| RESEARCH ARTICLE

Metadiscourse Markers in Senior High School Students Academic Papers: A Constructed Learner Corpus-Based Investigation

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| ABSTRACT

The need for proficiency in academic writing has never been more important due to its significance for academic success and professional growth. The skills required in academic writing range from research to critical thinking and communication skills. It develops holistic intellectual development and will help one run a successful professional life, more so in highly research-oriented areas where publications become highly valued. This paper has attempted to fill up the research gaps created by the lack of research into corpus linguistic and corpus-based studies in general within the parameters of Philippine academic writing, with its insufficiency of known studies on metadiscourse markers in particular. This paper examined the use of metadiscourse markers in a researcher-constructed 120,000-word corpus of academic papers written by Grade 11 Senior High School students, namely, concept papers, position papers, reaction papers, and scientific reports. Specifically, the research determined the metadiscourse markers used by students and their frequency across text types, as well as qualitative analysis of their contextual usage. In the current study, it is revealed that students utilize a wide array of interactive and interactional markers, drawing on Hyland's taxonomy of metadiscourse markers (2005) and AntConc V. 3.5.8, a corpus analysis software. The study revealed a predominant use of interactive over interactional metadiscourse markers, with a notable emphasis on transitions within the interactive category. Qualitative analysis also showed that transitions and engagement markers serve various functions, such as clarifying relationships within the text, structuring arguments, and providing additional information for better understanding. Interactional resources were also employed to convey the writer's stance, engage the reader, and present a balanced view by acknowledging different perspectives. Hence, the findings highlighted that text type, rhetorical purpose, and the use of metadiscourse markers interact closely in shaping how the writer communicates and accomplishes their purpose effectively. Future research should address writing ability and experience as factors influencing the choice of metadiscourse markers and examine their variation of use across academic and nonacademic settings.

1. Introduction

With the fast-paced modern life, trajectories toward acquiring proficiency in academic writing have been steadily moving upward. Even in the academe, this continues because it is seen as an important element in completing a subject, course, or program prerequisite. Moreover, it puts into play different sets of abilities, such as research, reasoning, creative thinking, critical reading, writing, and cultural and social skills—all significant in growing a holistic and intellectual person. More than satisfying the academic

requirements, good academic writing skills will probably put would-be professionals at an advantage since promotion is done based on the number of published research and articles.

This is further strengthened by the implementation of the New Enhanced K-12 Curriculum in the Philippines, wherein more subjects are added in order to enhance students' abilities in terms of academic writing. The additional subjects include English for Academic and Professional Purposes and Practical Research. These courses help students develop linguistic, critical thinking, and problem-solving skills for higher education and professional settings. Students will learn about research methodology and practical research techniques. Meanwhile, English for Academic and Professional Purposes develops students' advanced academic literacy skills. Also, a crucial component of the SHS English curriculum is the Reading and Writing (RW) subject, which focuses on refining students' cross-disciplinary writing skills as this subject establishes a foundation for language proficiency and successful communication in academic and professional settings (Reforsado & Lacar-Raymundo, 2024).

Even with the perceived worth, most students still find problems in academic writing. This statement is supported by the research conducted by Pablo and Lasaten (2022), where most of the students fell within the poor to fair level with regard to the criteria set: content and ideas, organization, vocabulary and word choice, use of language, formality, objectivity, and referencing. At a more specific level, the situation described above points to the need for educational systems to provide "inclusive and equitable quality education," as captured in United Nations SDGs 4.1 and 4.5. If these challenges are identified, teachers will be challenged to respond to learners' needs to provide support and scaffolding in the development of relevant skills for writing academically.

One of the fields of research that has received growing interest and has been empirically substantiated by evidence to enhance students' academic writing is the use of metadiscourse markers in their writing. Metadiscourse markers are linguistic features of texts that help readers or listeners with respect to the author's attitude, structure, and relationship with the audience. Considering the study context, these are lexical choices writers make in academic texts to indicate presence, organize, emphasize, evaluate, or provide interaction with the readers (Hyland, 2005).

While the use of metadiscourse markers in academic writing has been considered significant, the overall knowledge and range of functions and context remain understudied and underrepresented. A study on the presence/absence of MDMs in academic texts is recommended since it affects comprehension and interpretation in ESL or EFL learners. Further, directions are also suggested for the assessment of MDMs in a learner-corpora, especially from a larger corpus containing different spectrums and scopes (Gamad et.al., 2022).

In view of these, the present research sets out to investigate the metadiscourse markers in the constructed learner-corpus of English academic text, their frequency of use, and how these frequent metadiscourse markers are used depending on their context to provide a basis for the teaching of academic writing that addresses the writing needs of the students. The general outcome of the study will, therefore, contribute to the growing body of knowledge with respect to MDMs and corpus-based studies in the Philippines, which language teachers could utilize in teaching how to write academic texts among learners.

2. Literature Review
This chapter presents the literature readings and related studies, theories, and concepts that are essential in the development of the whole research study. Common and varied perspectives from different researchers were collected.

This study is anchored on Hyland's Interpersonal Model of Metadiscourse. It is a framework that analyzes how writers project themselves into their discourse to signal their attitude toward the content and the reader. This takes into account a range of linguistic tools that help shape the interaction between the text and its audience. The scheme is based on the principle of the Functional Approach, which sees metadiscourse as a reference in writing, either to the text, the writer, or the reader.

Hyland believes that metadiscourse provides a means of comprehending the interpersonal tools authors employ to structure texts effectively that communicate their personality, authority, sensitivity, and connectedness to their intended message (Hyland, 2015). Hyland's framework shows that metadiscourse includes interactive and interactional communication components:

Following the Hyland Interpersonal Model of Metadiscourse, the current study will analyze how metadiscourse markers shape the writer's stance, evaluation, and engagement with the reader.

Table 1. Interpersonal Model of Metadiscourse (Hyland, 2005)

Category	Function	Examples
Interactive	**Help to guide the reader through the text**	**Resources**
Transitions	express relations between main clauses	in addition; but; thus; and
Frame markers	refer to discourse acts, and sequences	finally; to conclude; my purpose is
Endophoric markers	refer to information in other parts of the text.	noted above; see Fig; in section 2
Evidentials	refer to information from other texts	according to X; Z states
Code glosses	elaborate prepositional meanings	namely; e.g.; such as; in other words
Interactional	**Involve the reader in the text**	**Resources**
Hedges	withhold commitment and open dialogue	might; perhaps; possible; about
Boosters	emphasize certainty or close dialogue	in fact; definitely; it is clear that
Attitude markers	express writer's attitude to proposition	unfortunately; I agree; surprisingly
Self- mentions	explicit reference to author(s)	I; we; my; me; our
Engagement markers	explicitly build relationship with reader	consider; note; you can see that

2.1 Enhancing the Quality of Academic Writing through Metadiscourse Markers

Academic writing is a genre-based form of specialization present in most academic texts. Raymundo (2023) synthesized that academic writing literature has offered evidence that learners in this class are asked to perform diverse types of writing tasks like reports, research papers, and essay exams since discourse synthesis is a typical exercise and actual practice in academic contexts. It includes various genres, such as research papers, essays, and dissertations, all interrelated by some specific conventions and standards that writers must maintain and within which they must competently express their ideas and arguments (Swales & Feak, 2012). According to Swales and Feak (2012), within this academic context, metadiscourse markers are utilized as irreplaceable linguistic tools that guide readers and help signal the writer's engagement, stance, and organization of the text. Besides explaining the text's organization, these metadiscourse markers guide the reader to better understand the writer's argument and main points.

Academic writing is inherently genre-based, encompassing a variety of texts such as research papers, essays, and dissertations. Each genre is governed by specific conventions and standards that require writers to articulate their ideas and arguments effectively (Swales & Feak, 2012). This foundational understanding is essential; however, there is a need for a more critical examination of how these conventions interact with the use of metadiscourse markers within different academic contexts.

Swales and Feak (2012) position metadiscourse markers as essential linguistic tools that facilitate reader comprehension by signaling the writer's engagement, stance, and organizational structure of the text. While this characterization is valid, it raises questions about the uniformity of metadiscourse's effectiveness across various genres. For instance, the use of metadiscourse in qualitative research papers may differ significantly from its application in theoretical essays. Studies by Hyland (2005) and Kuo (1999) highlight genre-specific variations in metadiscourse usage, indicating that certain markers are more prevalent in particular contexts.

Moreover, the assertion that metadiscourse markers guide readers to better understand the writer's arguments merits further scrutiny. The effectiveness of these markers is contingent upon the reader's prior knowledge and familiarity with the subject matter. Chen and Zhang (2020) found that students with varying levels of expertise interpret metadiscourse differently, highlighting the need to consider reader profiles when evaluating the impact of metadiscourse. This perspective would enhance our understanding of how metadiscourse can either facilitate or hinder effective communication. Hyland (2022) elaborates on the notion of metadiscourse as a mechanism for authors to comment on and engage with their texts. While this view is beneficial, it risks oversimplifying the complexities involved in author-reader dynamics. The text does not sufficiently address how different types of metadiscourse—such as interactive (which helps navigate the text) and interactional (which establishes a relationship with the reader)—serve distinct purposes. Nassaji (2018) emphasizes the importance of recognizing these categories, suggesting that a strategic approach to metadiscourse can significantly enhance reader engagement.

Furthermore, metadiscourse markers are not universally understood. For instance, Graham (2019) discusses how certain markers may be perceived as overly assertive or vague, which could alienate specific audiences. Recognizing these is essential for effective academic communication. Additionally, the discussion could benefit from a critical evaluation of how metadiscourse markers might be perceived differently across cultural contexts.

Despite highlighting the significance of metadiscourse, the discussion falls short in offering practical strategies for integrating these concepts into writing instruction. Educators could greatly benefit from frameworks that delineate effective metadiscourse

use in academic writing. Thompson and Ye (1991) suggest that explicit instruction on metadiscourse markers can significantly improve students' writing quality.

Hyland (2010) calls for more empirical studies that explore the relationship between metadiscourse markers and writing outcomes across diverse academic settings. Moreover, research could focus on the role of digital communication in shaping metadiscourse practices, particularly in online academic platforms where the dynamics of engagement differ from traditional writing. Longitudinal studies tracking the evolution of metadiscourse use in student writing could provide a clearer picture of how writers develop their academic voice over time. Additionally, exploring the impact of metadiscourse on reader comprehension and retention would contribute to a more comprehensive understanding of its efficacy in academic discourse.

2.2 Studies on Metadiscourse Markers
While existing studies predominantly emphasize interactive markers such as transitions and logical connectives, there is a notable lack of attention to less common interactional markers. Livingstone (2019) found that hedges were more frequent than boosters, suggesting that while engagement is essential, it is underutilized. Similarly, Kirişçi and Duruk (2022) noted that Turkish researchers employed engagement markers less frequently, likely due to constraints in abstract writing. This trend reflects a broader issue in academic discourse where less frequent markers are overshadowed by more dominant forms.

The findings of Celiešienė and Vaičienė (2023) highlight a disciplinary variance, where Lithuanian articles demonstrated a higher frequency of text-organizing markers compared to English texts. This suggests that cultural and disciplinary contexts significantly influence metadiscourse usage. Matroudy (2023) further supports this by showing that cultural factors affect engagement markers in dissertation defenses, revealing discrepancies in how certainty is conveyed across different educational contexts.

Despite these insights, the tendency to overlook the roles of less frequent metadiscourse markers remains problematic. The critical evaluation of studies such as Gamad et al. (2022) indicates that cultural and disciplinary considerations shape not only the frequency but also the effectiveness of metadiscourse in academic writing. As such, further investigation into these underrepresented markers is essential for a comprehensive understanding of metadiscourse's role in academic communication.

Research consistently shows that interactive markers are predominant in academic texts. Tang (2023) observed this trend across various registers, confirming that casual conversations and academic prose employ metadiscourse markers differently. However, the underutilization of interactional markers, particularly in less formal contexts, raises questions about the depth of reader engagement achieved by writers.

Moreover, the investigation by Ruskan and Maslauskienė (2023) into Lithuanian linguistic research articles illustrates how disciplinary conventions dictate metadiscourse strategies. The predominance of interactive markers in this context suggests a preference for guiding readers through complex information rather than fostering personal engagement. While the existing literature provides valuable insights, it also calls for more comprehensive studies that investigate how these factors influence the effectiveness of metadiscourse markers across different contexts. Understanding these dynamics is essential for developing more effective academic communication strategies that resonate with diverse audiences.

3. Methodology
This chapter presents the research design of the study, which explains the type of research methodology the researcher used, the respondents, the locale, the research instruments, and the study's data-gathering procedure.

3.1 Research Design
The researcher employed qualitative corpus analysis as the methodological basis for the investigation as it adopts an exploratory, inductive approach. It involved examining the metadiscourse markers and their meanings and functions using a constructed learner-corpus of English academic text. Qualitative corpus analysis is a methodology for pursuing in-depth investigations of authentic language use representative of purposefully selected communicative situations (Hasko, 2020). Thus, it involved examining the content of a corpus, which is a large collection of written language samples, in a detailed manner.

3.2 Locale and Participants of the Study
This study was conducted in all big schools across the municipalities in the Legislative District III of Isabela, namely, Alicia National High School in Alicia, Angadanan National High School in Angadanan, Cabatuan National High School in Cabatuan, Raniag High School in Ramon and Salinungan-Stand Alone High School in San Mateo. These learning institutions offer the following academic

strands and tracks: Science, Technology, Engineering, and Mathematics (STEM), Accountancy, Business and Management (ABM), and Humanities and Social Sciences (HUMSS), from which the constructed learner-corpus was taken.

As this was a qualitative inquiry, the participants of this study were senior high school students only from the said learning institutions, particularly grade 11 students. Since the schools offer subjects such as English for Academic and Professional Purposes and Practical Research 1, the written outputs of the participants, which constituted part of their final requirements in these subjects, served as the inputs for this study and underwent corpus analysis.

The number of participants in the study was 30 for every participating school, which totaled 120 participants and was selected through a purposive sampling procedure since it is qualitative research that followed the design criteria for corpus analysis proposed by Granger (2008) and Sinclair (2005). Table 2 shows the distribution of the participants per academic text type to give a clearer view of the selection of research participants.

Table 2. Distribution of Research Participants per Academic-Text Type

Academic Strand/Track	Participants	Number of Language Samples	Word Count
1. Concept Paper	30	30	40,938
2. Position Paper	30	30	25, 996
3. Reaction/Review Paper	30	30	15, 818
4. Scientific Report	30	30	40, 378
Total	**120**	**120**	**120, 000**

3.3 Research Instrument
In the context of the study, the research instrument was the constructed learner corpora of English academic texts. The corpus was assembled according to explicit design criteria proposed by Granger (2008) and Sinclair (2005). These include representativeness, sampling strategy, text types and genres, and corpus size and balance. The constructed learner corpora of English academic texts were comprised of written outputs of the research participants such as reaction paper, concept paper, position paper, and scientific report with approximately 250 words per language sample. The written outputs were part of their final requirements for the subject English for Academic and Professional Purposes and Practical Research 1.

3.4 Data Gathering Procedure
Following the selection of research subjects and materials, the researcher employed a strict and formal procedure for collecting data in a systematic way. In other words, each step of the collection process was intended to be well thought out and complied with in order to ensure the integrity and validity of the findings.

First, the researcher sought permission from the participating schools concerning the conduct of the study through a letter. Informed consent in writing was elicited by the researcher from students on the use of their previously written works as part of constructed learner corpora of English academic text. Soft copies of their outputs were retrieved from their teachers or any database where these were stored since digital or electronic copies were the needed inputs for analysis of these learner corpora. After all the language samples had been converted, encoded, and saved from the researchers' database, corpus analysis was used to analyze all the language samples of the research participants as it involves the compilation of a corpus of texts and the systematic analysis of the frequency and distribution of metadiscourse features within that corpus.

Moreover, the concordance software Antconc version 3.4.0, designed by Lawrence Anthony, helped recover all frequencies and contextual uses of the metadiscourse markers under study from the proposed constructed learner-corpus of 120,000 words.

3.5 Corpus Construction
The design of the corpus was built on the arguments and suggestions made by Granger (2008) and Sinclair (2005). The design criteria included representativeness, sampling strategy, text types and genres, and corpus size and balance. The constructed learner-corpus assembled by the researcher contained 120, 000 words taken from different language samples and genres written by Senior High School students such as concept papers, position papers, reaction papers and scientific reports.
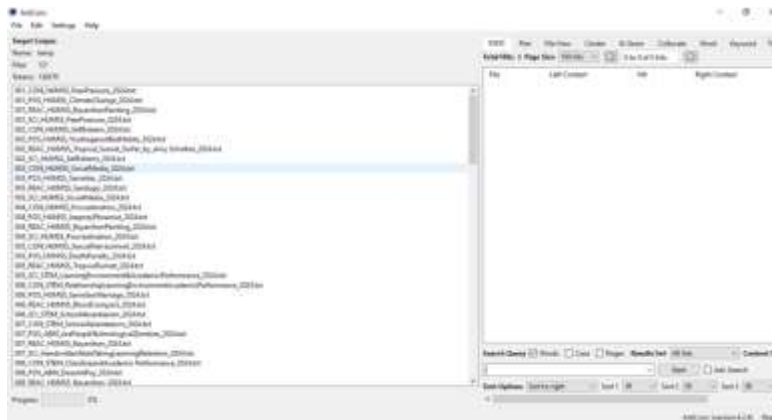
Figure 3: Uploaded language samples from the Antconc main interface

Figure 3 shows that the researcher has created a learner corpus of English academic text that was uploaded into the Antconc concordancer software interface. The list of file names suggested that the corpus contains texts from a wide range of sources and may contain several genres and topics. This dataset allowed the researcher to conduct an intensive textual metadiscourse analysis.
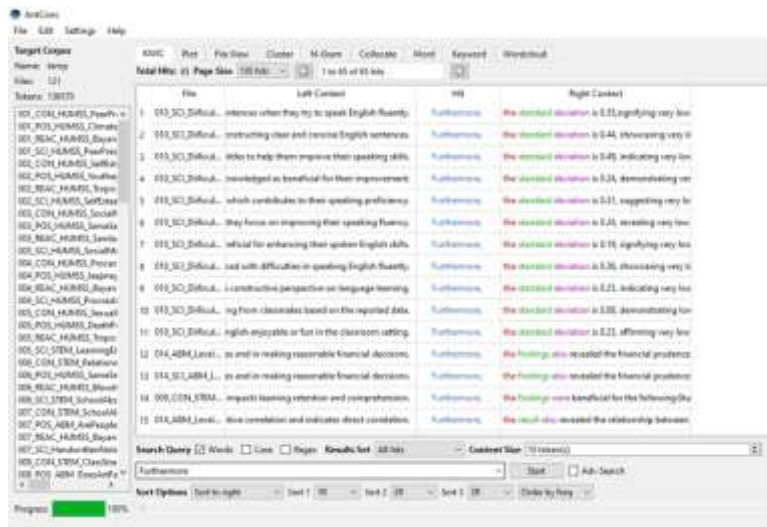

Figure 4: Keyword in Context Function feature

AntConc's "Key in Context" function was utilized to examine individual words or phrases in relation to their corpus context. This made it easier for the researcher to perform a qualitative analysis by allowing the researcher to observe how participants employed the keywords/search phrases in the material surrounding them.

Figure 5: Wordlist Feature

It also explained to the figure how important the Wordlist feature was in providing information to the researcher for each word, including the frequency and rank in the overall corpus.
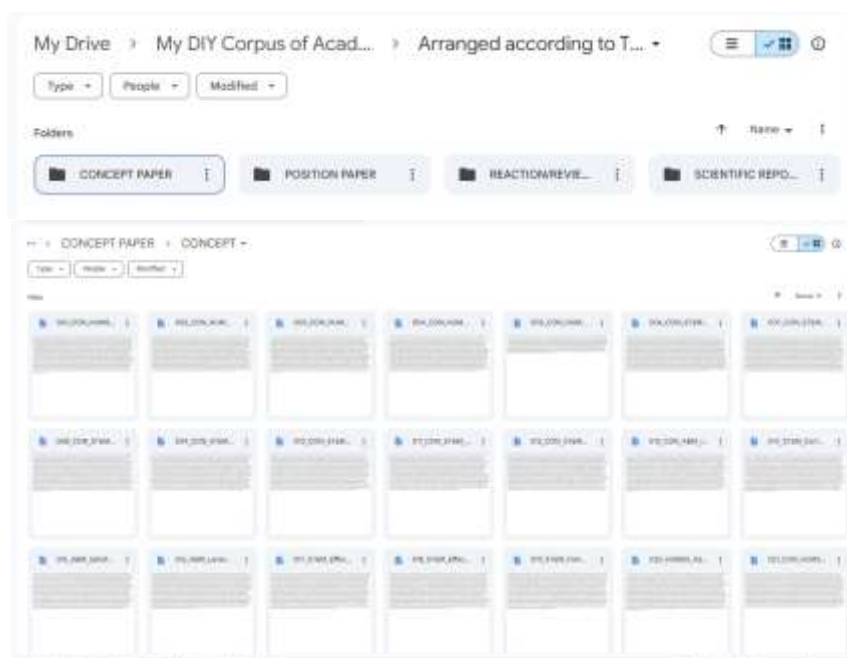
Figure 7: Compilation was done thru Google Drive

It can be seen that the researcher carefully collected and kept all the language samples from the corpus using the storing and sharing facilities of Google Drive, a cloud-based platform efficient for managing and sharing data among people in a research team.

3.6 Data Analysis

First of all, collected written outputs were preprocessed and classified. It involved transforming raw text data into a structured format suitable for analysis. Some data, however, did not have electronic copies or was not readily available, so the only option was a handwritten or hard copy. The researcher scanned, converted, and encoded this in Notepad. In this instance, the researcher confirmed that the rewritten text is a true reflection of the actual content created by the learner. In the process of encoding language samples, manual annotation was conducted, which included removing parts of the language samples that were not examples of the learner's original language use and, therefore, had to be excluded from corpus analysis, but also all the elements that could potentially disclose the identity of the learner and did not contribute to the analysis of metadiscourse markers in general,

such as acknowledgments, references, etc. This checking process ensured that all the subsequent analyses were based on an accurate representation of the learners' outputs. It ensured consistency, standardization, and linguistic annotations. At this stage, the researcher assigned a label or category to texts under study using predefined labels or categories according to their content. After the language samples had been scanned, converted, encoded, and labelled, the language samples were uploaded to AntConc 3.5.7 software.

In this research, AntConc concordance software, with its frequency feature, was used to count the frequency of words from Hyland's (2005) Taxonomy of Interpersonal Metadiscourse Markers. To this end, concordance features were employed to provide the context of metadiscourse markers for the qualitative aspect of the study. To check the context of metadiscourse markers used in learners' corpus reliably, the researchers enlisted two teacher-researchers who are language educators coming from the same educational institution. The possible differences in decisions for each annotation were argued upon by both the researcher and the teacher-coders. In this phase, only expressions that clearly showed the use of metadiscourse characteristics were deliberately chosen and analyzed as instances of metadiscourse markers. Afterward, an explication of the findings was made through textual evidence, which came from the constructed learner corpus of English academic text to support the claims that would be put forward by the researcher. After establishing the frequency of metadiscourse markers by the research participants, the most frequent category metadiscourse markers in the constructed learner corpus in relation to the type of text were established. The analysis with respect to the context was also done for the metadiscourse markers. These aided the language teachers in equipping the students with the competencies to produce coherent discourses, thereby addressing the writing needs of learners.

4. Results and Discussion
This chapter contained a detailed presentation and discussion of data analysis and interpretation of the study. The researcher's findings, which included the frequency of metadiscourse markers and qualitative corpus analysis on its context using a constructed learner corpus of academic English text, were summarized in this section.

4.1 Metadiscourse Markers in the Constructed Learner-Corpus of English Academic Texts

Table 3. Frequency of Interactive and Interactional Metadiscourse

Metadiscourse Category	Total Markers	% Total Metadiscourse
Interactive	9, 937	60.24
Interactional	6, 557	39.75
Total	**16,494**	**100**

As shown in Table 3, the values revealed that the interactive metadiscourse recorded 9 937 occurrences or 60.24 %, whereas interactional metadiscourse accounts for 6, 557 occurrences or 39.75% of the total metadiscourse frequencies. The percentage of disparity (20.49%) revealed that Grade 11 students use interactive metadiscourse resources more than interactional metadiscourse resources. These findings were similar to other metadiscourse studies such as Geng & Wei (2023), Siddique et al. (2017), Ruskan (2023), and Farahani (2020), where the dominance of interactive metadiscourse prevailed over interactional ones revealed.

These numbers can be interpreted to mean that students usually gravitate toward form, matters of grammar, organization, coherence, and overall surface features of the text because these elements are foundational in building a coherent, organized, and logical discourse. This was also attested by the findings of Hyland (2005), Dahl (2004), Mauranen (1993), Crismore et al. (1993), and Jalilifar (2010), which suggested that interactive resources were very important in scholarly and academic writing, where these markers become prominent in the text, guiding the reader through organizing the discourse, and setting up relationships between ideas. Hence, such characteristics greatly helped the participants enhance the readability, coherence, and organization of the text so that it is understood and accessed by the reader. This result on the greater prevalence of interactive markers is further explained through the following subthemes:

4.1.1 Interactive Markers as the Focus of Early Mastery and More Accessible Items
The prevalence of interactive markers can be attributed to students' writing proficiency since interactive markers were relatively more familiar and required lower writing skills, particularly for Grade 11 Senior High School students who were fairly new to academic writing and were considered beginning writers. Building on that notion, in the earlier stages of writing, students are usually taught to create a logical paragraph as a foundational element of solid writing. In fact, the progression toward creating the ability to generate cohesive and coherent discourse usually incorporates the early use of interactive tools like transitions and logical connectors that help develop flow and coherence in written work. This focus on early mastery of each of these basic writing skills has huge implications for the quality of structure and coherence that students produce in their written work in the corpus. This was noted by Grabe & Kaplan (1996) that in the early stages, students are typically taught to focus on foundational elements like coherent paragraph structure and the use of transitional devices. This focus on the structural elements, grammar, coherence, and

overall organization of text in the early stages of writing pedagogy explained why interactive metadiscourse markers dominated in comparison with other more evaluative and dialogic forms of interaction in written texts.

4.1.2 Interactive Markers in Expressing Relationships between Stretches of Discourse

Participants tend to use interactive markers more extensively in their writing and discourse for several key reasons. As they learn to construct more complex and organized texts, interactive markers help students create logical connections between ideas, guide the flow of the discourse, and signal the relationships between different parts of the writing. As captured in their written outputs in the corpus, it can be seen that the participants used interactive markers to express their relationship between parts of the text. Participant 2 in the scientific report deployed "and" to add additional aspects of the study, as in this extract. Participant 2 stated, *"The current paper used a narrative review method to review the literature on the academic performance of students at Senior High School **and** various factors that negatively affect academic performance **and** the need for them to be minimized to improve students' academic performance"* (Participant 2). In the first excerpt, the participant deployed "and" in the beginning and later in the text to add aspects that affect how well students do in school and to further highlight how important it was to address the problems in student academic performance. It can be inferred that Participant 2 in the scientific report relied heavily on additive "and" twice within the passage to stack on additional points about academic performance, which meant that the participant was more focused on weaving together related ideas in the text.

Moreover, Participant 12 in the concept paper used "as a result" to state a particular reason. Participant 12 stated, *"**As a result**, it becomes challenging for them to comprehend and communicate successfully in English".* In the second excerpt, the participant used the marker "as a result" to implicitly bring a particular situation as one of the main reasons the subject struggled to comprehend and articulate ideas in English. Another participant in the position paper used "because" to bring out a particular reason. Participant 23 stated, *"Technology is not limiting creativity **because** it is a source of information and inspiration".* In excerpt 3, the writer used "because" to give a reason to enrich the claim that technology is not limiting creativity, which helped the writer in the formation of a clear cause-and-effect relationship, specifically where technology is addressed as the cause for information and inspiration.

Furthermore, Participants 12 and 23 in the concept and scientific report, respectively, relied more on consequential and causal markers, drawing a direct link between student struggles and their communication challenges and framing technology as the root cause for inspiration rather than a limiting factor. This suggested that Participants 12 and 23 may have been more focused on constructing a tightly reasoned, cause-and-effect argument compared to Participant 2, who focused more on the accumulative-additive approach in their arguments. Overall, the deployment of these metadiscursive functions was supported by Halliday & Hasan (1976) and Schiffrin (1987), who highlighted the use of these resources to help readers interpret pragmatic connections between steps in an argument, tie the different parts of a text together and create a sense of overall unity.

4.1.3 Interactive Markers in Framing Information about Elements of the Discourse

Interactive markers have greater prevalence since they are considered essential devices in guiding the audience's understanding and underlining the structural and logical relationships between elements of discourse. As students, they are used to such devices, which help in organizing ideas and points and linking or transitioning from one section to another in writing or a presentation. This is particularly true when participants learn how to compose longer and more complex discourses. Other utterances captured from the participants stated the use of interactive metadiscourse function to frame elements of discourse. Participant 19 in the scientific report stated, *"...**next** is 90-94 average composed of 4 (13.33%), to be followed by 1 (3.33%) respondent was in 75-79 average".* As revealed in Participant's 19 language sample, it can be seen how the marker "next" was used to sequence parts of the text. The use of this marker helped the participant transition the data from 90-94 average (composed of 4 respondents or 13.33%) to the next (the 75-79 average). By guaranteeing that the reader can quickly understand the significance of the given data, this organizational framework probably helped the participant achieve their goal of providing information in a rational and understandable way. Not only as as a sequence marker, Participant 1 in the scientific report applied the marker "in conclusion" as a label marker; The Participant stated *"**In conclusion**, the data suggests that while students generally prioritize their academic responsibilities, there are instances where social influences, such as peer pressure, may lead to behaviors that are not conducive to academic success".* In the context of Participant 1 in the scientific report, the phrase "in conclusion" served to indicate the participant's closing points and concluding statements regarding practices that are detrimental to academic performance. The final remarks were positioned to maximize impact by playing on the reader's expectation of a summative synthesis, which served as a metadiscursive cue supporting the participant's rhetorical technique of developing a persuasive argument.

Likewise, Participant 32, in the reaction paper, utilized the marker "wants to" to indicate intention; the participant stated, *"History is used in this piece as the painter **wants to** convey what happened in the last supper of Jesus Christ with his disciple".* Participant 32 used "wants to" to indicate intention—meaning the painter had some purpose or motivation behind the use of the historical elements to communicate some meaning or message. In the text, it seemed that participant 32's use of the attribution marker

"wants to" served a certain rhetorical aim, that is, to impress on the painter's actions intentionality and therefore raised the interpretive stakes of the historical elements being described.

These applications of interactive metadiscourse markers were supported by different researchers and linguists, such as Hyland (1998), where sequence frame markers are expected to order parts or arguments within a sentence, explicitly structuring propositional content to aid readers' understanding. Swales and Feak (2012) stated that "in conclusion" and other concluding phrases serve to flag the end of the text and to signal to the reader that the writer is about to summarize the main points or draw conclusions. Further, Adel (2006) postulated that metadiscourse markers frame discourse through explicit commenting on the mental processes of the writer.

4.1.4 Interactive Markers in Aiding in the Recovery of the Writers Meaning
The wide-ranging use of interactive markers is also evident since these are necessary elements in a text that help readers understand the author's intended meaning. Here, language techniques served as indicators for the audience, guiding them in terms of interpretation and comprehension by clarifying the discourse's logical progression, conceptual links, and rhetorical emphasis. As revealed in the following excerpts, it can be seen how the participants assisted in the recovery of the writer's intended meaning. Participant 2 in the scientific report stated a precise definition of the term; Participant 2 stated, *"Coping is **defined as** the thoughts and behaviors mobilized to manage internal and external stressful situations".* The defined term gave the reader a clear, concise understanding of the writer's intended meaning, specifically to provide a formal, precise definition of the term "coping". Definitional frames, as Hyland (2005) discussed, help the reader understand and become familiar with important terminology.

In a similar vein, Swales and Feak (2012) pointed out that definitions guarantee that the reader comprehends key ideas in academic writing. As taken from another language sample, one instance revealed an illustration of how the writer intended to convey their feelings and emotions to the reader. Participant 24, in the position paper, stated, *"It can help them express their feelings and emotions, **such as** happiness, sadness, and fear".* In this context, the participant introduced a list of specific examples that illustrated the types of feelings and emotions that can be expressed through the means they were describing. The marker helped to make the idea presented clearer and more specific, hence making the general idea concrete and clear to the reader. On a similar note, Ädel (2006) clearly pointed out that exemplifiers, like "such as," can actually help the writer to make his message even more manifested and clear by providing examples to explain it. The examples helped to concretize the general claim and make it easier to apprehend the reader. The description that Biber et al. (1999) give of "such as" as a device that introduces a list of exemplars of a general category also fits the way it was operated. Here, Participant 24 used "such as" to give a set of representative exemplifications illustrating a broader notion of "feelings and emotions," which they had initially referred to.

An additional excerpt from the corpus can be seen in how the participant used the marker "in other words" to rephrase or restate their previous point in a different way. Participant 7 in the position paper stated, *"**In other words,** no medicine can treat mental health issues; they are just a treatment. Even though people know about what is mental health, they really can't elucidate and comprehend what are the factors of these mental health issues".* The participant elaborated to the reader that the following sentence, "no medicine can treat mental health issues, they are just a treatment" held the same meaning as the former sentence, only it was reworded. As such, the process goal "in other words" met the communicative purpose, that is clarification. Here, the participant was rewording more directly the general statement on "mental health issues" as "no medicine can treat mental health issues, they are just a treatment." Work from Hyland 2005, and Adel 2006 provides insight relevant to an understanding of the communicative function of rephrasing, as manifested in the use of "in other words" which was clearly reflected in how the participant used it.

4.1.5 Interactive Markers in Providing Support for Arguments
In academic writing, it is impossible to overemphasize the role of interactive markers as supportive arguments. This gives life to the development of ideas, helps persuade the reader on the claim, and denotes cause-effect relationships between sentences. As revealed in the following excerpts, it can be inferred how the participants maximized interactive resources to provide support for their arguments. Participant 9 stated in the position paper, "According to Ayleff (2017), s*ocial technology is enabling us to stay connected with distant family members, but it is gradually replacing face-to-face interactions. People are increasingly using technology to engage with others, and their online self-perception has led to shallow interactions".* Additionally, Participant 7 in the concept paper stated, *"Within the context of education, it signifies the recurrent or deliberate failure to attend school. In simpler terms, it means regularly missing school without a valid reason **(Keter, 2013)".***

Moreover, Participant 9 in the same academic type, stated, *"...as **cited by Carrell (2007),** note-taking is advantageous for two main reasons".* These excerpts showed how cited sources were deployed by the participants to maximize and strengthen their claim and increase persuasiveness of the text in general. With the help of these external resources, the participants were not just able to solidify their claims but also helped them produce more thoughtful, multi-perspective arguments. The way the participants in these examples used cited sources to support their argument was very relevant to the insights provided by Nussbaum and Kardash

(2005), Lupton and Bruce (2010), and Hyland (2004). Nussbaum and Kardash (2005) found that a writer's use of sources in a strategic way can maximize the persuasiveness of an article, and integration of external resources aids writers in formulating more reflective, multiperspective claims that become more and more resistant to dismissal.

Similarly, Lupton and Bruce (2010) have pointed out that the placement of citations facilitates writers' setting their arguments against the background of a more extensive discursive context. This contextualization granted more credibility and weight to the writer's claims. Moreover, Hyland (2004) helped throw more light on this dynamic and suggests that citation practices can be a significant rhetorical tool for the establishment of credibility and an enactment of persuasive authorial identity wherein a writer can use external sources tactically to place oneself as knowledgeable and authoritative within a certain field.

4.2 Interactive Metadiscourse Markers in the Constructed Learner-Corpus of English Academic Texts

Table 4. Categories of Interactive Metadiscourse in the Learner-Constructed Corpus

Interactive Metadiscourse Category	Total No. of Occurences	Occurrence per 1000 words	% Total Metadiscourse
Transitions	7, 018	58.48	42.54%
Frame markers	1, 251	10.42	7.58%
Code Glosses	1, 127	9.39	6.83%
Endophoric markers	398	3.31	2.41%
Evidentials	143	1.19	0.86%
Sub-total	**9, 937**	**82.80**	**60.24%**

The result showed that transitions (e.g., *and, because, also*) had the highest frequency of use of all the interactive metadiscourse categories with over half of the total metadiscourse frequency, which is 70.62 percent or 7, 018 occurrences. As described by Hyland (2005), they serve to create cohesion and coherence in the text by signaling logical relationships between ideas, sentences, and paragraphs. It is very evident that transitional signals have been used by students to make their argument logical and clear for their audience (Crismore et al., 1993; Dafouz-Milne, 2008). Frame markers (*e.g. finally, overall, lastly*) came second with 1,251 total number of occurrences or 12.51 percent of total interactive metadiscourse markers about 1.17 percent higher than code glosses (*e.g. in fact, this means, specifically)* with 11.34 percent or 1, 127 number of occurrences. Meanwhile, endophoric markers (*e.g. X above, X before, X earlier*) and evidentials (*e.g. according to, cited by, quoted by)* registered the lowest with 2.41 percent and 1.86 percent total interactive metadiscourse, respectively. The said results are explicated in the following subthemes:

4.2.1 Transition Marker and Frame Marker as Default Markers

One pattern that emerged from this data was the high frequency of transitions and the low frequency of evidentials. The high frequency of transition and frame markers can be explained by its being basic elements to construct a coherent paragraph structure. It was due to a focus on structural elements of text that transition markers and frame markers dominated in comparison with other metadiscourse markers. As provided in the excerpts, it can be seen how the participant built the paragraph with the use of these markers to make arguments clear and logical. Participant 30 stated:

> "**Furthermore, even** *when artists do use their platform to address important issues or convey deeper emotions and narratives, the actual impact and resonance of these elements may be limited and highly subjective. The educational and meaningful aspects of music may only resonate with certain listeners,* **while** *others may find the music to be irrelevant or lacking in substance.* **Ultimately***, while there are certainly meaningful and educational music tracks being produced, these instances are not necessarily representative of the music industry as a whole.* **The majority** *of music consumed today may still lack the depth and substance to be considered truly educational or meaningful,* **with** *the entertainment and commercial aspects taking priorit"*..

Based on one passage alone, it can be seen that the participant already deployed a number of transitions and frame markers. Other than its vitality in contributing to the logical and smooth transitions of thought, transition and frame amrkers markers made up the foundational aspect of every paragraph development. Because of this, writers were compelled to use these kinds of devices frequently. As Halliday and Hasan (1976) asserted, conjunctions are a fundamental aspect of the grammar of the clause, and their appropriate use is considered a hallmark of quality academic and professional prose. Chung and Ahrens (2019) postulated that one characteristic of effective academic writing is the intentional use of transition markers, through which the authors will find it much easier to transparently lay before the readers their ideas and propositions. Their finding echoed what was similarly concluded by Halliday and Hasan (1976) regarding the central role that conjunctions and other conjunctive devices played in creating quality and professionally-written prose. The participants' choice to apply such elements was evident across the presented passages.

4.2.2 Low Evidentials As a Result of Reliance on Personal Ideas and Experience

Meanwhile, evidential was obviously the least used marker because some participants usually did not make use of in-text citations or evidential since they relied more on their knowledge and ideas rather than expressly citing sources. Participant 30 in the Position Paper, stated:

> *"We made by God to glorify Him and to do of His will not to do what we wanted because more of the time what we wanted are not supposed to do. Also, the Pro says that they have the right to be married. Yes, it is right that marriage is a personal choice but it does not mean that you are able to be married with your same sex and not considering the laws of God about marriage because it is the Sacraments of Matrimony so it is sacred and holy The next one is they have said that it is a discrimination part to them if it will not be allowed but not legalizing the same sex marriage proposal does not mean gays and lesbian are being discriminated it is just their decision is not acceptable with God and also in the Christian country like Philippines that's why same sex marriage in the Philippines cannot be approved or be legalized in our country. in addition, there are four other reasons why it should not be legalized in the Philippines".*

Clearly, evidentials were not found in this text. By evidentials, one means linguistic devices that indicate the source or basis of information, such as "according to the report," "the data shows," or "it is believed that." Instead, the participant was more focused on presenting the arguments and perspectives around same-sex marriage than it was on reporting evidence or sources. The high frequency of transitions and low frequency of evidentials - aligned closely with the results reported by Aull and Lancaster (2014). Aull and Lancaster (2014) accounted for this pattern by suggesting that the students were more concerned with the organization of their argument rather than deeply anchoring their claims in external sources. This returns to the structural elements of text level, of which transition and frame markers are an important part when building a coherent paragraph structure. It could thus be inferred that this pattern reflected an emphasis of the participants on the organizational aspects of writing in the early stages of writing pedagogy and a few on strong evidence-based argumentation.

Table 5. Categories of Interactional Metadiscourse in the Learner-Constructed Corpus

Interactional Metadiscourse Category	Total No. of Occurences	Occurrence per 1,000 words	% Total Metadiscourse
Engagement Markers	2,418	20.15	14.65%
Hedges	1, 821	15.17	11.04%
Boosters	924	7.7	5.60%
Self Mentions	733	6.10	4.44%
Attitude Markers	661	5.50	4.00%
Sub Total	6,557	54.64	39.75%
Total	**16,494**	**137.44**	**100**

In the interactional category, engagement markers (*e.g. you, I, my, analyze, develop, determine)* accounted for 14. 65% of the total interactional metadiscourse, the highest percentage among all the interactional categories. The use of hedges (*e.g. generally, usually, actually)* came second with 1, 821 occurences or 11.04 percent of total interactional metadiscourse On the other hand, boosters *(e.g. found, show, demonstrated)* registered 5.60% of total interactional metadiscourse. While, self-mentions (*we, our, us)* recorded 4.44 % or 733 occurences. Attitude markers (*e.g. appropriate, important, essentially)* had the least frequency in the students' corpus with 661 occurrences, about 10.85% of total interactional metadiscourse frequencies. The said results are explicated in the following subthemes:

4.2.3 Engagement Markers and Reader Engagement

The results showed the dominance of engagement markers in interactional metadiscourse in the learner-constructed corpus. This was due to the participants' aim to compel the reader to draw lessons from their own experience. Giannoni (2018) asserted that "engagement markers are linguistic resources that involve the reader in the discourse, either by directly addressing them, by appealing to shared knowledge, or by acknowledging their potential reactions and viewpoints." It can be seen from the sample that reader-engagement was established by the participant. Participant 10 in the position paper stated:

> *"Also, people's ability to interact with other people physically will be impeded. There is a disadvantage to **us** if **we** are using the technology, **we** are becoming "Technological Zombies". **We** can communicate to others even if **we** are not using the technology, however the generation now is more sufficiently, knowledgeable about technology".*

It is evident in this sample that the participant used significantly more, second-person pronouns-inclusive such as we and us. From this sample, it was evident that the arguments were a shared perspective or experience, the participant allowed themselves to be part of that arguments and in the process allowed for a reader-friendly engagement.

4.2.4 Hedging Devices in Scholarly Discourse

One of the very well-known rhetorical devices in use is hedging, applied to a great extent in many academic disciplines and genres. Participants frequently employed this category because they are very common in many academic writing traditions as a means of conveying indirectness, opening a rhetorical space for alternative views, and avoiding responsibility for the certainty of a proposition. It was reflected from Participant 14's language samples as shown in the next paragraphs:

> *"According to Phung (2022), students whose parents are **primarily** responsible for financial decisions in the family perform higher in financial literacy and make a budget **more frequently**. The results are robust to alternative approaches. Also, conversations within the family regarding financial matters provide important knowledge regarding financial matters and **may** be a factor to consider in designing any financial literacy program (Hanson, 2018). Younger individuals **may** allocate a significant portion of their income to discretionary spending, such as entertainment and travel, while older individuals **may** prioritize saving for retirement or healthcare. Older individuals with higher financial literacy **tend to** make more informed and strategic spending choices, **considering** long-term consequences (Fernandes et al., 2014). Income volatility, or fluctuations in income levels, **can** significantly impact spending decisions. Research by Farrell and Greig (2019) highlights that households experiencing income volatility may adjust their   spending patterns, leading to increased financial stress and uncertainty".*

Hedging language ran throughout the text with such words and expressions as "may", "tend to", and "can". Besides setting a stage for qualifying statements, such hedging language worked at another level to express uncertainty, soften claims, acknowledge limitations, and convey the conditional nature of the relationships being expounded. It can be inferred that the participant seemed to be very careful in making generalizations and not to over-generalize but, in any case, to come up with context-bound findings in a measured manner.

4.2.5 Self-Mentions as a Result of the Participants Lack of Awareness and Uncertain Style Guides

The high rate of self-mentions may be a result of their relatively low level of awareness of proper style guides and, therefore some uncertainty in writing. Moreover, the participants aim to be more personal, related, and focused on readers engagement contributed more to the high rate of self-references within the participant's work. This statement was supported from this language sample excerpt of Participated 30:

> *"**I'm** not even sure **I** know **myself** and what's really important to **me**. **I've** had to ask myself- is it worth it? I've started a new diet-for the fifth time this year. **I** know **I'm** overweight, and **I** really want to change. **I** read all the new information, **I** set goals, **I** get **myself** all psyched up with a positive mental attitude and tell **myself I** can do it. But **I** don't. After a few weeks, **I** fizzle. **I** just can't seem to keep a promise **I** make to **myself**."*

In this context, there are significant numbers of self-mentions. The repeated use of self-mentions in the following paragraph helped the participant to convey his inner conflict and lack of self-awareness. The continuous mentioning of oneself allowed the participant to put across the message that the challenge was personal, internal to the participant, hence allowing the reader to connect with the story and reflect on it. The repetition of "I" and "myself" showed the personal nature of the dilemma being expressed. This was similar to previous researchers which revealed that this stern rule of formality in researches had already turned out to be more personal and focused on readers' engagement (Abbas & Shehzad, 2017; Hyland & Jiang, 2017).

4.3 Metadiscourse Markers in the Constructed Learner-Corpus of English Academic Discourses Based on the Type of Texts

Table 6. Metadiscourse Markers in Position Paper

Categories of Metadiscourse Markers	Total Markers	Occurrence per 1000 words	% Total Metadiscourse
Interactive Metadiscourse			
Transitions	2, 380	19.83	45.58
Frame markers	309	2.57	5.91
Code glosses	281	2.34	5.38
Evidentials	57	0.47	1.09
Endophoric markers	43	0.35	0.08
Sub-total	3,070	25.58	58

Interactional Metadiscourse

Engagement Markers	803	6.69	15.38
Hedges	561	4.67	10.74
Self-Mentions	378	3.15	7.23
Boosters	273	2.27	5.22
Attitude Markers	136	1.13	2.60
Sub-total	2,151	17.92	41
Total	**5, 221**	**43.50**	**100**

It can be gleaned from the table that position paper has more interactive markers than interactional ones, with 58% and 41% of total metadiscourse markers, respectively. In the interactive category, transitions are the most common, with 45.58% frequency, followed by frame markers (5.91 %) and code glosses (5.38%), while the use of evidentials (1.09%) and endophoric markers (0.08%) are the least employed metadiscourse markers within this academic text type. Within the interactional metadiscourse category, engagement markers are the most utilized with 15.38 %, followed by hedges at 10.71% and self-mentions at 7.23%. The least utilized markers were boosters and attitude markers with 5.22 % and 2.60%, respectively. The aforementioned results of the study are further explained in the following subthemes:

4.3.1 High-Frequent Interactive Marker: Transition as Needed in Writing a Persuasive and Compelling Position Paper (Interactive Metadiscourse)

The prevalence of transition markers, 3% higher than the average, indicated that students employed these resources because they make writers' arguments well-defined and clear. In writing position papers, a writer expresses his/her position on an issue. It gives arguments that support the opinion of the writer based on the facts collected.

It can be observed how transition was used by the participant to make a persuasive voice. Participant 26, in the position paper, stated, *"Pursuing a career in the arts can **indeed** lead to success in many forms, enriching both the individual and the world around them"*. The participant emphasized the position's persuasiveness and confidence by using the word "indeed". This was essentially his way of strongly highlighting his claim and alerting the reader to the fact that it is unquestionably a crucial issue. In addition, it conveyed a strong sense of confidence over the legitimacy of their stance, giving them a very compelling aura of authority. Furthermore, it can be seen in the passage that the writer used transitions very effectively to create a logically organized argument that builds persuasiveness through the sequencing of ideas. Participant 13, under this academic text type, had written:

*First, since God created us, we all have to be obedient to Him. **Second,** you should seek God's will while choosing a life mate. **Third**, even when you are given the freedom, you have to be aware that such freedom comes along with its restrictions, obligations, and discipline.* The participant used the transition "First" to signal that this was the opening point in a sequence of ideas. The "since" clause provided the rationale, establishing a logical foundation for the claim that we must be obedient to God. The transition "Second" indicated this was the next step in the participant's argument. This point logically flowed from the first, as obedience to God would necessitate seeking His will in important life decisions like choosing a spouse. The transition "Third" signaled that this was the concluding point in the sequence. This idea was built upon the previous ones, as the concept of freedom being limited by responsibilities and discipline was a natural extension of the themes of obedience and seeking God's will. Overall, the deployment of transitions as a means to write a compelling and persuasive approach and its necessity to be deployed as a foundational resource in building a logically organized paragraph was evident in the participant's language samples. These were particularly important, especially when one is to write a persuasive and compelling position paper, which requires a well-defined, logical, thorough and clear explanation on a certain issue. This was in line with the study conducted by Chiu (2015), which revealed that essays that incorporated a greater variety and frequency of transition words were rated higher in terms of clarity of position, development of arguments, and overall persuasiveness.

4.3.2 Low-Frequent Interactive Marker: Endophoric As A Result of Concise and Focused Nature of Position Paper

The lack of endophoric markers (e.g. see Figure 2, refer to the next section, as noted above) in this academic text type can be attributed to the nature of position papers, which are typically concise and focused on presenting well-reasoned arguments. As a result, writers intentionally omit unnecessary or moptional references to parts of the text. Hyland (2005) and Swales (1990) noted that writers of position papers and similar genres tend to employ fewer explicit endophoric markers compared to other academic genres like research articles. They attributed this to the concise, argument-focused nature of position papers, where the writers aim to present their case in a streamlined manner without unnecessary internal references. However, the use of this marker in this corpus suggested that participants in this academic text type used this marker to selectively and intentionally refer to information that was already present within a text rather than introducing new external information. Participant 12 stated, *"The suggestion **above** is conceivable that most information on the internet goes unverified, and people cannot doubt its legitimacy"*. In this context, "the suggestion above" was an endophoric marker referring to some previous suggestion or recommendation that had been

outlined. The participant established cohesion and flow between the current statement and the preceding information. The writer, therefore, consciously signaled to the reader that the current statement was directly related to and building upon the previous "suggestion" that was presented, guiding the attention of the reader through the logical progression of the text. It was therefore suggested, despite it being low frequent in the corpus and unnecessary in the circle of position papers, that participants had to intentionally include it explicitly in the text for specific rhetorical purposes. It is in this light that the nature of the position paper and the selective and conscious use of this marker played a meaningful role in understanding how the participant put extra emphasis on a particular metadiscourse marker. These played a huge role in why it resulted in being less frequent.

4.3.3 High-Frequent Interactional Marker: Engagement Markers Meet Readers' Expectations of Inclusion
The writers used quite a good number of engagement markers because they attempted to adequately meet readers' expectations of inclusion. As taken from their writing outputs, it can be seen how the writers addressed them as participants in a discussion with reader pronouns. Participant 10 had written this:

> *"Modern technology have brought far people very nearer, and because of using it **we** can talk or communicate with   anyone who is even sitting thousand miles away from **us** but it's disadvantage is that **we** have just forgot those who are nearer to us. **We**, most of the time don't even bother to talk with people who are with us, **we** just always try to spend time using social media and all, so which results lack of communication with those who are with **us** at a time".*

Participant 10 deployed "we" and "us" in the paragraph to create an inclusive, relatable tone. From "We can talk or communicate" through "We have just forgot those who are nearer to us" to "We just always try to spend time", all made the reader part of the group facing the consequences that modern technology brings. The use of inclusive pronouns like "we" and "our" increased feelings of group identification, social cohesion, and persuasive impact because inclusive pronouns created a sense of shared identity and common ground between the writer and reader (Brewer & Gardner, 1996). Drawing from that analysis, the relatable nature of the arguments added breadth to the persuasive aspect of the participant's position paper, making it popular in this academic text type.

4.3.4 Writing Prompts Increase Appearance of Engagement Markers (Interactional Metadiscourse)
The writing prompts determined from the language samples of the study also amplified the number of engagement markers. Hence, another important consideration is the nature of the writing prompts. Notably, the majority of the writing prompts were framed in a subjective manner. As can be seen in the actual examples of writing prompts, the way the teacher structured the questions tended to elicit subjective responses from the students: *PROMPT 1: "Are people becoming technological zombies?: PROMPT 2: "Does Art Pay?" PROMPT 3: "Should death penalty be legal?"*. It is very important to have these writing prompts framed according to what the teacher wants and how the type of writing demands students to write because they frame what kind of response they want from the students. As a result of this, the prompts lead students writing their own views, beliefs, and emotional responses to topics assigned to them contributing to the frequent use engagement markers particularly pronouns.

4.3.5 Low-Frequent Interactional Marker: Less Attitude in Position Papers As result of Creating a More Objective and Impartial Tone
Position papers are written to present a particular viewpoint or stance on a specific issue. They aim to persuade the reader to adopt or consider the writer's position on the topic. The success of persuasion depends on the arguments that are grounded on evidence and presented in an objective way. The participants' low usage of attitude markers was a result of participants creating a more objective and impartial tone, which may be preferred in academic or professional contexts. For instance, Participant 9 stated, *"It is **very important** to acknowledge that one of the significant factors to this issue is people's dependency on technology for various aspects of their life; they depend on it whether work, connecting with others or even for obtaining information"*.

While this statement did employ the attitude marker "very important," the overall approach reflects a more measured, impartial tone. It was noted earlier that since the goal is to present an argument in an objective and impartial way, as is often the case with position papers, the number of attitude markers used may be purposefully reduced by the participant to respond to the calls for an objective, impartial presentation of the issue. Though attitude markers were less likely to be displayed within the position papers, this should not be taken as a failure to meet the expectation; it was more of a decision that the participant made to uphold the general purpose and the desired neutral tone that is expected of this kind of writing. As to the academic writing itself, it is encouraged to use attitude markers as only needed so that it will not devalue the writers' credibility. It ought to be taken into consideration that the appropriate limitation in the use of such markers can spoil the impression made not less but also preserve the proper academic register (Adel, 2006).

Table 9. Metadiscourse Markers in Reaction Paper

Categories of Metadiscourse Markers	Total Markers	Occurrence per 1000 words	% Total Metadiscourse
Interactive Metadiscourse			
Transitions	752	6.26	35.72
Frame markers	236	1.96	11.21
Code glosses	116	0.96	5.51
Endophoric markers	46	0.38	2.18
Evidentials	4	0.03	0.19
Sub-total	1,154	9.61	54.81
Interactional Metadiscourse			
Engagement Markers	380	3.16	18.05
Self-mentions	196	1.63	9.31
Hedges	176	1.46	8.36
Boosters	153	1.27	7.26
Attitude Markers	46	0.38	2.18
Sub-total	951	7.925	45.17
Total	**2, 105**	**17.54**	**100**

As drawn from the table, the same pattern with position papers emerged within the interactive metadiscourse category. Transition markers were also the most prevalent, accounting for 35.72% of the total metadiscourse markers. Frame markers followed at 11.21%, while Code glosses made up 5.51%. In contrast, Endophoric markers and Evidentials were the least utilized, representing only 2.18% and 0.19%, respectively, within the interactional metadiscourse category. Engagement markers had the highest frequency, comprising 18.05% of the total metadiscourse. This was followed by self-mentions at 9.31%, hedges at 8.36%, and boosters at 7.26%. Notably, attitude markers were the least frequently used, with a mere 2.18% of the interactional markers. These results of the study are explained in the following subthemes:

4.3.6 High-Frequent Interactive Marker: Transition as Foundational Resource in Building a Logically-Organized Reaction Papers

In writing an effective reaction paper, transition markers can be quite important to help the reader go through the thought process of the writer and the structure of the paper. Since structure is very important, the participant used this more to have a well-structured paragraph necessary for an effective description or judgment of particular events, experiences, or readings. This explanation was clearly satisfied by the participants. Participant 19 said:

> *"Many of these new techniques modified lighting **and** color to portray deep emotion **and** added drama to pieces. This painting also employs distinct artistic elements and principles. It has balance, for example, which creates interest **and** variety, **and** makes an observer feel a visual weight. **Because** of the placement of the disciples, the painting is asymmetrical. They are balanced with the shape of the artwork using visual weight. There are numerous principles that were used in the painting. **Furthermore**, movement is used in the painting of Jesus **and** the disciple's colorful clothing **because** of the way the painting is arranged, emphasis is also used".*

Indeed, it was quite obvious already that the participant had produced many instances of transitional markers. In particular, the additive transition marker "and" connected the idea of the new techniques that would modify the lighting and color to portray emotion with the added drama; the causal transition marker "because" explained why the painting was asymmetrical, due to the placement of the disciples; and lastly, the additive marker "furthermore" to introduce an additional artistic principle used in the painting - movement. Consequently, it can be inferred that the participant used these transitions in its effort to build up a coherent paragraph, logically ordered and with smooth flow as the author described the various artistic elements and principles which were employed in the painting, all contributory in writing an effective reaction paper. The study of Crossley and McNamara (2020) added further weight to this inference since a key finding in their study was that the use of cohesive devices, particularly transition markers, was a strong predictor of essay quality and organization in higher-rated reaction papers. In other words, the more effectively writers used transition markers and other cohesive devices, the more coherent and well-organized their essays were perceived to be by expert evaluators. In other words, the more effectively the writers used transition markers and other cohesive devices, the more coherent and more well-organized their essays appeared to expert evaluators.

4.3.7 Low-Frequent Interactive Marker: Evidentials as the Least Preferred in Reaction Papers As a Result of Writer's own Personal Response

Generally, position papers centered on the writer's personal response, analysis, and interpretation of a text or topic. The use of evidentials in the learner corpus seemed to be less common to the reaction papers than to other genres of academic writing. This can be connected to the very nature and purpose of reaction papers that required the participants to focus on their personal response, analysis, and interpretation of a text or topic and require them rather to be analytical and interpretive than informative or persuasive. It was evident in this passage that the participant emphasized personal response and analysis. As noted by Participant 27, *"**I think** that the painting is breathtaking. **I find** it remarkable that the disciples are all very human looking and portray emotions on their faces. When **I look** at the painting, **I feel** like that's exactly how Jesus and the disciples looked at that night. **I also see** and feel that this painting shows the world huge piece of history"*. The example quote clearly projected the focus on personal response and analysis that characterized a reaction paper. The participant used first-person pronouns referring directly to the subjective and personal nature of the engagement with the painting. Much of the language used was emotive, with terms like "breathtaking," saying he "feels" this or that about the painting, which further highlighted the participants' highly emotional reactions. All these pronouns and emotive attitudinal expressions limited the appearance of the evidentials in the text. Thus, it can be said that, under this academic text type, the priority of the participants was based on their attempt to foreground his/her subjective impressions, emotions, and analysis rather than relying on external support. A journal article on Reflective Writing in Higher Education by Moon (1999) considered that reflective writing does not need much of a response where source materials are a point of reference, but more of the writer's internal processes. This was also followed and strengthened by Adler-Kassner & Wardle (2015), who noted that some writing assignments, like reading responses, "do not require extensive use of outside sources" and are more oriented around the writer's own ideas and impressions. While evidentials are essential in other academic text types, they are not necessary for the context of reaction papers, especially if a participant prioritizes personal response rather than building an argument. The lack of evidentials hereof could be attributed to as a defining characteristic of reaction papers.

4.3.8 High-Frequent Interactional Marker: Engagement Marker and Writers' Presence

The fact that reaction papers are focused on personal responses does not necessarily exclude the application of engagement markers. Indeed, the nature of a reaction paper—dependent on the writers' personal response to a subject—is entwined with the goal of making writers' presence felt. That is why the high frequency of engagement markers was observed in this particular text type. As quoted from Participant 30, *"Leonardo da Vinci wants to tell us that **we should** remember that scene from the Bible because it is a scene that showcases how Jesus is true to his words"*. In this context, the participant maintained the use of pronouns to focus on his or her interpretation. This contributed to the objectives of the reaction paper, in which the need to express one's response is a core characteristic. The participant allowed the reader into the thought process of the participant and invited him or her to consider the very same points, questions, and conclusions that the writer is bringing forward. Studies by Heng and Feng (2017), Ädel and Li (2019), and Wharton (2021) indicated how such inclusive pronouns enable the writer to place the self in relation to the audience and signal shared understanding. Therefore, it can be inferred that some engagement markers in the quote, such as inclusive pronouns, can greatly heighten the degree of personal and reflective qualities in the language found in academic writing, especially in reaction papers.

4.3.9 Low-Frequent Interactional Marker: Restricted Attitude Markers due to Descriptive and Narrative Nature of Reaction Paper

As previously mentioned, a reaction paper typically includes the writer's personal ideas, feelings, and reactions in addition to a description of the events, experiences, or readings. This basically means that the inherent nature and purpose of the writing genre tend to be the reason for the low use of attitude markers in reaction papers. The usage of attitude markers was restricted by the participants' highly descriptive language, as evidenced by the language sample. As captured in the participants' language sample, it can be seen that the participants highly descriptive language limited the use of attitude markers. Participant 23 stated:

> *"There are a group of people in the painting, both men and woman were in the front of a dining table with empty plate and in the middle there is our Jesus Christ. The people in the painting wore an old clothes style which is some good example of like a long dress and it looks like a baggy clothes. Some of the men's hair were long like the girl's hair and they have beards. Some of them are talking and some of them have their own worlds like the three on the right side of the painting.* The writer succeeded in describing various elements of the picture—the people, their clothes, their hair, and how they stand—in minute detail in an objective way. Phrases such as "both men and women," "old clothes style," and "some of them are talking" conveyed information without expressing any sentiment or opinion. As a result, the text lacked any adjectives, adverbs, or other words that would have revealed the author's opinion of the picture or its contents. This approach tallied with the general tendency of the descriptive and narrative modes of writing in reaction papers to place much emphasis on objective, detailed reporting, as opposed to the introduction of the writer's own judgments or feelings about the subject matter".

Table 12. Metadiscourse Markers in Concept Paper

Categories of Metadiscourse Markers	Total Markers	Occurrence per 1000 words	% Total Metadiscourse
Interactive Metadiscourse			
Transitions	1, 889	15.74	46.44%
Frame markers	396	3.3	9.73%
Code glosses	240	2.00	5.90%
Endophoric markers	83	0.69	2.04%
Evidentials	51	0.42	1.25%
Sub-total	2, 659	22.15	65.37%
Interactional Metadiscourse			
Engagement Markers	672	5.6	16.52%
Hedges	375	3.12	9.22%
Boosters	154	1.28	3.78%
Attitude markers	153	1.27	3.76%
Self mentions	54	0.45	1.32%
Sub-total	1,408	11.73	34.625
Total	**4,067**	**33.89**	**100%**

Table 12 demonstrated that in students' concept papers, interactive markers (65.37%) were more common than interactional markers (34.62%). Transitions constituted 46.44% of all markers in the interactive category, code glosses came in second at 9.73%, and frame markers at 5.90% at third. Evidentials and endophoric indicators were the least used, with 2.04% and 1.25%, respectively. On the contrary, engagement markers (16.52%), hedges (9.22%), boosters (3.78%), and attitude markers (3.76%) prevailed as the most frequently occurring elements within the interactional category. Self-mentions, at a mere 1.32%, were found to be the least utilized. However, one pattern that stood out in this data is that, in contrast to other academic text types (position papers and reaction papers), there were more evidentials.

4.3.10 High-Frequent Interactive Marker: Transitions Bridge Between Sentences and Paragraphs to Achieve Organized Structure and Coherent Concept Paper

The nature of a concept paper has a direct and integral relationship with the use of transitions. The primary purpose of a concept paper is to propose a novel idea, approach, or framework in a clear, compelling, and well-reasoned manner. Transitions were very common in the corpus specifically in concept paper because the participant wanted to establish coherence and logical connections between key points to make a well-reasoned concept paper. It was evident in this sample how the participant demonstrated how different components of the concept were related, enabling the reader to follow the participant's line of reasoning. Participant 14 stated, *"The family is always the first point of contact for the child. It lays the foundation of education before the child goes to school and the personality that the child takes to school is determined by the home. **Therefore**, it is not out of place to imagine that parents' socioeconomic background can have possible effects on the academic performance of children in school. Whatever affects the development environment of children would possibly affect their education"*.

The participant used "therefore" here to mean that the probable effect of parents' socio-economic background on the performance of children at school was a logical consequence of the ideas previously stated. Moreover, the transition helped the participant demonstrate the flow of ideas, allowing one to reach well-reasoned conclusions that flow logically from preceding points. This is important in a concept paper, where the writer are required to build a persuasive case for the viability and significance of a proposed concept many times. Using "therefore" for inferential relationships enabled the writer to guide the reader through the conceptual reasoning in a structured and easy-to-follow way.

4.3.11 Low-Frequent Interactive Marker: Efficient Use of Evidentials for Sounder Arguments in Concept Papers

The low-frequency of evidential in concept papers did not necessarily mean that there was a lack of evidence argumentation on the ideas presented, as evidentials in this case do not have to appear systematically but only at strategic instances. As drawn from the language sample, participants came up with a strong case by referencing relevant literature from a credible researcher using evidential as only required in the discussion. Participant 24 stated:

"In spite of the fact that the curriculum includes disciplines like Oral Communication, Reading and Writing, and Literature, difficulties continue to be encountered. In addition to being multifaceted, these issues can be related to a variety of different sources. One of the most significant factors is the limited exposure to the English language, particularly in rural areas of the Philippines. According to research conducted by Leaño et al. (2019), it has been demonstrated that indigenous learners in the Philippines face difficulties in English semantics. Similarly, According to Liu and Miao (2021), a substantial barrier can be associated with a lack of confidence, as some students are afraid of being embarrassed when speaking English. This is mostly attributed to insufficient early exposure, which has a negative impact on their vocabulary and pronunciation skills. As a result, it becomes challenging for them to comprehend and communicate successfully in English".

Concept papers are expected to be evidence-based, including perhaps citations of relevant research, data, or expert opinions that would most probably be useful in establishing the credibility of concepts or ideas presented in the paper. In that regard, the participant was able to link a very relevant finding very efficiently, employing a study to justify that exposure to the English language is significant in improving their proficiencies in the language. It can be noted here that external references were not overused; the participant employed them just as needed. This selective use of evidentials helped not only the participant build the argument but also in a way that could reinforce the flow of ideas without disrupting it. This was anchored on the points raised by Adel (2006) and Hyland (2005) that excessive use of evidentials may actually disturb the flow and readability of academic writing.

4.3.12 High-Frequent Interactional Marker: Engagement Markers to Establish Engagement

Engagement markers can help the writer establish a more interactive and engaging relationship with the reader, guiding them through the logic and key points of the argument (Adel, 2006; Hyland, 2005). That is the reason why the participant used these more often as reflected in this language sample. In this context, it can be inferred how the participant made the concept paper more accessible and encouraged the reader to actively engage with the presented ideas. Participant 15 stated, *"Generation Z's satisfaction with online shopping and traditional shopping can vary based on several factors, and it's essential to consider that individual preferences can differ. Here are some general points* **to consider:…"** In this expression, the participant used the marker to actively involve the reader in ideas presented. Likewise, Cao and Hu (2014) examined, in an abstract setting of a research article, the use of metadiscourse and showed that engagement markers were prominently used by the authors. This means that these engagement markers were attributed to the attempt to involve the reader in the abstract genre by the writers, who were trying to engage the reader, underline key concepts, and call for further research. Through framing some points as something "to consider," the participant acknowledged the role that a reader has to evaluate and potentially build up the concepts of the presented paper.

4.3.13 Low-Frequent Interactional Marker: Self-mentions as Least Marker Due to Its Informal Nature

In a concept paper, the focus should not be on the writer's experiences or his views but on the suggested idea or framework. When self-mentions are avoided the paper becomes more persuasive strictly focusing on the conceptual elements, their importance, and potential implications. It was apparent from the language sample provided that no self-mentions were used purposefully by the participant. Participant 4 mentioned, "*Procrastination appears to cause students to delay their academic activities or delay delivering their assignments throughout their academic careers. Students may feel depressed and upset as a result of their lack of confidence, which holds à significant impact on their learning and access. These concerns must be addressed properly in order to get the best possible learning outcomes. As a result, it was far to perform research to investigate the problem and recommend some appropriate suggestions".* Ädel (2017) found that the frequency of self-mention usage was higher in those essays where the writers' personal perspectives or experiences were applicable to the argument. In this passage, the writers' opinion itself was not the main matter of concern. It can thus be seen that the avoidance of self-references here provided the participant an easier path to stay focused, objective, and inclusive in the approach towards the conceptual issues at hand.

Table 15. Metadiscourse Markers in Scientific Report

Categories of Metadiscourse Markers	Total Markers	Occurrence per 1000 words	% Total Metadiscourse
Interactive Metadiscourse			
Transitions	1,997	16.64	39.14%
Frame markers	466	3.88	9.13%
Code glosses	334	2.78	6.54%
Endophoric markers	226	1.88	4.43%
Evidentials	31	0.26	.60%
Sub-total	3, 054	25.45	59.87%
Interactional Metadiscourse			
Hedges	709	5.91	13.89%

Engagement markers	563	4.69	11.03%	
Boosters	344	2.87	6.74%	
Attitude markers	326	2.72	6.39%	
Self mentions	105	0.88	2.05%	
Sub-total	2, 047	17.06	40.12%	
Total	**5, 101**	**42.51**	**100%**	

With 59.87% of the overall metadiscourse usage in the scientific report, the interactive metadiscourse markers were more common than the interactional metadiscourse markers (40.12%). Transition Markers emerged as the most prominent category, with 1,997 occurrences or 39.14% of the total metadiscourse markers. Code Glosses had 334 occurrences, representing 6.54% of the metadiscourse usage. Endophoric Markers accounted for 4.43% with 226 occurrences. Interestingly, Evidentials had the lowest frequency, with only 31 occurrences, constituting a mere 0.60% of the total metadiscourse markers.

In interactional metadiscourse, hedges emerged as the most prominent, with 709 occurrences, accounting for 13.89% of the total metadiscourse usage. Engagement markers were the second most frequent interactional metadiscourse feature, with 563 instances making up 11.03% of the total. In contrast, self-mentions had the lowest frequency among the interactional metadiscourse markers, with only 105 instances constituting a mere 2.05% of the total metadiscourse under this category. Interestingly, under this academic text type, hedges emerged as the most prominent.

4.3.14 High-Frequent Interactive Marker: Transition to Show Implications

Scientific reports often involve the presentation of complex causal relationships, experimental procedures, and the interpretation of results. In this sense, transitions play a crucial role in articulating these logical connections, ensuring that the reader can follow the reasoning and implications of the scientific investigation. This was evident in the corpus as one participant provided the causal relationship between the investigation; Participant 17 stated, **"As a result**, *it was found that there is no significant difference in Pechay growth rate between using fish amino acids and commercialized fertilizer"*. The participant used the transition "as a result" to signal that the information that follows is the direct outcome or consequence of the investigation or analysis. Anderson et al. (2017) paid more attention to the place of transitions in the Discussion sections of research studies. In this regard, the researchers established the idea that at this point, when authors are supposed to link their results to the broader conclusions and further directions of research, transitions were highly imperative. Bitchener and Basturkmen (2006) identified a characteristic feature of high-quality scientific reports through the effective use of transitions. As such, this study argued that the writer needs to use transitions critically in performing the task of clearly expressing his work more compellingly. This was similar to what Participant 17 showed about how they could use transitions in scientific reporting in the presentation of logical steps from research activities to research results.

4.3.15 Low-Frequent Interactive Marker: Less Evidential Due to Focus on Reporting Findings

The primary purpose of a scientific report is to clearly communicate the methodology, results, and conclusions of an empirical study. In this context, the low frequent use of evidential can be attributed to the evidentials not being the main argument itself, but rather a supporting element to back up the central claims and findings being presented. As a result, the participant avoid to overemphasize the evidentials which could risk distracting from or overshadowing the current finding of the report. Participant 07 stated,

> *"Similarly, statement 24, with a mean of 3.25 corresponding to the verbal description "agree," suggests that summarizing handwritten notes helps them better understand information. It indicates that this note-taking strategy is perceived as effective for learning retention and comprehension among STEM students. **According to Eada (2023**), when summarizing, complex concepts distill into concise, digestible portions, explaining why this simplification promotes a deeper comprehension of the material and aids in memory retention."*

This pattern of using evidentials was in line with Kuteeva and McGrath's (2015) idea to avoid excessive use of evidential phrases that could make writing "too wordy" and obscure the key content. Samraj (2008) also emphasized that writers should be very cautious with respect to the degree of commitment arising from evidentials and other stance markers. In this context, the participant tried consciously to include just the most essential and relevant evidential markers so credibility would come to the claim without allowing the discussion of the evidence itself to dominate the entire report.

4.3.16 High-Frequent Interactional Marker: Hedging Strategy to Avoid Making Overly Definitive Claims in Scientific Reports

The heavy use of hedges in scientific reports can be attributed to the decision on the part of the writer to stay away from too definitive a claim and, therefore, conveyed openness to alternative findings. As drawn from the language sample, it can be implied

that participant tried to stay away from definitive claim. Participant 3 stated, *"**It is assumed** that children's everyday talk-in interactions are influenced by social media languages due to their exposure to current devices, internet access, and a variety of online networking site".* In the context of the paragraph, the writer deployed the phrase "it is assumed" to avoid making an absolute or definitive claim about the influence of social media on children's language. Using "it is assumed" allowed the participant to bring up an idea for consideration without actually laying claim to its being a fact. This approach is preferred in most cases, especially in academic and research-oriented contexts, since the making of strong claims without corresponding evidence has a tendency to undermine the credibility of the argument. This was supported by the studies of Crompton (1997), Varttala (2001), and Koutsantoni (2006) who stated that the use of hedging in academic writing serves to protect the writer's face by acknowledging the limitations of their knowledge and the potential for alternative viewpoints.

4.3.17 Low-Frequent Interactional Marker: Self mentions As Less Likely Needed in a Highly Objective and Focused Scientific Findings

As previously mentioned, scientific reports are very objective, fact-based, and unbiased in the discussion of their findings. This makes subjective stand and self-mention not preferred at all in most scientific reporting. It is for this reason that the participant tried not to use self-mention, as this will make the discussion center or focused on the researchers' perspective rather than the actual result of the research. Participant 5 stated, *"Overall **the result shows** that the temperature in the classroom is perceived as comfortable for learning by the participants".* The phrase "the result shows" here acts as a transition, not an evidential one. Using "the result shows" instead of the self-mention "I" or "We" removed the researcher's personal perspective and presented the finding in a more objective, impersonal manner. This was in line with the discussion earlier on the prevalence of transitions in scientific reports. Furthermore, Godfrey-Smith (2003) stated that the purpose of scientific writing is to "present findings, not to discuss the psychological states of the researchers". Swales and Feak (2012) suggested that scientific reports should focus on the research, not the researchers, and that the use of personal pronouns can detract from this focus. Simply put, it can be inferred that the preference of the participant to use "the result shows" as opposed to "I" or "we" in this scientific report was conditioned by the broader conventions of academic and scientific writing since it let the participant put forward the empirical findings in an objective, impersonal way that keeps the focus on the research itself rather than the researcher's role.

5. Conclusion

This study investigated the use of metadiscourse markers in constructed learner corpus of English academic text adopting Hyland's (2005) model of interpersonal metadiscourse. The analysis focused on two key dimensions - the interactive and interactional functions of the metadiscourse markers, as well as their frequency and contextual usage across different text types. Through this research study, the key findings revealed that:

1. The research participants employed a range of metadiscourse markers to fulfill both interactive and interactional purposes in their academic writing. In terms of interactive functions, transitions, frame markers, code glosses, endophoric markers and evidentials all guide the reader throughout the text and establish logical connetions. For interactional functions engagement markers, hedges, boosters, attitude markers and self mentions enabled the participants to engage with their audience and convey a sense of stance and evaluation.
2. The results of the study showed that there was a clear preference for interactive metadiscourse markers, especially transitions, which pointed to the concern of students in guiding the reader through the logical flow of ideas. This emphasis on coherence and clarity cuts across all text types. While students demonstrated a very good command of interactive markers, the frequency of interactional markers—such as hedges and engagement markers—was significantly different across text types, which may indicated subtle knowledge of audience and purpose. Relatively low frequencies for evidentials and attitude markers reflected future directions in developing the skill of supporting one's claims with evidence and voicing personal opinions. The overall findings suggested that students are developing their metadiscourse skills but indicate the need for more explicit teaching and practice in interactional marker deployment, fostering academic voice, and argumentation.
3. Metadiscourse marker analysis therefore represented the dynamic interplay of rhetorical purpose and text type, demonstrating student writers' strategic adaptation to different academic conventions. Across all text types, transition markers were quite prominent, underlining the key function of logical coherence and clarity of organization in academic writing. The interactional markers, however, through various uses of engagement markers and hedges, reflected an understanding of audience expectations and the need to balance objectivity with personal voice.

The inputs in this study are mainly addressed to language teachers in general and those teaching ESP and EAPP in particular, with the goal of better teaching academic writing by putting metadiscourse markers to good use. This study shall then inform the development of specific writing enhancement tasks targeting the particular writing needs of students that would be outlined in the student outputs. In light of the above, the research calls for a number of strategies from language teachers. First, tasks that could lead the students to achieve coherence and logical organization in their writing must be prepared: graphic organizers

mapping out ideas or outlines, placing emphasis on relationships between main points. The inclusion of foregrounded tasks in which students are made to complete gapped texts by removing hedges and other metadiscourse markers will encourage critical thinking about language use as they discuss how these changes to readability and coherence may have an effect. This understanding of the features of metadiscourse will be further enhanced by the encouragement of students to carry out their own discourse analyses, wherein they can identify and categorize metadiscourse markers in samples of academic writing. A task-based approach using authentic texts filled with metadiscourse markers will provide meaningful writing opportunities. For example, students could analyze research articles on topics of interest to them and then write responses that incorporate similar markers to strengthen their arguments. Controlled writing activities can be done by the completion of parallel texts, editing of drafts, and rewriting of models to practice the incorporation of appropriate metadiscourse features. Furthermore, teaching students to use concordancers can allow them to search for and analyze specific metadiscourse markers and expand their knowledge concerning context-dependent language patterns. The integration of peer review sessions will facilitate commenting on other students' usage of the metadiscourse markers, which will enable them to give constructive feedback and collaborate. The reflective writing tasks can also be included, which may allow them to reflect on their own use of these markers in their own writing to become more aware of their choices in writing. Finally, scaffolded assignments will be created that gradually introduce more complex uses of the metadiscourse markers. This will, in turn, give students a learning trajectory in which they first complete simpler requirements and progress toward challenging writing projects that require a deeper understanding of academic conventions. The provided study prepares students for different academic skills in writing and equips teachers with relevant teaching methodology by incorporating selective writing improvement activities.

In the future, additional studies by researchers in the language field should consider examining just how writing ability and experience by the students constrain or back up choice alternatives in relation to interactive and interactional metadiscourse markers. Comparative studies between novice and expert writers would shed more light on the developmental trajectory of metadiscourse use. It would also be important to find whether there were differences in the use of metadiscourse markers within students following different academic strands at the senior high school level, a likely cause of insight toward how disciplinary conventions and expectations could be shaping the use of such linguistic features. Therefore, expanding the varieties of general academic text types and student samples will improve generalization, which will be based on understanding how writers use metadiscourse in academic writing. Ultimately, the inputs and findings of this study will aid teachers in designing contextualized practice activities and enhancement writing tasks that focus on the revising and rewriting of passages. These activities have to encourage learners to analyze the effectiveness of metadiscourse markers in a given context and to identify those areas that need improvement. This approach will enable students to understand the metadiscourse functions much better and their influence on clarity, coherence, and persuasiveness in academic writing.

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