's health. In fact, Hull (2023) reported findings that eating meat, especially red meat and processed meat, has harmful effects on human health, such as increasing the risk of cancer and cardiovascular disease. For example, the World Health Organization (WHO, 2015) warns that eating processed meat and red meat are carcinogenic. In this case, the IARC Working Group found highly processed and unprocessed red meat consumption causes cardiovascular disease. It may be true that such meat can cause cancer and heart problems.

Nevertheless, Hull (2023) expanded the scope of processed meat and unprocessed red meat to all meat which WHO's warning does not mention. In other words, the author considered all meat diets to be unhealthy. On the contrary, the white meat diets represented by fish are healthy. (Evidence) For instance, unprocessed fish meat is quite healthy food that is added to the classic Mediterranean diet. To be more specific, according to Katherine (2023), the Mediterranean diet includes fish and seafood at least twice a week. Katherine (2023) further proposed that this dietary pattern has been associated with lower risks of obesity, diabetes, heart disease, stroke, cancer, and mortality.

Another research study revealed that that people should eat meat to get sufficient nutrient elements like protein, iron and omega-3 fatty acids from fish (Hull, 2023). Eating fish is an important source of omega-3 fatty acids. These essential nutrients keep our heart and brain healthy. (Evidence) Two omega-3 fatty acids found in fish are EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) (Washington State Department of Health, 2023). Evaluation of Evidence. Therefore, eating unprocessed fish meat as part of a balanced diet can help you meet your protein and micronutrient needs, as well as improve your heart health and overall well-being. In this case, unprocessed fish meat is also quite healthy food which people do not need to worry about health problems.

In conclusion, people can choose a healthy diet with unprocessed fish meat which may not cause cancer and heart problems. Although processed meat and unprocessed red meat may cause health problems, people don't need to avoid all meat in their daily diet.

Student Comment:  
Topic established well in the beginning

Student Comment:  
Introduction with background and thesis

Student Comment:  
Main idea linked to thesis

Student Comment:  
Topic statement established and evidence is given as well

Student Comment:  
Evidence to support the main point

Student Comment:  
Counter argument by the author

Student Comment:  
Keywords can be identified from here  
The argument flows logically.  
Key words follow logically from the thesis to the main idea.

**Figure 7: Students' evaluation of a good critique essay sample**

In the article "The Right to Bury the Online Past," the author presents a compelling argument for the implementation of a "right to be forgotten" policy and argued that it should not be extended to the United States (Americans Shouldn't Demand, 2015). Through poignant narratives and logical reasoning, the author advocates for individuals' ability to request the removal of distressing, irrelevant, or distorted personal information from search engine results. At stake in this debate is a question crucial to democracy: Should the free flow of information and ideas ever be restricted? Tucker says yes. While the article effectively highlights concerns related to privacy and individual well-being, a thorough analysis reveals multifaceted considerations that require nuanced evaluation.

The article successfully invokes empathy and underscores the urgency of addressing distressing personal information disseminated online. (Example) By illustrating instances such as the tragic case of the Catsouras family, the author aptly accentuates the emotional toll of unauthorized and traumatic content. This serves as a powerful backdrop for advocating the need for mechanisms that allow individuals to mitigate potential harm. With the links removed from search lists, these materials would still exist on the Internet but would be difficult (or impossible) to find.

Tucker is fighting the right battle but advocating the wrong approach in demanding the FTC give Americans a right to be forgotten. The distinction drawn between the "right to be forgotten" and government censorship is a noteworthy argumentative strategy. By attributing the role of gatekeepers to corporations like Google and Yahoo, the article effectively counters concerns of undue governmental influence on freedom of expression. This distinction aims to strike a balance between individual privacy and the broader public discourse. In this capacity, Google plays an important role in maintaining the free, unrestricted flow of digital information. The Post argues correctly that no matter how "unflattering" online material may be to a particular individual, the danger posed by selectively removing links to that material is potentially more damaging because it places the First Amendment freedoms of the larger society at risk.

Student Comment:  
Summary is not clear.

Student Comment:  
Thesis statement is unclear. Own opinion is given instead. The idea is about the right to bury information online. But the idea presented here is something else, all together

Student Comment:  
The author's statement arrives super late in the paragraph.  
It's a bit unclear/hard to distinguish arguments/ counter-arguments.

Student Comment:  
What is the link of this result to Liza Tucker's opinion? Why is this support the main argument?

Student Comment:  
Unclear statement being made here. Need more explanation on the term FTC and what's the wrong approach?

Student Comment:  
The main idea is missing from here

Student Comment:  
This could be a better opening statement being placed at the start.

**Figure 8: Students' evaluation of a poor critique essay sample**

In the poorly developed critique essay example written by ChatGPT (Figure 8), students were able to identify the weaknesses with the flow of the introduction with good background information and a thesis statement, body paragraphs with insufficient and unclear explanations and evidence, and a conclusion that missed out on the key points raised in the essay. After the evaluation of this critique essay, students were informed that this essay was written by ChatGPT, and the class discussed the limitations of ChatGPT and possible ways to further improve on the ChatGPT outputs if they decided to use ChatGPT to assist them in the writing process. After his evaluation activity, students were encouraged to use ChatGPT to assist them with their critique essay.

After the completion of the critique essay, students were invited to fill in a survey to indicate their use of ChatGPT. Six students volunteered to participate in the survey. The results revealed that 2 students (33%) in the class did not use ChatGPT and 4 students (67%) used ChatGPT in their critique essay assignment. The remaining 10 students who did not fill in the survey declared they did not use ChatGPT.

The four students who used ChatGPT reported that they used ChatGPT to assist with the writing process tended to use the tool to check language accuracy and define and understand concepts. However, most students did not use ChatGPT to even summarize the texts, and like feeding the prompt to ChatGPT to ask it to assist with writing and generating ideas.

It is likely that students did not use ChatGPT during the writing process because they felt that ChatGPT was only ‘somewhat accurate’ that they have to re-write ‘only 75% of the work produced by gen-AI tools such as ChatGPT’ and/or ‘have to do about 75% research to check work produced by gen-AI tools such as ChatGPT’. On average, students who used ChatGPT reported that ChatGPT could produce language (n=4; x=3.25), summarize (n=3; x=3), and define and understand concepts (n=3; x=3.33) accurately.

In general, students seemed to be aware of the limitations of ChatGPT. Despite the benefits of using ChatGPT to improve the accuracy and fluency of their language expressions, students reported that ChatGPT was not helpful with writing their critique essay because it reduced the flow of their essays, produced wordy and robotic expressions that lacked authorial voice, extracted only some information, and could not explain certain concepts. Interestingly, one student did not use ChatGPT because it felt like cheating.

## **Discussion and Conclusion**

From the first case described, we can see how enhanced AI platforms like Consensus can potentially be utilized to facilitate student learning and train students to develop important research skills like searching for and selecting sources purposefully for their research. These skills, which involve higher order thinking and move beyond language proficiency, are essential for first-year undergraduates to succeed in university and beyond. Moreover, while the student in the example presented here did not find Consensus so useful for his topic, there were other students who found Consensus more helpful, as one student mentions how

she found Consensus ‘useful in summarizing the article’, but that ‘it has a smaller range of articles compared to Google Scholar’. This is because, in contrast with traditional research databases, Consensus targets sources which address a specific research query, and are not just keyword-based searches, and is able to provide quick summaries of sources, as well as key insights into the topic of the student’s query.

However, Consensus does have its drawbacks. For example, its coverage of sources is quite likely not as extensive as traditional databases like JSTOR since it is reliant on what is publicly available on the internet via the Semantic Scholar database. It is also not known from the above case whether the student fully utilized the functionalities of the Consensus platform, for example, the ‘Co-Pilot’ functionality. Nonetheless, for the first-year undergraduate who is still new to research skills, the platform can serve as a first step in the research process of searching for sources, with traditional databases also introduced, as needed. The student can then make comparisons with the search results obtained from different databases to see what would work best for their purposes. Furthermore, as developers of such platforms work on improvements to the functionality and capabilities of AI-driven platforms like Consensus, such refinements would likely be helpful in facilitating more detailed and more efficient searches in the future.

In the second case, ChatGPT was introduced to a group of graduate students as a way to illustrate the capabilities and limitations of using ChatGPT to assist them in a writing task. Asking students to evaluate a ChatGPT-produced essay and a human written essay based on the assessment criteria allowed them to understand the expected writing requirements, identify the strengths and weaknesses of a ChatGPT produced essay, and explore possible ways to further improve on an AI essay if they choose to use AI tools to assist them with other writing tasks in future.

As illustrated in the students’ evaluation of the weak ChatGPT produced essay and a good human written essay, students were able to evaluate the strengths and weaknesses of both essays in terms of the overall structure and content development. Consistent with the literature (Hartwell & Aull, 2023), students in this study also reported that ChatGPT presents concepts that could be inaccurate; ideas that lack specificity and may be irrelevant to the context of the essay; claims that cannot be substantiated with sufficient evidence; and many brief concepts that may not link coherently. Due to these reasons, students reported that they were more likely to use GenAI tools such as ChatGPT to improve language accuracy and fluency and define some concepts for their writing. However, they would not use these tools for writing the tasks for them.

Consequently, while much of the emphasis is currently on GenAI and how it can help students improve their language proficiency, especially with writing skills, it would be useful to consider how AI and GenAI can be used for other skills that would be required to complete higher level writing tasks, like researching and evaluating a critique. However, while AI and GenAI offer a myriad of features that may seem exciting and appealing at first glance, there should not be exclusive and solitary use of AI in the classroom for its own sake. Its use should be carefully integrated into teaching and learning tasks, with attention paid to the learning outcomes that are to be achieved. In addition, AI and GenAI platforms may have

different functionalities and quality of outcome. Thus, it is important that teachers test the platforms they are intending to use for their specific intended purpose. Perhaps further studies could involve in-depth examinations of student assignment submissions directly impacted by usage of the AI and GenAI platforms reported here to see how this usage influences the process and quality of work produced.

## References

- Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, 100745.
- Bowen, A. (2014). LibGuides and web-based library guides in comparison: Is there a pedagogical advantage? *Journal of Web Librarianship*, 8(2), 147–171.
- Casal, J. E., & Kessler, M. (2023). Can linguists distinguish between ChatGPT/AI and human writing?: A study of research ethics and academic publishing. *Research Methods in Applied Linguistics*, 2(3), 100068.
- Dong, W., Pan, D., & Kim, S. (2024). Exploring the integration of IoT and generative AI in English language education: Smart tools for personalized learning experiences. *Journal of Computational Science*, 82, 102397.
- Guo, K., Wang, J., & Chu, S. K. W. (2022). Using chatbots to scaffold EFL students' argumentative writing. *Assessing Writing*, 54, 100666.
- Hartwell, K., & Aull, L. (2023). Editorial introduction – AI, corpora, and future directions for writing assessment. *Assessing Writing*, 57, 100769.
- Hu, G., & Liu, Y. (2018). Three-minute thesis presentations as an academic genre: A cross-disciplinary study of genre moves. *Journal of English for Academic Purposes*, 35, 16-30.
- Huddleston, B. S., Bond, J. D., Chenoweth, L. L., & Hull, T. L. (2019). Faculty perspectives on undergraduate research skills: Nine core skills for research success. *Reference and User Services Quarterly*, 59(2), 118–130.
- Ingle, S. J., & Pack, A. (2023). Leveraging AI tools to develop the writer rather than the writing. *Trends in Ecology & Evolution*, 38(9), 785-787.
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). Exploring generative artificial intelligence preparedness among university language instructors: A case study. *Computers and Education: Artificial Intelligence*, 5, 100156.
- Law, L. (2024). Application of generative artificial intelligence (GenAI) in language teaching and learning: A scoping literature review. *Computers and Education Open*, 6, 100174.

- Linder, F. (2007). Life as art, and seeing the promise of big bodies. *American Ethnologist*, 34(3), 451-472.
- Liu, J. (2024). Enhancing English language education through big data analytics and generative AI. *Journal of Web Engineering*, 23(2), 227-249.
- Voss, E., Cushing, S. T., Ockey, G. J., & Yan, X. (2023). The use of assistive technologies including generative AI by test takers in language assessment: A debate of theory and practice. *Language Assessment Quarterly*, 20(4-5), 520-532.
- Walkinshaw, I., Fenton-Smith, B., & Humphreys, P. (2017). EMI issues and challenges in Asia-Pacific higher education: An introduction. In B. Fenton-Smith, P. Humphreys, & I. Walkinshaw (Eds.), *English medium instruction in higher education in Asia-Pacific* (pp. 1-16). Cham: Springer.

### Declaration of Use of Generative AI

The authors declare that no GenAI tools were used in the preparation of this article.

**Marissa Kwan Lin E, Ph.D.** is a Senior Lecturer at the Centre for English Language Communication (CELC), National University of Singapore (NUS). She has published a monograph – *Discourses of Neoliberalism in Singapore’s Higher Education Context: Individualist and Communitarian Perspectives* – as well as an edited volume - *Discourses, Modes, Media and Meaning in an Era of Pandemic: A Multimodal Discourse Analysis Approach* - with Dr Sabine Tan. She has published and presented in the areas of social semiotics, critical multimodal discourse studies, multiliteracies and the use of multimodality for educational purposes.

**Misty So-Sum Wai-Cook, Ph.D.** is Deputy Director and Senior Lecturer at the Centre for English Language Communication and Director of Student Life at the College of Alice & Peter Tan (CAPT). She is interested in working with students as partners, and has strong interest in student leadership. She has also conducted multiple research projects and published papers on academic literacies, tutor and peer feedback in language education, and the use of technologies to enhance teaching and learning. She is on the editorial board for *Journal of Interdisciplinary Studies in Education* and *Journal of Underrepresented & Minority Progress*.

**Appendix A**  
**Assessment criteria for critique**

|              |   |
|--------------|---|
| Content      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Thesis statement: Thesis statement is concise, focused, clear, and relevant.</li> <li><input type="checkbox"/> Summary: Summary accurately captures the main point(s), and it is succinct.</li> <li><input type="checkbox"/> Critical evaluation and argument: Analysis and evaluation are highly accurate and provides strong authorial insights on the topic with well-reasoned argument; uses highly relevant source information/frameworks/theories and provides compelling evidence to support the argument.</li> </ul>  |
| Organisation | <ul style="list-style-type: none"> <li><input type="checkbox"/> Macro level elements: Very good overall organization; all rhetorical moves (introduction, summary, evaluation and conclusion) are present, and the moves are accurate.</li> <li><input type="checkbox"/> Overall transition of ideas at a macro level: The writing has good coherence and cohesion; ideas easy to follow throughout the essay.</li> <li><input type="checkbox"/> Micro level: Good paragraph cohesion; key elements (ToS, SSt, and CS) in the paragraph are present and sufficiently developed; all the ideas in the paragraph are logically presented.</li> </ul>  |
| Language     | <ul style="list-style-type: none"> <li><input type="checkbox"/> Grammar: No/few minor grammatical errors, syntax, and vocabulary, and these errors do not impede comprehension of the essay.</li> <li><input type="checkbox"/> Range of sentences/vocabulary: Simple, compound, and complex sentences are used appropriately to express meaning; sentences have no/very few minor errors; academic vocabulary are appropriately used.</li> <li><input type="checkbox"/> Evaluative expressions: Consistent use of evaluative expressions to capture an authorial/critical voice (e.g. appropriate use of boosters, hedges, active/passive voice, and reporting verbs); the expressions are highly appropriate in engaging the academic conversation, and demonstrate how the analysis of the data supports or extends the literature.</li> <li><input type="checkbox"/> Transitions: Transition words/phrases are used to build coherence and cohesion in writing and has no/very minor errors; usage is consistent and appropriate throughout the essay.</li> <li><input type="checkbox"/> Citations: In-text citations and references are provided, and with no stylistic error; citations are well integrated into the text throughout the essay.</li> </ul> |

## **Appendix B**

### **Critique essay written by human**

#### Critique of “A Meatless Diet Is Better for You—And the Planet”

Hull (2023) argued that people need to change their meat diet which will cause health problems into a meatless diet. Hull (2023) also argued that all meat diets cause cardiovascular disease, which is a crucial question for the meat diet debate. Hull (2023) has the best intentions, but the desire to advocate for people to apply to a meatless diet is based on a wrong assumption, that all meat diets are unhealthy. However, the white meat diet represented by fish is healthy. Therefore, this essay argues that people should consider having a healthy fish diet rather than a total meatless diet.

Although a meatless diet can be healthy, eating some meat like fish can be healthy. Hull (2023) tried to convince people that red meat diets and processed meat diets are not good for people’s health. In fact, Hull (2023) reported findings that eating meat, especially red meat and processed meat, has harmful effects on human health, such as increasing the risk of cancer and cardiovascular disease. For example, the World Health Organization (WHO, 2015) warns that eating processed meat and red meat are carcinogenic. In this case, the IARC Working Group found highly processed and unprocessed red meat consumption causes cardiovascular disease. It may be true that such meat can cause cancer and heart problems.

Nevertheless, Hull (2023) expanded the scope of processed meat and unprocessed red meat to all meat which WHO’s warning does not mention. In other words, the author considered all meat diets to be unhealthy. On the contrary, the white meat diets represented by fish are healthy. For instance, unprocessed fish meat is quite healthy food that is added to the classic Mediterranean diet. To be more specific, according to Katherine (2023), the Mediterranean diet includes fish and seafood at least twice a week. Katherine (2023) further proposed that this dietary pattern has been associated with lower risks of obesity, diabetes, heart disease, stroke, cancer, and mortality.

Another research study revealed that that people should eat meat to get sufficient nutrient elements like protein, iron and omega-3 fatty acids from fish (Hull, 2023). Eating fish is an important source of omega-3 fatty acids. These essential nutrients keep our heart and brain healthy. Two omega-3 fatty acids found in fish are EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) (Washington State Department of Health, 2023). (Evaluation of Evidence:)Therefore, eating unprocessed fish meat as part of a balanced diet can help you meet your protein and micronutrient needs, as well as improve your heart health and overall well-being. In this case, unprocessed fish meat is also quite healthy food which people do not need to worry about health problems.

In conclusion, people can choose a healthy diet with unprocessed fish meat which may not cause cancer and heart problems. Although processed meat and unprocessed red meat may cause health problems, people don’t need to avoid all meat in their daily diet.



### Appendix C Critique essay written by ChatGPT

In the article “The Right to Bury the Online Past,” the author presents a compelling argument for the implementation of a “right to be forgotten” policy and argued that it should not be extended to the United States (Americans Shouldn’t Demand, 2015). Through poignant narratives and logical reasoning, the author advocates for individuals’ ability to request the removal of distressing, irrelevant, or distorted personal information from search engine results. At stake in this debate is a question crucial to democracy: Should the free flow of information and ideas ever be restricted? Tucker says yes. While the article effectively highlights concerns related to privacy and individual well-being, a thorough analysis reveals multifaceted considerations that require nuanced evaluation.

The article successfully invokes empathy and underscores the urgency of addressing distressing personal information disseminated online. By illustrating instances such as the tragic case of the Catsouras family, the author aptly accentuates the emotional toll of unauthorized and traumatic content. This serves as a powerful backdrop for advocating the need for mechanisms that allow individuals to mitigate potential harm. With the links removed from search lists, these materials would still exist on the Internet but would be difficult (or impossible) to find.

Tucker is fighting the right battle but advocating the wrong approach in demanding the FTC give Americans a right to be forgotten. The distinction drawn between the “right to be forgotten” and government censorship is a noteworthy argumentative strategy. By attributing the role of gatekeepers to corporations like Google and Yahoo, the article effectively counters concerns of undue governmental influence on freedom of expression. This distinction aims to strike a balance between individual privacy and the broader public discourse. In this capacity, Google plays an important role in maintaining the free, unrestricted flow of digital information. The Post argues correctly that no matter how “unflattering” online material may be to a particular individual, the danger posed by selectively removing links to that material is potentially more damaging because it places the First Amendment freedoms of the larger society at risk.

However, an in-depth exploration of the nuances associated with content removal requests is warranted. While the article proposes that corporations should decide what material should not be provided in response to search requests, the criteria for evaluating such requests remain underspecified. The task of distinguishing between “deeply disturbing,” “unauthorized,” “irrelevant,” “excessive,” or “distorted” personal information is complex and may raise questions about subjectivity, consistency, and the potential for unintended consequences. Another possible conflict: In deciding cases, Google might be motivated by financial considerations—and it would be within its rights to do so as a for-profit company. What would happen, for instance, if links to photos someone wants removed earned Google a significant amount of advertising revenue? In its delisting decision, Google would be forced to weigh ad revenues against requests to delist. There should be no place for either type of conflict when making decisions like these.

Appendix C continued...

While Google seems to be following the European Court’s ruling, we have no real way of knowing, and this is the third problem with Tucker’s argument: She takes Google at its word that it is doing the right thing. After all, the company has published a Transparency Report about its delisting decisions, which essentially claims: Look, we’re doing well! We’re complying with the law! Maybe not. Powles (2015) from *The Guardian* reports that before a Web leak in July 2015, Google had “refused to make public” its data on right-to-be-forgotten requests. The information exposed in that leak led one Dutch researcher to state that Google “is becoming almost like a court or government, but without the fundamental checks on its power.” *The Guardian* determined that “Google’s data leak reveals flaws in making it judge and jury over our rights” (Powles, 2015). The newspaper has called on Google to be “much more transparent” in its policies for delisting links.

Tucker is right: people need relief from damaging online materials. But Google should not be the entity providing that relief. The article compellingly underscores the need for mechanisms that empower individuals to protect their personal information from unwarranted exposure. To further enrich the analysis, the article could delve into the complexities of evaluating content removal requests, societal implications, potential misuse, and the practical feasibility of implementing the proposed “right to be forgotten.” Such a comprehensive exploration would provide a well-rounded perspective on the multifaceted dimensions of this important topic.