UNIVERSITY OF EDUCATION, WINNEBA

METADISCOURSE RESOURCES IN CLASSROOM INTERACTION: THE CASE OF AGGREY MEMORIAL SENIOR HIGH SCHOOL



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A thesis in the Department of Communication Instruction, School of Communication and Media Studies, submitted to the School of Graduate Studies, in partial fulfilment of the requirements for the award of the degree of Master of Philosophy (Communication Instruction) in the University of Education, Winneba.

DECLARATION

Student's Declaration

I, JOSHUA DZIVOR, declare that this THESIS, with the exception of quotations and references contained in published works, international journals and online documents which have all been identified and duly acknowledged, is entirely my own original work and has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:	• • • • • • • • • • • • • • • • • • • •
DATE:	

Supervisor's Declaration

I hereby declare that the preparation and presentation of this project work was supervised in accordance with the guidelines for supervision of THESIS as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: PROFESSOR CHRISTIANA HAMMOND
SIGNATURE:
DATE:

DEDICATION

Dedicated to Dorcas, Mawudi and Edudzi.



ACKNOWLEDGEMENT

I am highly grateful to the Almighty God for his divine protection and endowing me with the necessary knowledge and skills to enable me to bring this project and my entire Master of Philosophy in Communication and Media Studies Programme to a successful completion. My gratitude will not be complete without acknowledging the support and supervisory role played by Professor Christiana Hammond (PhD) who dedicated her, patience, time, and wisdom to guide me throughout this project. I am truly blessed by her guidance and assistance, and I pray for abundant blessings upon her. I cannot also forget the outstanding contributions of Professor Andy Ofori-Birikorang, Professor Christiana Hammond, Dr. Albert Agbesi Wornyo, Mr. Kwesi Aggrey, Prof. Mavis Amo-Mensah, Dr. Gifty Appiah Agyei, Dr. Akwasi Boateng Bosompem, Ms. Yvonne Dedzo, Ms. Gloria Baffoe, Mr. Bismark Odum- Sackey, Mr. Emmanuel Nii Adama Mensah, Ms. Akosua Asantewaa Anane, Mr. Rainbow Sackey, Ms. Belinda Osei-Mensah and Ms. Elizabeth Owusu-Asiamah all from the School of Communication and Media Studies, University of Education, Winneba. Their insights and constructive criticisms especially during seminars, greatly contributed to the completion of this dissertation.

Special gratitude is extended to Dr. Ellen Sobeng, Mr. Nicholas Thompson, and Mr. Kofi Boabeng both staff of Aggrey Memorial A.M.E. Zion SHS for their continued support and encouragement

I am thankful to Ms. Cecilia Agyapong and Mr. Emmanuel Owusu Kwarteng of the School of Communication and Media Studies for the warm receptions they offered and unwavering assistance.

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A special mention goes to my lovely wife, Madam Dorcas Tsamah, for her attention, time and trust which inspired my every sense of commitment to task of completing this work. I am eternally grateful for your guidance and encouragement.

To my siblings, James Agbozo, Peace Dzivor, Geoffrey Dzivor, Timothy Dzivor and Xorse Victor Dzivor, I say it has been and will also be my greatest blessing to have you.

I am also grateful to my Research Assistant and friend and course mate, Gladys Addai, for her ever present support and assistance. May God bless you in ways that only a God can. Finally, to all my Course mates, Luther Mends, Fuseini K. Elijah, Dominic Abilimsige, and Sesi Sedegah, I wish you continued success in all your further endeavours. It has been a pleasant journey with you all and I look forward to celebrating our achievements, now and later, together.

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ABSTRACT

This study employed a qualitative research approach to investigate the use of metadiscourse resources in selected Ghanaian secondary classrooms. The study focused on six lessons from English, Mathematics, Social Studies, and Integrated Science classrooms, selected through purposive sampling. The data collection spanned six months (May-November, 2023) and included videotaped classroom interactions, observations, and semi-structured interviews with teachers. The lessons were transcribed and coded for metadiscourse markers such as transitions, frame markers, evidentials, hedges, boosters, attitude markers, and engagement markers. Thematic analysis was used to analyze the data, with the unit of analysis being individual utterances. Findings revealed that teachers utilized both interactive and interactional metadiscourse resources to structure discussions, qualify claims, frame epistemic stances, emphasize points, convey evaluation, reference knowledge, and engage students. Additionally, colloquialisms, code-switching, vocatives, and nonverbal cues were used to fulfill various metadiscoursal communicative functions. Interviews with language and non-language teachers highlighted differences in communication pedagogy knowledge, with non-language teachers exhibiting limited awareness of metadiscourse resources. The study found that both language and nonlanguage teachers did not consciously or systematically plan their use of metadiscourse during classroom interactions. Based on these findings, the study recommends that teachers incorporate more of Hyland's (2005) metadiscourse resources to introduce dynamism in their instructional strategies and enhance classroom communication. Furthermore, the study recommends that the functions of metadiscourse resources should be leveraged by teachers to promote effective classroom teaching and learning. Finally, the study suggests that teachers should make conscious efforts to integrate metadiscourse resources into their classroom lessons planning and delivery to guide discussions, clarify concepts, and foster student participation. EDUCATION FOR SERV

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Communication is a fundamental aspect of human interaction and plays a crucial role in various aspects of human lives. Communication is a social process where messages are exchanged, received, and understood among individuals or communities, influencing relationships, promoting collaboration, and collectively constructing shared understandings of reality (Putnam et al., 2020). As such, communication is a significant social practice that acts as the lifeline of any social group, (societies and communities) whether large or small, formal or informal. Also, Barge and Oliver (2003) emphasize that communication is a social process through which individuals interact and create meaning by exchanging verbal and nonverbal messages within specific cultural and social contexts. In order to communicate efficiently, individuals and societies adopt language elements such as symbols, sounds, and gestures which are both common and familiar to them (Vivas et al., 2020). It is these language features from which shared meanings are derived and established. This suggests that societies develop communication features and language elements in order to respond to thoughts, feelings, ideas and other social acts and subsequently have them transmitted.

Any communicative situation can be analyzed and ascribed meaning at two main levels, namely, the ideational/proportional level and the metadiscourse level (Hyland, 2005). The proportional/ideational level refers to the expression or conveyance of ideas, thoughts, or information between individuals or groups. It involves the exchange of content-related messages that aim to share knowledge, provide explanations, offer opinions, or present factual information. At the metadiscourse level, speakers or

writers use various strategies to lure how listeners or readers perceive and draw meaning from their message and by so doing, text recipients are guided into the encoded meanings of a text (Hyland, 2005). Thus, the metadiscourse levels open insight into how language users establish their attitude or stance relative to the content and context of a text while at the same time guiding the perceptions of interlocutors into the deeper meanings of the text (Wei et al., 2016, cited in Mensah, 2020).

In communication, the term used to describe any spoken or written communication among a specific group of people is "discourse" (Jaworski & Coupland, 2006). Jaworski and Coupland (2006) further define discourse as the utilization of language in connection to social, political, and cultural frameworks. It encompasses language's reflection of the prevailing social structure and its ability to actively mold that structure. Furthermore, discourse plays a significant role in shaping how individuals engage and interact within society. According to John Swale (1987, p.3), "the term discourse refers to any written or spoken communication among a group." Discourses are therefore products of social engagements and emerge from various forms of social interactions and settings. From the foregoing, classroom interactions can therefore, be perceived as a form of social discourse that enables the utilization of language to shape interactions between teachers and students.

The occurrence of various discourses can be attributed to different groups of people, which are known as discourse communities. Discourse communities refer to social environments where language is used, including specific terminologies, expressions, and acceptable forms of communication (Asemanyi et al., 2018). To put it differently, discourse communities are groups that engage in distinctive language use and communication practices. A discourse community is composed of interlocutors or

individuals who are constantly producing and or receiving texts or ideas which are transmitted through various means. According to linguist, John Swales (2016, p.8) discourse communities are characterized as groups with specific objectives or aims, and they employ communication as a means to accomplish these objectives. For instance, a community of writers of an academic journal, readers and editors who share common goals and communicate in a specific academic style, constitutes a discourse community. In the same vein, a community of teachers, students and administrators who share specific common goals and communicate in a specific style to achieve those goals form a discourse community. From the foregoing, the classroom can be perceived as a type of discourse community in which there are interlocutors (teachers and students) who share specific aims or objectives and engage in communication as a means to accomplish them.

Metadiscourse is one of the common linguistic analytical tools that are used for understanding how writers or speakers adopt linguistic features to project themselves in the discourses they have created (Hyland & Tse, 2004). Metadiscourse is generally used to refer to self-reflective verbal or written expressions which are useful in constructing interactional meanings in a text in order to assist writers/speakers to express their viewpoints, and effectively engage with readers/listeners who act as members of a particular community (Hyland, 2005). Hyland (2005) notes that metadiscourse combines a wide range of language markers to describe how writers/speakers communicate with their audiences through organized content. By combining these language markers, individuals can guide their readers or listeners through the content in an organized manner, enhancing clarity, coherence, and reader engagement. This insight further highlights the crucial role that metadiscourse plays in shaping discourse and facilitating effective communication in various contexts, from

academic writing to everyday conversation. Metadiscourse incorporates an extensive range of language markers to describe how writers/speakers relate to their readers/listeners through organized content (Hyland, 2005). According to Livingstone (2019), metadiscourse assists writers or speakers to engage with their readers or listeners by expressing their own opinions. This suggests that metadiscourse resources help the audience understand the speaker's perspective, making the communication more interactive and accessible. They may also enhance clarity, emphasize key points, and make the discourse more engaging, allowing the audience to follow the speaker's or writer's line of reasoning more effectively. By using metadiscourse, therefore, the speaker or writer is not just delivering information but also managing the relationship with the audience.

According to Datt (2021), classroom interaction is one of the fundamental strategies for accomplishing learning goals in a classroom. Classroom interaction is generally perceived as comprising all the interaction that occurs within the classroom between teachers and students and among students (Datt, 2021). Classroom discourse is indispensable in learning and teaching within the classroom context and is characterised by communicative and interactive practices that aim to promote the sharing of information and facilitate learning (Derakhshan, 2015). Interaction is considered as a collaborative activity that enables people to communicate their thoughts, ideas, and feelings (Brown, 2015). In emphasizing the significance of classroom interactions, Siddiq and Alkoudary (2018) assert that teacher-student interactions play a vital role in helping develop a positive path for students' academic and social improvement. In a further attempt to explore the significance of classroom interaction to the overall learning process, Hanum (2017) summarizes the role of classroom discourse in the following points;

Interaction between teacher and students and students and students are needed in the classroom activities taking communicative approach; It will maintain communication to happen in the classroom; It will help the teaching and learning process run smoothly; When teacher-students, and student-student interactions happen, the instruction will reach the target; The gap between teacher and students in the classroom will disappear (p. 2).

The goal of classroom interactions is to promote exchange of thoughts, ideas and feelings of both teachers and students in order to enhance learning (Datt, 2021). As observed by Alward et al, (2012) teaching goes beyond the simple exchange of information between teachers and students and actually entails the cautious use of interactive metadiscourse markers as an indication of one's commitment to the interactive discourse. Research findings suggest that interactive classroom instruction is essential for promoting learning outcomes (Hattie, 2009). Additionally, interactive classroom instruction can lead to increased student engagement, which is a key factor in promoting learning outcomes. Overall, the quality of interactions between teachers and students is a crucial factor in the quality of education. Positive interactions can foster student motivation, engagement, and academic achievement, while negative interactions can have the opposite effect. Classroom discourse plays a crucial role in facilitating effective communication between teachers and students, as well as promoting active participation and engagement in the learning process.

At the core of the communicative practices and modes of interaction that characterize classroom discourse are teacher-talk, teacher-student, and student-student interactions (Viberg & Grönlund, 2020). Teacher-talk is the language that teachers use to convey information, manage the classroom, and interact with students. "Teacher-talk includes not only the words they use, but also the tone of their voice, their body language, and the context in which they speak" (Viberg & Grönlund, 2020, p. 1). Similarly, Kakavas,

(2022) concurs that "teacher-talk" refers to the various ways in which teachers use language to effectively communicate information, ensure comprehension, and establish a conducive learning atmosphere. This encompasses not only the words they use, but also the manner in which they deliver them and the nonverbal signals they use to reinforce their message. Additionally, teacher-talk is conceived as the linguistic and paralinguistic features that teachers adopt during classroom instruction to facilitate communication and learning. This includes what is said by teachers and how it is said (Liu & Zhang, 2021). In the context of teaching, teacher-talk can be seen as a form of metadiscourse, in that, it involves the use of language to signal the teacher's relationship to the material being presented and to the students in the classroom. For example, a teacher may use metadiscourse markers to introduce a new topic, emphasize key points, or to invite student participation in the discussion. By using metadiscourse effectively, teachers can make their communication clearer and more effective and can help students better understand the content being presented (Gholami et al, 2020; Zare-ee et al, 2019). Additionally, students interact with their teachers in the classroom. For example, students' classroom discourse may involve asking relevant questions, asking for clarifications, providing examples, or sharing their experiences in relation to lesson content. Classroom discourse can also provide opportunities for students to provide constructive feedback to their peers. By giving thoughtful suggestions, offering praise, or highlighting areas of improvement, students can contribute to a supportive and collaborative learning environment.

The quality of interactions between teachers and students, and among students themselves can have a significant impact on student motivation, engagement, and academic achievement (Pekrun, Elliot, & Maier, 2009). It is, for instance, noted that positive teacher-student interactions, characterized by warmth, support, and

encouragement, can promote a sense of belonging and positive emotional experiences for students (Reeve, Jang, Carrell, Jeon, & Barch, 2004). Again, teachers who provide clear and constructive feedback to students, and who encourage student participation in classroom discussions, can foster an environment of intellectual challenge and growth (Hattie & Timperley, 2007). Effective teacher-student interactions can also help to create a culture of respect and inclusivity in the classroom, where all students feel valued and supported (Gregory & Weinstein, 2008).

From the foregoing it could be seen that classroom interaction and metadiscourse are inseparable and interdependent. Classroom interaction provides learners with opportunities to actively engage with the topic being learned. Metadiscourse, on the other hand, plays a crucial role in classroom interaction as it helps interlocutors to navigate and understand the structure and organization of discourse, and it facilitates effective communication and comprehension. In the classroom, metadiscourse can be used by teachers to provide instructions, give feedback, or clarify concepts while students can also employ metadiscourse to signal their understanding, ask questions, express their opinions, or engage in collaborative problem-solving.

1.2 Statement of the Problem

Studies on metadiscourse have drawn attention from many scholars both globally and locally. The main focus of this study is to investigate the use of metadiscourse markers in classroom interaction in a Ghanaian senior high school. Studies on academic discourse have explored a wide array of written and spoken communications within and across academic fields. This includes analyzing different forms of texts produced by students, textbooks, research papers, lectures, seminars, and presentations given at conferences. For instance, Zacharias and Hagemann (2020) analyzed research articles

from various disciplines to investigate the role of metadiscourse in scientific writing. The corpus-based study of research articles across disciplines concludes that researchers use metadiscourse to establish authorial presence, guide readers' understanding, and shape the discourse of scientific writing. The study highlights the importance of metadiscourse in scientific writing and its role in shaping readers' interpretation of research articles. It provides valuable insights into the rhetorical strategies and linguistic features employed in scientific texts to enhance clarity, credibility, and reader engagement. Similarly, Hyland and Jiang (2019) examined metadiscourse in English and Spanish research articles, focusing on persuasive writing. Their study sought to explore the impact of cross-cultural differences on the use of metadiscourse markers in research articles. Their study identified the use of metadiscourse to persuade readers and present arguments in the two languages. The study reveals cross-cultural differences in the use of metadiscourse in persuasive academic writing between English and Spanish. It emphasizes the importance of understanding these cultural variations and highlights the rhetorical strategies employed in persuasive writing across languages.

Drawing on Hyland's (2005) metadiscourse model, Akoto and Afful (2020) examined the metadiscursive elements in the introduction and literature review chapters of Master of Philosophy (MPhil) thesis papers submitted to the Department of English, University of Cape Coast. Their study revealed significant statistical differences across the sub-categories of both interactive and interactional metadiscourse markers. Their study further affirmed the scholarly view that the rhetorical function of a thesis chapter impacts the choice of metadiscourse elements.

Away from metadiscourse and written discourse, some attention has been given to metadiscourse in spoken discourses especially, in media discourses including television interviews (McKweon & Ladegaard, 2020) talk shows (Mensah, 2020) and YouTube featured videos (Sivanya, 2019). The study of metadiscourse in spoken academic discourse is, however, minimal. For example, Tang (2021) explored the use of metadiscourse markers in classroom talk with a focus on how science teachers use metadiscourse to build scientific knowledge with their students during classroom instruction. Six typologies namely; text connective, knowledge connective, activity connective, attitude marker, epistemology marker, and interpretive marker were developed for the study and further grouped into organisational and evaluative metadiscourse markers. One important discovery was the prominence and function of metadiscourse compared to the interaction and development of content in classroom talk, depending on the different stages of the instruction. During the opening and reviewing stage, metadiscourse was found to be more significant, while during the developing stage, interaction and content development were more prominent. Tang (2021) however, recommended that further studies consider the numerous other contexts, including diverse cultures, curricula, instructional methods, learning environments, teachers, and grade levels, where similar studies can be conducted to further enhance our understanding of metadiscourse and its utilization in classroom discourse. Conducting research in these varied settings would contribute to the expansion of knowledge regarding metadiscourse and its potential applications in educational contexts.

The current study, situated in the Ghanaian context adopts discourse analysis design and extends focus to include other subjects categorized into language and non-language. This study varies from that of Tang (2021) in that it adopted Hyland's (2005)

metadiscourse model and further explored the perspectives of teachers on the use of metadiscourse resources in classroom interaction.

Similarly, Wu and Yang (2022) conducted a comparative study on the use of interactive metadiscourse by native English-speaking English for Academic Purposes (EAP) writing teachers in the United Kingdom and their non-native counterparts in Chinese contexts. The analysis was based on a self-compiled corpus consisting of two subcorpora: EAP lessons from the Chinese context and EAP lessons from the British context. The study applies an interpersonal model of metadiscourse to examine the similarities and differences in the use of interactive metadiscourse between the two groups. The findings reveal that EAP teachers in both contexts heavily rely on transition markers and frame markers to organize their teaching, although they differ in specific linguistic realisations. These differences may be influenced by factors such as logical preferences, acquisition order, discourse community, and speech community. The current study however, explored both interactive and interactional metadiscourse resources in both language and non-language classroom lessons. As such, it helped to provide insight into how language and non-language secondary school teachers use and perceive metadiscourse resources. Within the Ghanaian context, singular study by Arthur and Fenyi (2022) focused mainly on hedging devices used in English instruction at a College of Education. Arthur and Fenyi (2022) recommended that a wider corpus of classroom interactions and several institutions need to be analyzed within the Ghanaian context. The study analyzed 18 English language lessons, each lasting 30 minutes, delivered by four tutors at a College of Education in the Western North Region of Ghana. Both tutor and student interactions were recorded, totaling 540 minutes of classroom discourse, using audio recordings and note-taking during the second semester of the 2020/2021 academic year. Unlike the present study, the data were analyzed using Salager-Mayer's (1995) taxonomy of hedges as cited in Mansour and Alghazo (2021). The findings revealed the use of 10 classes of hedging devices, with modal auxiliary verbs, modal lexical verbs, and adverbial phrases or approximators being the most common. The hedging devices were used to emphasize points, express politeness, and indicate a lack of commitment to propositions. However, due to the limited number of teachers and classroom sessions examined, the researchers recommended that findings should be validated through the analysis of a broader corpus of classroom interactions.

Existing literature, therefore, shows that there is presently, a paucity of studies in the area of metadiscourse resources and classroom interactions in Ghanaian SHS classroom interactions. Also, globally, literature seems to be silent on the perspectives of teachers on the nature of their interactions in the classroom. Hence, the need for the present study which sought to examine the role of metadiscourse resources in SHS classroom interactions in Ghana, as well as the perspectives of teachers on the subject matter.

1.3 Research Objectives

The following objectives guided the study;

- To identify types of metadiscourse resources employed in classroom interactions at Aggrey Memorial African Methodist Episcopal Zion Senior High School (AMAMEZSHS)
- To explore how the metadiscourse resources enhance communication in the classroom AMAMEZSHS.
- 3. To examine the perspectives of teachers on the use of metadiscourse resources in classroom interactions at AMAMEZSHS.

1.4 Research Questions

The study sought to answer the following research questions

- 1. What are the types of metadiscourse resources employed in classroom interactions at AMAMEZSHS?
- 2. How do the identified metadiscourse resources enhance communication in the classroom at AMAMEZSHS?
- 3. What are the perspectives of teachers on the use of metadiscourse resources and classroom interactions at AMAMEZSHS?

1.5 Significance of the Study

This study aims to investigate the use of metadiscourse resources in Ghanaian classrooms, with a focus on how the resources are used to manage classroom interactions and to facilitate effective communication between teachers and students in Ghanaian Senior High Schools. Through a qualitative analysis of classroom discourse, this study explored the types and functions of interactive and interactional metadiscourse markers as used by Ghanaian teachers and students, as well as their roles in facilitating effectiveness of classroom instruction. Ultimately, this sought to contribute to our understanding of how metadiscourse resources can be effectively utilized in Ghanaian classrooms to promote active student participation and engagement in the learning process.

In the Ghanaian context, existing literature suggests that most studies have analyzed metadiscourse in university students' academic writing with specific attention to "Hedging" (Akoto, 2019; 2020; Musa, (2014); Akoto, (2019). A study by Arthur and Fenyi (2019) explored the use of hedging devices and their pragmatic functions in classroom interactions in a College of Education in Ghana. The study revealed that ten

(10) groups of hedging devices (including modal auxiliary verbs, modal lexical verbs, adjectival modal phrases and adverbial phrases) are employed during the classroom interactions in the College of Education. The study is however, limited in its focus because it examined only one interactional metadiscourse marker (i.e. hedging). Arthur and Fenyi, (2019) therefore, recommended that further studies engage several institutions and other metadiscourse resources so as to widen the corpus in order to draw generalizations.

The analysis of metadiscourse use in the Ghanaian Senior High School (SHS) classroom can therefore, provide valuable insights into how teachers use language to negotiate meaning and interact with their students in spoken classroom discourse. Classroom interactions and metadiscourse are related in that, metadiscourse is a type of discourse that refers to language used to comment on or clarify the ongoing discourse in a conversation or text, including classroom interactions. In other words, metadiscourse is a way for speakers to provide feedback, explain their thought processes, and communicate their intentions to their listeners (Hyland, 2005). This seems to suggest that, in the context of classroom interactions, metadiscourse markers can be used by teachers and students to clarify their understanding of a particular topic, to provide feedback on their performance, or to manage the flow of the conversation. For example, a teacher might use metadiscourse to clarify a difficult concept or to ask students to reflect on their own learning. Similarly, a student might use metadiscourse to explain their reasoning or to ask for clarification on a particular point. Research has shown that the use of metadiscourse markers can improve student engagement, comprehension, and retention of information. For example, one study found that when teachers used metadiscourse markers to guide their students through the learning

process, students were better able to understand and remember the material (Hyland & Tse, 2004).

For instance, interactional metadiscourse resources help speakers to signal their intentions, attitudes, and beliefs in conversation, and to establish and maintain relationships with their interlocutors (Schiffrin, 1987). Previous research has shown that the use of metadiscourse resources in classroom discourse can enhance the quality of interactions between teachers and students, promote students' understanding and retention of academic content, and create a positive classroom atmosphere that supports learning (Feng, 2011; Wong, 2013).

Overall, research has established that the use of metadiscourse markers in classroom interactions is a valuable tool for promoting learning and academic success. By identifying effective metadiscourse strategies employed by teachers to enhance student engagement, comprehension, and critical thinking, this study contributes to the enhancement of teaching practices in the Ghanaian educational context. More significantly, applying Hyland's metadiscourse model to the study of spoken discourse, and in a specific context, such as a Ghanaian senior high school, contributes to the validation and extension of the model's applicability. Therefore, by applying the model in this specific context, this study provides valuable insights into the use and functions of metadiscourse markers, as well as the perspectives of teachers about metadiscourse in classroom discourse, enabling a better understanding of classroom discourse dynamics, pedagogical practices, and cultural considerations in Ghanaian educational settings.

1.6 Scope of the Study

This study focused on investigating how SHS teachers use Interactional Discourse Markers. Although there are various subjects taught within the SHS system in Ghana, this study is limited to data collected and analyzed from the four core subjects taught in senior high schools in Ghana. In a study by Adzahlie and Ampiah (2019), interviews with teachers on core subject instruction challenges revealed that issues like outdated resources, overloaded curriculum, lack of professional development and assessment limit ability to effectively teach knowledge and skills across English, Maths, science, social studies. Prior to this, Akyeampong et al (2006) had established through a qualitative study examining teacher perspectives on the teaching the core subjects that teachers felt they lacked adequate resources and skills to teach effectively in the four areas. Data for the study comprises video recording of lessons of four core subject tutors in a selected SHS in the Central Region of Ghana. Due to factors such time and availability of participants, two sessions of mathematics and English lessons and one session each of Integrated Science and Social Studies lessons were recorded for the study. The interactions of both teachers and students during each lesson will be recorded using mobile phone recorder and note taking during the second semester of the 2023 academic year. Finally, collected data was analyzed using Hyland's (2005) framework of interactional discourse markers in an attempt to explore the stated research objectives and questions. Additional data from focus group discussion, interview with teachers and observation notes were also useful in developing relevant themes using Braun and Clarke's (2006) six-step thematic analysis to further enhance findings and discussions in this study.

1.7 Organisation of the Study

This study is presented in five chapters. The chapter one presents a detailed background to the study and provides an overview of various works that have been carried out in metadiscourse both in written and spoken discourse in the academic setting. The chapter also captures the research objectives and questions which provide direction for the study, and outlines the research questions that the study sought to provide answers to. Further, chapter one also provides the scope within which the study would be carried out, as well as its significance. The chapter two of the study provides a review of literature and theories which are both related and relevant to the study. Definition and Functions of Metadiscourse, review of previous studies on metadiscourse markers in English discourse, both in Ghana and in other countries is discussed. Literature on theoretical frameworks will unearth ideological and conceptual perspectives that underpin metadiscourse. Chapter three discusses the methodology adopted for the study. It highlights the strategies for data collection and analysis. It provides and outlays the adopted research approach, design and how data is to be analyzed. Chapter four, presents findings from analysis of data collected. The various themes and issues that are emergent from the data are critically examined in line with the theories outlined for the study from chapter three. Chapter five is the final chapter of the study. Conclusions and recommendations for the study resulting from the data analysis from the previous chapter are provided in the fifth chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Classroom discourse plays a vital role in student learning and development. The language used by teachers and students to organize and negotiate meaning shapes the social and academic environment of the classroom (Wells, 2007). Metadiscourse refers to explicit linguistic cues that signal connections and guide the reader through a text or communication (Hyland, 2005). This literature review examines research on the role and use of metadiscourse in classroom interactions. It aims to contextualize a proposed case study exploring metadiscourse patterns at a senior high school in Ghana. As such, relevant concepts and theories of the research approach as well as analysis are discussed. The chapter reviews relevant literature on the concept of metadiscourse, the role of metadiscourse in human discourses and interactions, metadiscourse in spoken interaction, metadiscourse in classroom interaction in order to provide an in-depth understanding into metadiscourse as a pragmatic concept in the context of classroom interaction in Ghana. Furthermore, the chapter reviews Hyland's (2005) Metadiscourse theory and draws upon the theory as the framework for analyzing metadiscourse markers in the classroom interactions. By examining the existing literature, case studies, and research, the researcher sought to deepen understanding of how metadiscourse markers are employed, their functions, and their implications for effective communication and learning outcomes. This chapter therefore, sets the stage for the research study, which will further explore the use and impact of metadiscourse markers in the Ghanaian educational context.

2.1 The Concept of Metadiscourse

The concept "metadiscourse" was developed by Harris (1959) to provide some ways of understanding language in use by presenting a writer's or speaker's attempts to guide readers' or listeners' perception of a text (Hyland, 2005). After the introduction of the term, many scholars have explored it in many fields and added their contributions. For instance, Kopple (1985) observes that metadiscourse is discourse about discourse, and that its intention is not just the presentation of information, but an attempt by writers/speakers to direct text receivers through a specific text either written or spoken. Also, according to Mensah (2021), metadiscourse is regarded as a linguistic tool that can be used to achieve discourse organisation, readers'/listeners' expression and response to discourse. Metadiscourse also appears to be an instrument which expresses self-reflection with the intention to achieve mutuality in interaction within a text between a writer and a reader (Hyland, 2005). Metadiscourse resources therefore create some sort of strategic ways in which writers communicate with their readers and makes those strategies available to readers to be able to understand the writers as well as relate to the text. Metadiscourse therefore, refers to linguistic expressions used by writers and speakers to reflect on or comment on the ongoing discourse. It operates at both the macro and micro levels, shaping the structure of the text and guiding readers' interpretation. Metadiscourse acts as a powerful tool for writers to establish a connection with their readers, manage information flow, and shape the reader's understanding of the content. The effective use of metadiscourse enables writers to convey their ideas more clearly, enhance coherence, and provide context for complex or unfamiliar concepts (Hyland, 2005).

According to Chrismore (1989) as cited in Nordquist (2020), metadiscourse is one of the concepts of discourse that can be described as the study of discourse itself. Additionally, Hyland and Jiang (2022) concur that metadiscourse can be described as the remarks or commentary provided by the creator of a text while engaging in the act of speaking or writing. Metadiscourse also relates to aspects of a text that affect how authors relate to audiences. Metadiscourse focuses on the relation between a text, the writer/speaker and the reader/listener and enables the message and perceptions of the author to flow through the text to the audience, thereby resulting in the author engaging the audience in the text (Hyland 2005). As highlighted by Hyland and Jiang (2022), metadiscourse serves as a recipient design filter, influencing the construction of a text with the readers or listeners in mind. With an increased usage of metadiscourse markers, readers/listeners can gain more than just the information with which they are presented. Metadiscourse resources also describe the design of discourse by assuming a crucial role in effective communication and social engagement, in the process of writing/speaking (Roka, 2020). This opportunity for engagement is what makes the instructional environment a crucial platform for teachers to interact with their students, and students, with one another.

The term metadiscourse also defined as the commentary that writers or speakers make on a text during its production which serves as a manifestation of how discourses incorporate the personalities, attitudes, and beliefs of those who engage in any communicative act (Hyland & Jiang, 2021). Metadiscourse allows speakers and writers to gain understanding and clarity by signaling structural relationships and navigating discourse (Crismore et al. 1993). It encompasses reference to sequential, inferential and topic organizational relationships through words, phrases, and exchanges used for connective and interactive purposes rather than propositional meaning (Vande Kopple 1985). In other words, metadiscourse is concerned with the various ways in which writers or speakers organize the text content to aid and enhance the understanding of

their audiences. Additionally, metadiscourse resources can be considered as textual elements that are employed by speakers or writes to fine-tune how listeners or readers perceive their texts. The root of metadiscourse lies in the idea that language is not only an instrument for the exchange of information but also instrumental in communicating or commenting about itself. Metadiscourse also refers to the linguistic properties that draw significant attention to writers or speakers and the act and context of what they say (Wei et al., 2016). In simpler terms understanding metadiscourse involves examining how language is employed within the text itself to guide the reader/listener and convey the author's intentions. This includes linguistic features such as transition words, self-references, hedges, and boosters, which serve to frame the discourse, provide coherence, and indicate the writer's stance or attitude toward the content. Metadiscourse is also defined variously by several scholars as discourse about discourse (Hyland, 2005, p.2), communication about communication (Vande Kopple, 1985, p. 83), and writing about writing (Williams, 1981, p. 40). These various definitions of metadiscourse highlight the point that metadiscourse includes elements that guide or shape the interaction between the communicator and the audience, involves reflection or commentary on the structure, style, or function of the discourse and draw attention to the writer's/reader's choices, intentions, or strategies in conveying meaning. Metadiscoursal elements reveal how writers and or speakers project their personalities and signpost their attitudes toward the content of their text and their listeners or readers (Wei et al., 2016).

2.2 Conceptualization of Metadiscourse Research

In fact, metadiscourse is a leading research framework in discourse studies and has been applied by many researchers to the analysis of discourses in various fields such as academic, legal, business, linguistics, media and science (Bhatia, 2018; Jiang &

Hyland, 2022; Mauranen, 2019; Sancho, 2017; Zacharias & Hagemann, 2020). This study is an attempt to enhance the literature and knowledge on metadiscourse by lending critical attention to spoken discourse that ensues in classroom interaction. The study of metadiscourse offers a window of insight into the interactional features of a text, whether written or spoken, and provides essential opportunities to analyze texts beyond their ideational level. Hyland and Fu (2014) as cited in (Wei et al, 2016). This means that metadiscourse research reveals how writers and speakers carefully consider their audience when creating texts. By analyzing metadiscourse markers, such as frame markers, transitions, self-mentions, boosters, and hedges, the model uncovers how language is strategically used to connect with the audience, shape the reader-writer relationship, and enhance the effectiveness of communication.

In essence, the model emphasizes the significance of metadiscourse in making texts more reader-friendly, coherent, and persuasive. The main focus of metadiscourse research is to examine how language is used by interlocutors to manage talk, organize relationships, and interpret communication in specific social contexts (Hyland, 2020). metadiscourse research is therefore an essential approach to applying a tested research framework to the analysis of texts (whether spoken or written) to highlight that communication is a social engagement that goes beyond the content itself and involves thoughtful consideration of the audience's needs and expectations. Hyland and Jiang (2021, pp.1) argue that metadiscourse study provides a framework for "understanding communication as social engagement and helps reveal how writers and speakers consider their audience in creating texts". A metadiscourse study therefore, provides opportunities for analyzing and providing meaning and interpretations about text or talk which is produced in and by members of a particular discourse community.

Again, (Hyland, 2018) argues that examining metadiscourse helps us explore the interactive elements of a text, whether it is written or spoken. This approach allows us to analyze texts beyond just their content, offering a clearer view of how communication functions. Metadiscourse analysis helps to see how language is used to shape interactions between people, whether in writing or speaking and allows us to analyze texts in more depth than just looking at their main ideas. Studying metadiscourse, therefore, helps to understand how communication works within specific contexts, enhances communication, and is useful in understanding authorial voice. Hyland and Jiang (2021) further assert that metadiscourse is currently a thriving research area, applicable in the analysis of various texts, and promises a deeper understanding into language use, the interconnectivity between societies and communicative behaviours, as well as how teaching can best be carried out. Metadiscourse offers a particular framework for exploring and understanding communication as a social interaction process and helps reveal how writers and speakers consider their audience in the composition of texts (Jiang, 2022).

2.3 Hyland's Model of Metadiscourse

The concept of metadiscourse has been extensively explored by linguists and discourse analysts, with one of the prominent models developed by Ken Hyland. Hyland's (2005). Hyland's (2005) model of metadiscourse provides a comprehensive framework for understanding the various devices writers use to guide readers and shape the discourse in academic writing. The framework has been applied to the study of various texts both in and outside academia. Hyland and Jiang (2021), conducted a bibliometric study aimed at tracing the appreciating interest in metadiscourse studies between 1980 and 2020. The analysis of 431 published articles revealed Hyland (2005) is the most cited author and as such has a preference for this study. Hyland's model of

metadiscourse proposes a taxonomy of metadiscourse markers, categorized into two main groups: interactive and interactional metadiscourse (Hyland, 2005). Interactive and interactional metadiscourse markers serve different purposes, collectively enhancing reader/listener engagement, coherence, and the writer's authorial presence.

2.3.1 Interactive Metadiscourse Markers

Interactive metadiscourse resources focus on the writer's engagement with the reader. They include devices that invite the reader to participate in the discourse and establish a dialogue between the writer and the audience. Interactive markers help the organizations of ideas in the text, and interactional markers enable the writers to engage the readers in the text (Hyland, 2005, as cited in Alkhathlan, 2019). Interactive metadiscourse resources are subdivided into Transitional resources, Frame resources, Endophoric resources Code glosses and Evidentials.

Transitional Markers

Hyland (2005) defines transitional metadiscourse resources as those linguistic devices that help to express semantic relationships between main clauses in a specific text. As such, transitional metadiscourse resources function to promote the flow and continuity of text and show how the various parts of a text fit together. Some examples of transitional resources outlined by Hyland (2005) are expressions such as *in addition*, *but, thus* and, *and* which all are used to link clauses in texts.

Code Glosses

Code glosses are words or phrases that provide additional information about an idea, concept or term in a given text. Hyland (2005) avers that code glosses help readers/listeners to grasp the meaning of ideational material. As such, they provide examples, explain, define, translate or interpret language as used in a specific discourse

act. Examples of code glosses include *namely*, *e.g.*, and *in other words*. By using code glosses, communicators can ensure that their audiences understand complex ideas, facilitating clear and effective communication.

Frame markers

Frame markers are words of phrases that signal a shift in conversation, text or presentation. They refer to discourse acts, sequences, or stages in a text and include expressions such as *finally*, *to conclude*, and *my purpose is* (Hyland, 2005). In a text, frame markers function to introduce new topics or ideas, help the audience to understand the organization and structure of the message, signal a transition between stages or provide a framework for listeners/ readers to follow (Hyland, 2005).

Endophoric Markers

Endophoric markers refer to information in other parts of a text (Hyland, 2005). In other words, they are words or expressions that refer to information within the same text, conversation or talk. They signal relationships between texts create coherence and refer back to previously mentioned information in the same text. Ken Hyland gave examples of endophoric markers as expressions such as *noted above*, *see Fig*, and *in Section* 2

Evidentials

Evidentials are linguistic resources that refer to information sources of information from other texts and include expressions such as *according to X*, (*Y*, 1990) and *Z states* (Hylang, 2005). Evidentials indicate the source or evidence for a statement or claim and show how a speaker/writer knows or came to know the information. By using evidentials, communicators can convey subtle shades of meaning and provide more accurate information.

2.3.2 Interactional Metadiscourse

Interactional metadiscourse focuses on the writer's stance towards the content and the audience (Hyland, 2005). It includes devices that allow the writer to position themselves and their ideas within the discourse. Interactional metadiscourse resources help to manage the ongoing interaction between the speaker/writer and the listener/reader. They facilitae communication, engagement and relationship-building among interlocutors. Key concepts in interactional metadiscourse include the following.

Hedges

Hedges are a kind of interactional metadiscourse marker that authors and speakers employ to convey caution or uncertainty, lessen the impact of their claims, and lessen the force of their arguments (Hyland, 2005). By implying that the speaker is not making firm or conclusive statements, these linguistic strategies serve to elevate communication to a more courteous or diplomatic tone. In other words, hedges are words, phrases, or sentence constructions that imply reservation, qualification, or tentativeness regarding the information being communicated. Suggested hedges by Hyland (2005) are *might*, *possible*, *perhaps*, and *suggest*. Through the use of hedges, speakers might acknowledge the intricacy or subtlety of the subject at hand and communicate their ideas more softly by using these terms.

Boosters

Boosters, unlike hedges are used to increase intensity or commitment to an ideational proposition in a text (Hyland, 2005). In other words, boosters are linguistic devices that emphasize a statement, claim, or idea and strengthen the tone, conviction or authority of the message, making it more persuasive, confident and compelling.

Examples of boosters suggested by Hyland (2005) are *in fact, definitely,* and *it is clear that.*

Engagement Markers

Engagement markers often refer to or build relationships with readers/speakers and include expressions such as *consider*, *note that*, and *you can see that*. Engagement markers, signal the writer's/speakers active involvement in the text and invite the reader to join the discussion (Hyland, 2005). Simply put, engagement markers are words or phrases that encourage audience engagement, participation and create a sense of connection, and foster a collaborative atmosphere during communication.

Attitude Markers: Attitude markers convey the writer's stance towards the content, reflecting their evaluation of evidence, arguments, or alternative viewpoints (Hyland, 2005). These linguistic resources convey the writer's/speaker's attitude, tone, or emotions towards a subject, idea, or audience. Hyland's (2005) suggested examples of attitude markers include, *unfortunately, surprisingly*, and *I agree to*.

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Self-mentions

Self-mentions, according to Hyland (2005) are linguistic resources that are used to mark the presence of an author in his/her text and include words such as *I*, *We*, *My*, and *Our*. Self-mentions attribute ideas to the writer/speaker establishing authority and credibility of their texts. They also make texts more personal, authentic and engaging.

Tabular Breakdown of Hyland's (2005) Metadiscourse Framework

Main Category	Sub-category	Description	Examples
Interactive		Help to guide reader	
Metadiscourse		through the text	
	Transitions	Express semantic relation	In addition/
		between main clauses	but/ thus/ and
	Frame	Refer to discourse acts,	Finally/ to conclude/
	markers	sequences, or text stages	my purpose is to
	Endophoric	Refer to information in	Noted above/ see Fig./
	markers	other parts of the text	in Section 2
	Evidentials	Refer to source of	According to X/ (Y, 1990)/
		information from other texts	Z states
	Code glosses	Help readers	Namely/ e.g./ such as/
		grasp meanings	in other words
Interactional		Involve the reader	
Metadiscourse		in the argument	
	Hedges	Withhold writer's	Might/ perhaps/
		full commitment	possible/ about
	Boosters	Emphasize force or	In fact/ definitely/
		writer's certainty	it is clear that
	Attitude	Express writer's	Unfortunately/ I agree to/
	markers	attitude	surprisingly
	Engagement	Build relationship	Consider/ note that/
	markers	with reader	you can see that
	Self-mentions	Explicit reference	I/ we/ my/ our
		to author(s)	

Source: Hyland (2005).

Category	Function	Examples
Textual (interactive)	Help to guide reader through the text	Resources
Logical connectives (Transitions) Frame markers	Express relations between main clauses Refer to discourse acts,	and, but, in addition, however, thus My purpose is, first,
	sequences or stages	second, the findings are, In conclusion
Endophoric markers	Refer to information in other parts of the text	mentioned above, as follows
Evidentials	Refer to information from other texts	according to, X states that
Code glosses	Elaborate propositional meanings	in other words, it means that, such as, e.g., for example
Interpersonal (interactional)	Involve the reader in the text	Resources
Hedges	Withhold writer's full commitment to statements	may, might, could, would, perhaps, some, possible
Boosters	Emphasize force or writer's certainty	in fact, definitely
Attitude markers	Express writer's attitude including significance, obligation to proposition	should, have to, agree, surprisingly
Self-mentions	Refer to author(s) explicitly	I, my, exclusive we, our
Engagement markers	Build relationship with reader explicitly	imperatives (e.g., Please note that), You can see that, inclusive we

Source: Hyland (2005)

2.3.4 Cross-cultural and Disciplinary Variations in Metadiscourse

Research has shown that the use of metadiscourse can vary across cultures and disciplines. Different linguistic and rhetorical conventions influence how metadiscourse is employed. For instance, research by Jiang (2006) revealed differences in metadiscourse usage between English and Chinese academic writing. Cultural norms and academic conventions influence the choice and frequency of specific metadiscourse markers.

Moreover, disciplines within academia have distinct preferences for certain metadiscourse features. For example, a study by Ozturk and Goksu (2016) demonstrated variations in metadiscourse usage between social sciences and hard sciences disciplines. Awareness of these variations is essential for effective academic writing and communication within specific disciplinary contexts. The functions and manifestations of metadiscourse can also vary across cultures and academic disciplines, highlighting the need for writers/speakers to be conscious of the contextual appropriateness of metadiscourse usage. By utilizing metadiscourse strategically, writers and speakers can create texts that are more reader-friendly, credible, and effectively convey their ideas.

2.4 Classroom Discourse

Teaching as a practice is defined as the interactional process between teachers and students, and among students themselves, and the success or failure of any instructional activity is determined by the strategies and efficiency of the interactional process (Qai, 2015). Classroom discourse is a critical aspect of the teaching and learning process, influencing how knowledge is constructed, shared, and internalized within educational settings. This literature review examines various scholarly perspectives on classroom discourse, its definitions, and its impact on student learning outcomes. By exploring existing research, we aim to shed light on the significance of classroom discourse in fostering effective teaching practices and improving student engagement and achievement.

Grifenhagen and Barnes (2022)) define classroom discourse as the language and communication practices that shape the learning environment. This definition emphasizes the dynamic interplay between language use, instructional strategies, and

that classroom discourse constitutes the verbal and non-verbal communication that occurs within the educational context between teachers and students and among students themselves. It encompasses a wide range of interactions, such as teacher-led discussions, student responses, questions, explanations, and collaborative problem-solving activities. Cazden (2001) also emphasizes that the nature and quality of classroom discourse play a crucial role in shaping students' cognitive development, fostering critical thinking skills, and promoting social interaction.

Effective classroom discourse is essential for creating a supportive and engaging learning environment. A study by Mercer (2000) highlighted the significance of language in facilitating cognitive development. Mercer argues that language, not only conveys information but also structures thought processes, helping students construct and organize their understanding of the world. Moreover, classroom discourse is instrumental in promoting students' social and emotional development. A study by Li, Bergin, and Olsen (2022) demonstrated that positive teacher-student interactions and peer discussions foster a sense of belonging and community among students, leading to increased motivation and improved learning outcomes.

Numerous studies have examined the impact of classroom discourse on student learning. For instance, a meta-analysis conducted by Wegerif and Mercer (2007) found a positive correlation between high-quality classroom discourse and academic achievement. The researchers identified that open-ended questions, extended conversations, and opportunities for elaboration were associated with deeper understanding and knowledge retention. Conversely, classrooms characterized by closed-ended questions and one-way teacher-centered communication were linked to

lower levels of student engagement and limited cognitive development. This highlights the importance of fostering interactive and inclusive classroom discourse to enhance learning outcomes. Davis (2018) emphasizes the significance of classroom interactions as a crucial element in the process of meaning-making within mathematics teaching and learning. He further argues that teachers' classroom interactions contribute to fostering a deeper understanding of mathematical concepts and principles among their students in Ghanaian classrooms.

Teachers play a pivotal role in shaping classroom discourse patterns. A study by Edwards and Furlong (2009) identified three common discourse patterns adopted by teachers. The first is Recitation Style, in which, the teacher primarily delivers information through lectures, and students passively listen. Interaction is limited, and students rarely have opportunities to voice their thoughts or ask questions. The second, *Question-and-Answer Style*, involves frequently asking closed-ended questions and expecting short responses from students. While this encourages participation, it may not foster in-depth understanding or critical thinking. Lastly, is the Interactive Style which involves open-ended questions, active discussions, and collaborative activities. This pattern promotes student engagement, encourages varied perspectives, and supports higher-order thinking skills. The interactive style of discourse has been associated with more positive learning outcomes (Edwards & Furlong, 2009). Students are more likely to be active participants in their learning, leading to increased motivation and a deeper understanding of the subject matter.

Despite its importance, effective classroom discourse can face several challenges. One common barrier is the dominance of certain students in discussions, which may inhibit the participation of quieter or less confident individuals (Nystrand, 2006). Teachers

must be aware of these dynamics and create an inclusive environment where all students feel comfortable contributing. Additionally, time constraints and curriculum demands may limit the amount of discourse that can take place during a class.

Classroom discourse is a vital aspect of effective teaching and learning. It shapes students' cognitive, social, and emotional development and significantly impacts their learning outcomes (Mercer & Littleton, 2007; Alexander, 2008; Wells, 2007). The adoption of an interactive discourse style, with open-ended questions and collaborative activities, has been shown to foster student engagement and critical thinking skills. To ensure an inclusive learning environment, teachers must be mindful of potential barriers to effective discourse and implement strategies to encourage participation from all students. By understanding the significance of classroom discourse and its impact on learning, educators can create dynamic and enriching learning experiences that empower students to become active and lifelong learners.

Multiple frameworks exist for analyzing classroom discourse (Song et al., 2020), with the most predominant being IRF (Sinclair and Coulthard, 1975), FIAS (Flanders, 1970), and CLASS (Pianta et al., 2008). Nonetheless, these frameworks predominantly emphasize the structure of classroom dialogue (Mercer et al. 2019). Hyland's (2005) framework, however emphasizes the interpersonal and interactional aspects of discourse which is crucial for understanding classroom discourse where teacher-learner interactions and relationships are vital.

2.4.1 Empirical Studies on Metadiscourse Resources

The concept of metadiscourse is considered one of the key pragmatic approaches to textual analysis. As one of the key approaches to textual analysis, studies on metadiscourse have attracted both international and local attention across various

fields. In a bibliometric study of the application of metadiscourse to textual study, Hylang and Jiang (2021) analyzed 431 related papers published on metadiscourse between 1983 and 2020. The focus of their study was to provide insight into the most prevalent topic and interest areas with respect to metadiscourse study. The analysis of articles from the WoS database between 1983 and 2020 reveals that written academic texts received the most privileged attention with specific foci on academic writing and research articles. The study further reveals that studies on higher education writing appear to be the most occurring theme in published articles over the past forty (40) years as metadiscourse continues to inspire huge interest in interaction in academic registers.

Hyland and Jiang (2021) further argue that the study of metadiscourse in different rhetorical and social contexts significantly promotes knowledge in the role of interaction in written discourses but only occasionally in spoken discourse. This suggests that, although metadiscourse has been most applicable to the study of academic discourses, research have been biased against spoken academic discourses and other levels of education other than tertiary. As such the use and implication for metadiscourse in spoken academic discourse is an area that requires attention. As established in the preceding argument, metadiscourse study both on the global and national scene has largely been influenced by the huge interest in written higher education academic text. For instance, Ahmadi (2022) investigated how writer-reader interaction is textually represented in academic writing of applied linguistics research articles published in English by both English and Persian researchers. The aim was to explore the use of stance and engagement markers as metadiscourse tools in the research articles. The cross-cultural study showed that hedging devices were commonly used by the researchers as stance markers in research articles to express

authors' opinion. Both groups also used directives as engagement markers but variedly. The study emphasizes the role of writers' linguistic and contextual awareness of the first and second language in forming efficient interaction and communication between writers and readers of academic texts.

He and Rahim (2017) delved into the realm of legal discourse by examining the presence of implicit meta-discourse in the Chinese and American constitutions. The study focused on Chinese and American constitutions to identify instances of implicit meta-discourse markers. The researchers scrutinized the language used in these legal documents to decipher the presence and function of implicit meta-discourse. Their aim was to uncover how implicit meta-discourse shapes legal arguments, guides interpretation, and establishes authority. The analysis yielded noteworthy findings, revealing the presence of implicit meta-discourse markers in both the Chinese and American constitutions. These markers encompassed references to shared values, assumptions, and legal principles. It became evident that implicit meta-discourse plays a pivotal role in conveying legal arguments and influencing the interpretation of constitutional texts. Based on their findings, it was concluded that implicit metadiscourse is prevalent in legal discourse, as exemplified by its presence in the Chinese and American constitutions. The findings underscored the significance of implicit meta-discourse in shaping legal arguments effectively and appealing to the intended audience. The study further recommends that legal practitioners and scholars acknowledge the importance of implicit meta-discourse in legal writing. The study stressed the necessity for a deeper understanding of the function and impact of implicit meta-discourse markers in legal discourse. Essentially, grasping and employing implicit metadiscourse has the potential to elevate the efficacy of legal communication

and advocacy strategies, ultimately enhancing persuasion and engagement within the legal domain.

Tayladoraki and Tsantila (2019) aimed to investigate and compare the use of metadiscourse in two specific genres: research articles and master's theses. The study adopted a comparative research design to collect a corpus of research articles and master's theses written in English as a second language. The study employed systematic analysis to examine the presence and frequency of metadiscourse markers in the selected texts by focusing on identifying and categorizing metadiscourse features, such as hedges, boosters, engagement markers, and evidentials in the data. The comparative analysis revealed interesting patterns and differences of varying frequency and distribution. The findings revealed that research articles exhibit a higher overall occurrence of metadiscourse resources as compared to the master's theses. Within each genre, certain metadiscourse features are more prevalent than others. For instance, research articles tend to rely heavily on hedges and boosters, whereas master's theses employ engagement markers more frequently. The differences in the use of metadiscourse across research articles, master's theses, and academic disciplines can be attributed to several factors identified by scholars including the need to meet audience expectations (Hyland, 2004), establish authorial voice (Vande Kopple, 1985) or take an epistemological stance of a discipline (Swales, 1990). Different academic fields, therefore, show distinctive patterns in their metadiscourse usage, reflecting the conventions and communication practices within those disciplines. This finding highlights the importance of genre-specific analysis in understanding metadiscourse in academic writing and sheds light on the role of metadiscourse in L2 academic writing, specifically in research articles and master's theses pointing out variations in the use of metadiscourse markers between the two genres and provide insights into disciplinary differences.

Similarly, Huang et al. (2020) investigated the use of interactional metadiscourse in English travel blogs. The study aimed to explore how bloggers employ interactional metadiscourse markers to engage with readers, express their attitudes, and create a sense of interaction in this specific genre. Huang et al, (2020) quantitatively and qualitatively compiled a corpus of English travel blogs and analyzed the texts to identify and categorize interactional metadiscourse markers. The content analysis focused on understanding the frequency, types, and functions of these markers, shedding light on how bloggers employ them to enhance their interaction with readers. The researchers found that bloggers often employ personal pronouns, such as "I" and "we," to establish a personal connection with readers and create a sense of involvement. Additionally, evaluative language, including positive and negative assessments, is frequently utilized to express the blogger's opinions and engage readers in a subjective manner. The study also revealed the use of engagement markers, such as rhetorical questions and directives, which are employed to directly address readers and encourage their active participation. Moreover, the analysis uncovers the presence of comment clauses, discourse markers, and inclusive language, which contribute to the interactive nature of travel blogs, and it demonstrates the significance of interactional metadiscourse markers in shaping the discourse and fostering a sense of interaction between bloggers and their audience.

Zakaria, Malik, Rashid, Pilus, and Zakaria (2018) examined the use of metadiscourse in the academic writing of both domestic and international students studying at a university in Malaysia. The study adopted textual analysis and aimed to compare and

analyze the metadiscourse features employed by these two groups of students and identify any potential differences. Zakaria et al. (2018) collected a corpus of academic writing samples from a sample of students at the university and analyzed the texts for the presence and distribution of metadiscourse markers. The study employed textual analysis focused on identifying and categorizing various metadiscourse features, including hedges, boosters, engagement markers, and textual metadiscourse. The study revealed that both groups of students employ metadiscourse markers in their writing, indicating their awareness of the importance of metadiscourse in academic discourse. However, some differences are observed in the frequency and distribution of specific metadiscourse features between the two groups. For example, the analysis suggests that domestic students tend to use more textual metadiscourse markers, such as transitional words and phrases, to guide the reader through their writing. On the other hand, international students demonstrate a higher use of engagement markers, which involve direct interaction with the reader and aim to establish rapport. The study also highlights the influence of language proficiency on the use of metadiscourse. It suggests that the level of English proficiency may affect the selection and distribution of metadiscourse markers, with international students potentially relying more on explicit markers to compensate for any language limitations. The findings suggest that both domestic and international students are aware of the importance of metadiscourse in academic writing. However, differences in the frequency and distribution of specific metadiscourse markers are observed, potentially influenced by language proficiency and cultural backgrounds.

From another perspective, Haikal (2018) aimed to analyze metadiscourse categories in second-language learners at the International Program School of Muhammadiyah, University of Surakarta. Specifically, the study explored interactive and interactional

metadiscourse categories present in students' writing results. Additionally, the research examined differences in metadiscourse usage between male and female students and the factors that could affect their usage. The study utilized Hyland's metadiscourse model to analyze written forms from 10 male and 7 female students. The findings indicated that interactive metadiscourse included frame markers, transition markers, endophoric markers, evidentials, and code glosses. On the other hand, interactional metadiscourse encompassed boosters, hedges, attitude markers, self-mentions, and engagement markers. Moreover, the research revealed that the category of transition markers was more prevalent among female students, possibly influenced by the fact that female students engage in learning outside the classroom, such as at the "Pondok Pesantren" (traditional Islamic boarding schools or residential Islamic educational institutions).

Spoken discourse and metadiscourse have emerged as a trending topic of interest among scholars. In response to this growing interest, some studies have been conducted in the international academic community to explore and examine various aspects of spoken discourse and the use of metadiscourse markers. These studies contribute to a deeper understanding of how language is used in spoken communication and shed light on the role of metadiscourse in shaping and guiding interactions.

In another study, Vasheghani (2020) carried out a comparative study which aimed to analyze the distribution of interactive and interactional metadiscourse features in two modes of academic English: spoken and written. The primary objective of the research was to examine the distributional patterns of interactive and interactional metadiscourse features in two modes of academic English. A comprehensive list of

metadiscourse characteristics was compiled and utilizing the Sketch engine software, the researchers meticulously examined all the words in the corpus and analyzed their concordance lines for both the British Academic Written English Corpus and the British Academic Spoken English Corpus. The results indicated that in both corpora, there was a prevalent preference for interactive metadiscourse features among the authors. Moreover, in the written corpus, transitions and endophoric markers were more frequently used, whereas in the spoken corpus, endophoric markers and transitions were the most commonly applied metadiscourse features. Regarding interactional metadiscourse features, the written form showed a higher frequency of hedges and self-mentions, while in the spoken form, self-mentions and boosters were more commonly employed. This study provides valuable insights into the patterns of interactive and interactional metadiscourse features in academic spoken and written English.

Some studies in Ghana have also been conducted in the Ghanaian context, especially, within the academic space. Afful (2017) sought to analyze students' engagement with their readers in the literature review section of their theses. The study employed the appraisal theory's engagement system as proposed by Martin and White (2005). The researchers purposively selected 45 theses for their analysis. The aim was to identify the various engagement resources used by M.Phil. students to shape their interactions with readers. The findings of the analysis highlighted that M.Phil. students in the sciences tend to be more contractive and expansive in their dialogic engagement when constructing literature review sections. On the other hand, the humanities and social sciences students displayed a different pattern of engagement. This shows that some differences exist in the use of metadiscourse resources across academic disciplines. The study also revealed that the use of engagement resources in the literature review

section is influenced by the epistemological norms and conventions of the respective disciplines. The researchers concurred that the findings provide a foundation for further research in this area of academic writing and disciplinary variation.

Akoto and Afful (2020) investigated the use of metadiscourse in the context of sociology masters' theses. The study employs a qualitative research approach to explore how metadiscourse functions in the introduction and literature review chapters of these academic works within the discipline of sociology. Data was collected from a corpus of sociology masters' theses from various universities was used and examines the introduction and literature review chapters in detail. Through a systematic analysis, the study identified and categorized metadiscourse markers used by the writers, focusing on aspects such as engagement, authorial presence, attitude, and textual organization. The study yielded significant findings regarding the use of metadiscourse in sociology masters' theses. The study revealed that metadiscourse markers are prevalent in both the introduction and literature review chapters, underscoring their importance in guiding readers and conveying the writer's attitude and credibility. In the introduction chapters, metadiscourse is used strategically to establish rapport with readers and orient them to the research topic. Engagement markers, such as rhetorical questions and directives, are frequently employed to involve readers in the scholarly discourse. The presence of personal pronouns and self-mentions signals the author's involvement and authority in the research, contributing to the overall ethos of the thesis. In the literature review chapters, metadiscourse plays a crucial role in organizing and synthesizing existing research. Textual metadiscourse, including transition markers and enumerations, helps structure the literature review and aids readers in navigating through the complex scholarly landscape. Additionally, evaluative markers, such as hedges and boosters, are used to assess the credibility and

relevance of the cited sources, further positioning the writer as an authoritative voice within the discipline. The research demonstrates the significance of metadiscourse in academic writing, particularly in establishing authorial presence, guiding readers, and organizing scholarly discourse. The study encourages further investigation into metadiscourse practices in different disciplinary contexts, advancing our understanding of this essential aspect of academic communication.

Studies on spoken discourse within the Ghanaian space is however, scant. A singular study was conducted by Arthur and Fenyi (2022) whose research delved into the exploration of hedging devices employed in classroom interactions, specifically focusing on the metadiscourse markers or linguistic elements used to express hedging. The study further investigated the pragmatic roles that hedging plays during these interactions. The data for this study were collected from 18 lessons conducted by four English language tutors at a College of Education in the Western North Region of Ghana. The interactions between the tutors and their students were recorded, amounting to a total of 540 minutes of classroom interactions during the second semester of the 2020/2021 academic year. Both audio-tapes and note-taking were utilized for data recording. Salager-Mayer's (1995) taxonomy of hedges, as cited in Mansour and Alghazo (2021), provided the framework for analyzing the data. The results revealed the adoption of ten classes of hedging devices in classroom interactions, with modal auxiliary verbs, modal lexical verbs, and adverbial phrases/approximates being the most prevalent. Furthermore, the study identified several purposes for the use of hedging devices, such as emphasizing specific points, achieving politeness, and expressing a lack of commitment to a proposition. However, due to the limited number of teachers and classroom lessons examined in this research,

the researchers pointed out that their findings warrant further validation through the analysis of a broader corpus of classroom interactions.

2.4.2 The Role of Metadiscourse in Communication

The term "metadiscourse" has become central to communication studies. In fact, metadiscourse helps to view language beyond its linguistic elements. Hyland and Jiang (2022) posit that metadiscourse is an essential pragmatic resource for understanding the commentary provided on a text or discourse whether spoken or written, by its producer, which reveals aspects of the communication such as the personalities, attitudes, and presuppositions or expectations of communicators. Metadiscourse, therefore, can be understood as the commentary provided about language-in-use to reveal essential aspects of how a discourse discusses or provides a context for talking about, analyzing, and understanding discourse. From a metadiscoursal angle, texts are therefore discourse discourse-inherent and audience-oriented. As such, the role of metadiscourse in communication is to help decipher what we use communication to do with communication. Thus, whether it occurs naturally or coincidentally in any text, metadiscourse is a useful way of understanding aspects of a text which, otherwise might remain latent or missing. According to Hyland (2005), metadiscourse emerged as a remedy to earlier limited views of language (as merely propositional and expository), emphasizing that the function of communication is to create relationships between words and ideas within the contexts in which they occur. Thus, within any communicative event, metadiscoursal elements serve as vehicles for transmitting and organizing discourse towards its content, as well as writers' or speakers' stance towards their audience.

2.4.3 The Roles of Metadiscourse Studies in Classroom Interactions

Although metadiscourse has emerged as a leading method in discourse analysis in academic settings, its application has largely been limited to written academic texts, especially at the tertiary levels of education (Hyland & Jiang, 2022). Research into metadiscourse and spoken classroom interactions is rare and represents an emerging area of interest within the field of discourse analysis and is driven by the recognition that metadiscourse plays a crucial role in managing classroom interactions (Tang, 2017; Setiawan et al. 2021; Subtirelu, 2015; Resnik, 2017). Some studies have explored how metadiscourse features in classroom talk and interactions.

For example, Tang (2017) conducted a study on teachers' use of metadiscourse as the missing link in classroom discourse. The purpose of the study was to explore how Science teachers use metadiscourse to construct scientific knowledge with their students. Based on a corpus of classroom data, Tang (2017) developed a typology of metadiscourse commonly found in science classroom communication. The typology is made up of six major categories of metadiscourse namely; text connectives, knowledge connectives, activity connectives, attitude connectives, epistemology markers, and interpretive markers. Using the qualitative content analysis design, the study revealed two categories of metadiscourse; Organisational metadiscourse (text connectives, knowledge connectives, activity connectives) and Evaluative metadiscourse (attitude connectives, epistemology markers, and interpretive markers). Organizational metadiscourse markers were functional to link one aspect of text to another, thereby promoting coherence and interactivity in classroom interaction. The major metadiscourse features used to realize this effect were text connectives. The text connective metadiscourse features were instrumental in providing connections to what was previously stated or served as a cue to subsequent information. Among these main

functions, however, the researcher found that the use of text connectives to prior conversation are the most common since teachers frequently need to relate new ideas to previous knowledge. Additionally, text connectives were found to provide context for constructing relevant meaning within the science classroom. In terms of evaluative metadiscourse, attitude markers (comprising importance, challenge, and affect) were the most commonly used in science classroom interaction. Notably, it was discovered that metadiscourse was prevalent at various distinct stages of classroom interaction and content development. During the opening of the instruction, teachers use organizational metadiscourse predominantly than reviewing stages.

Based on the above findings, Tang (2017) argued that analysis without organizational metadiscourse would only focus on the isolated development of interaction or content, thereby, losing sight of the true picture of how every discourse is knitted together within the larger teaching scenario. However, Tang's (2017) study was limited in that, it focused unduly on teacher-talk in the science classroom to the neglect of students' classroom participation and discourse. Additionally, Tang's (2017) typology does not consider other relevant classifications such as Hyland's (2005) classification of metadiscourse and how these manifest and function within the classroom context.

Furthermore, Setiawan et al. (2021) analyzed the use of metadiscourse elements by pre-service science teachers in science classroom interactions. The study drew data from pre-service science teachers who performed microteaching courses. Through descriptive content analysis, data revealed that pre-service teachers use metadiscourse to construct students' knowledge. The researchers developed a coding scheme based on ten items of classroom discourse theory such as move/interaction, types of utterance, the purpose of utterance, cognitive process, meta-discourse classes, Socratic

questioning, verbal jigsaw, semantic tapestry, and framing. Specifically, the study concluded that the challenge category of metadiscourse was employed by the preservice teachers to direct how students think and make meaning from other groups in the Science classroom.

Also, Wu and Yang (2022) investigated the functions of personal metadiscourse markers in teachers' classroom discourse, the corpus-driven study focused on three personal metadiscourse markers, engaging "you," inclusive "we," and self-mentioning "I" in teachers' classroom discourse. The quantitative and qualitative study was based on eight sessions of teacher contributions to classroom discourse from four native English-speaking English for Academic Purposes (EAP) teachers in the UK. The qualitative analysis revealed four types of metadiscourse functions in teacher-student interactions namely; managing comprehension, managing students' responses, imagining scenarios, and managing students' discipline. The study by Wu and Yang (2022), however, was conducted in the UK and focused on only one classroom context highlighting possible gaps in terms of classroom context and range of corpus. The study, however emphasizes that metadiscourse serves as a means of managing the flow of communication and helps learners navigate complex information and as such, plays a crucial role in promoting effective classroom interaction. Teachers and students can, therefore use metadiscourse to shape discussions, provide feedback, and regulate the flow of information during instructional activities.

Similarly, Kashiha (2022) analyzed and compared the use of metadiscourse markers that serve as audience orientation tools in academic and political speech modes. The analysis was conducted on a corpus of 40 transcriptions of 20 academic lectures and 20 political speeches using Ädel's (2010) taxonomy of metadiscourse. The goal was to

determine the extent to which these two spoken modes utilize metadiscourse functions to engage and involve audiences in discourse. The findings revealed that academic lectures made significantly more frequent use of metadiscourse functions to orient audiences, attributed to their inherently dialogic nature, where lecturers actively draw students into their argumentation and create linguistic and pragmatic connections while conveying information. Additionally, the study highlighted differences between the two modes, with certain metadiscourse functions such as being unique to academic lectures. The findings suggest that the presence and role of the audience can influence the language choices of the speaker, emphasizing the importance of audience awareness in shaping oral discourse, particularly in dialogic contexts. This audience awareness can manifest either explicitly through audience engagement metadiscourse functions or implicitly through metatextual language use.

Further, Resnick (2017) explored how metadiscourse markers are used in spoken interactions among ESL speakers from various linguistic backgrounds. An analysis of 24 in-depth interviews with multilingual individuals from various language backgrounds (either L1 German or L1 Mandarin Chinese) on expressing emotions in different languages revealed diverse metadiscursive strategies aimed at maintaining mutual understanding. The research emphasizes the role of metadiscourse in facilitating communication and managing interaction in multilingual settings. The study also found that considering the participants' multilingualism, instances of codeswitching (CS) were strategically employed only when both interlocutors shared the same L1, in order to restore clarity in communication. It highlights that cultural and linguistic backgrounds significantly influence the use of metadiscourse markers, reflecting different communicative norms and strategies in spoken discourse. These sources collectively illustrate that metadiscourse norms are not universal but are

shaped by the specific cultural and educational contexts in which they are employed. Understanding these differences is crucial for educators, researchers, and translators who work across cultural boundaries. The current study seeks to extend the literature on the types, functions, and perspectives of teachers on metadiscourse usage within the Ghanaian SHS classroom context. Findings could usefully inform pedagogical training and curriculum design in Ghana. Overall, existing literature motivates qualitative investigation of metadiscourse as situated social practice with implications for teaching and learning.

Perspectives on Metadiscourse and Classroom Interactions

As indicated earlier, metadiscourse studies have largely been focused on written academic discourses, especially in tertiary-level academic writings. Research into spoken-mode metadiscourse, especially in classroom settings, is rare and represents an emerging area of interest within the field of discourse analysis and metadiscourse research. This growing focus is driven by the recognition that metadiscourse plays a crucial role in managing classroom interactions, guiding student understanding, and fostering engagement (Lee & Subtirelu, 2015). Unlike written metadiscourse, spoken metadiscourse must navigate the immediacy and dynamic nature of live communication, making it a rich area for investigation. As an emerging area of research interest, some studies have studied and shared perspectives on metadiscourse and classroom interactions.

Zhang (2017) investigated classroom discourse in content-based instruction with specific focus on how teachers use metadiscourse. Based on Systemic Functional Linguistics and genre theories, this study used a multi-case study design to examine classroom discourse in tertiary-level Content-Based Instruction (CBI) settings, with a

focus on teachers' use of metadiscourse and the factors influencing their linguistic choices. The research involved five content teachers and their students from two key Chinese universities over a 16-week period. Data were collected from various sources, including classroom observations, teaching materials, interviews with teachers and students, and a student questionnaire survey. The study found that teachers' reflections on their beliefs, pedagogical content knowledge, and language awareness were found to potentially shape their instructional strategies and use of metadiscourse. Tang, (2017) however emphasized that in the area of spoken discourse, classroom interaction has received much less attention and teachers' perspectives use of metadiscourse have not been systematically examined. The current study therefore attempts to fill this gap in literature by systematically collecting and analyzing teachers' perspectives on metadiscourse in classroom interactions.

Zare and Tavakol (2016) also analyzed the use of personal metadiscourse over monologic and dialogic modes of academic interactions. The study aimed to investigate the functions of personal metadiscursive expressions in academic monologues and dialogues. The analysis utilized verbal data from 16 academic lectures and discussions. Using Ädel's (2010) taxonomy of the subtypes and discourse functions of metadiscourse, the two data sets were compared in terms of personal metadiscourse functions. The results indicated that "references to the audience" metadiscourse was significantly more prevalent in dialogic speech than in monologic lectures, while "metatext" was more frequent in monologues. The perspectives of the researchers suggest that academic lecturers made more frequent use of "discourse organization" metadiscourse expressions in their presentations, emphasizing the importance of managing the topic and flow of discourse. Conversely, interlocutors in

dialogues employed more "audience interaction" metadiscourse expressions, highlighting the necessity of active audience understanding and contribution.

More recently, Zhang and Lo (2021) explored EMI teachers' use of interactive metadiscourse in lecture organisation and knowledge construction. Based on data from four English-Medium Instruction (EMI) courses at two key Chinese universities, the study showed that EMI teachers use interactive metadiscourse for organizing lectures, explaining scientific concepts, accumulating knowledge, and connecting knowledge. However, they tend to use a limited range of expressions to achieve these purposes, which might hinder L2 learners' exposure to diverse language use. Students' questionnaire data confirmed that the functions of metadiscourse in classroom instruction were generally well-received. However, the extent to which students appreciated certain types of metadiscourse was not linked to the frequency of these expressions in the lectures. Zhang and Lo (2021), however, did not investigate the perspectives of teachers to understand their perspectives which a considerable gap for the current study.

Hyland and Tse (2004) cited in Doiz and Lasagabaster (2022) proposed that teachers can use metadiscourse resources to promote effective classroom communication, to support their stance and establish rapport with learners. Both Adel (2010) and Hyland (2009) examined spoken and written metadiscourse and found that, despite the constraints of limited time and the presence of an immediate audience in spoken discourse, speakers still incorporate interactional features of language. This suggests that even in spontaneous speeches like in classroom interactions, where the focus might be expected to be primarily on content delivery, interactional aspects remain significant (Doiz and Lasagabaster, 2022).

Lee and Subtirelu (2015) also carried out a comparative study on the use of metadiscourse resources in EAP lesson and academic lectures. The exploratory study investigated the use of metadiscourse by teachers in English for Academic Purposes (EAP) lessons and academic lectures. The analysis draws on two corpora of instructor contributions to classroom discourse: 18 EAP lessons from the L2CD corpus and 18 university lectures from the MICASE corpus. Utilizing Hyland's (2005) interpersonal model of metadiscourse, the study compares these corpora to examine how pedagogical content and context influence teachers' use of metadiscourse. Lee and Subtirelu (2015) concluded that these teaching and learning aspects significantly impact metadiscourse use. EAP teachers tend to focus on explicitly framing discourse to set up classroom tasks and foster greater student involvement and participation. Conversely, university instructors prioritize establishing relationships between ideas within the unfolding arguments of their lectures. However, for some metadiscoursal features, the real-time spoken environment of the classroom seems to supersede pedagogical focus and approach.

As can be seen from the above, most available studies on metadiscourse in classroom interactions mostly reveal the perspectives of the researchers leaving out teachers whose perspectives might help appreciate further the role of metadiscourse resources within classroom context. This current study therefore, advances our knowledge of teachers' use of metadiscourse by interrogating their perspectives on the subject matter.

2.4.4 Criticisms against Hyland's Metadiscourse Model

While Hyland's metadiscourse model has been influential in understanding the role of metadiscourse in academic writing, it has not been without criticisms. One of the primary criticisms is that the model may not adequately consider cultural variations in

metadiscourse usage. Different cultures may have distinct ways of expressing authorial presence, hedging, and engaging the reader. The model's focus on English academic writing might not fully capture the nuances of metadiscourse in other languages and cultural contexts (Mauranen, 2018). Critics also argue that Hyland's model heavily concentrates on written academic texts, and its applicability to spoken discourse is less evident. Spoken language often involves different rhetorical strategies and interactive features that may not be as prevalent in written texts. As a result, some argue that the model should be adapted or expanded to encompass a broader range of discourse types (Bhatia, 2004). Some scholars find fault with the limited number of metadiscourse categories in Hyland's model. The model classifies metadiscourse into interactive and interactional metadiscourse, which might not capture the full complexity of metadiscourse markers and their various functions (Perez-Llantada & Ferguson, 2019). Through detailed analysis of classroom interactions, this study has identified a wider range of metadiscourse markers beyond the categories proposed by Hyland. By so doing, the study can help to enrich the understanding of metadiscourse and its multifaceted functions in classroom discourse. Additionally, critics such as Salager-Meyer, (1994) suggest that Hyland's model may not fully account for the disciplinary variations in metadiscourse usage. Different academic fields might have specific preferences for certain metadiscourse features, and the model's generalization across disciplines could be limiting. The findings of the present study confirm that differences exist in metadiscourse use in terms of academic disciplines and cultural contexts.

Some scholars argue that Hyland's model focuses primarily on the writer's intentions and does not adequately consider the reader's response to metadiscourse. The impact of metadiscourse on reader engagement and interpretation might be more nuanced and intricate than the model implies (Hatipoglu & Vatan, 2014). However, addressing these

criticisms and incorporating a more comprehensive understanding of cultural, disciplinary, and genre-specific variations may further enrich the analysis of metadiscourse in diverse contexts. These concerns are addressed in chapter four of the current study.

2.4.5 Relevance of Hyland's Metadiscourse Model to the Present Study

Despite these criticisms, it is important to note that Hyland's model has provided valuable insights into metadiscourse and its functions in academic writing and as of 2020, is considered the most applied metadiscourse model to metadiscourse studies (Jiang and Hyland, 2022).

One of the key strengths of Hyland's (2005) model is its ability to capture the multifaceted nature of metadiscourse, which includes both interactive and interactional components. Interactive metadiscourse involves references to the writer, such as the use of pronouns ("I", "we"), while interactional metadiscourse refers to references to the reader, such as personal engagement markers ("you", "your"). Hyland's model recognizes that these components work together to shape the writer-reader or speaker-listener relationship and discourse coherence. Within the context of academic discourse, Hyland's (2005) model has been widely cited and applied by scholars in various disciplines. For instance, researchers in linguistics, applied linguistics, and discourse analysis have drawn upon this model to investigate a range of academic genres, such as research articles, dissertations, and review papers. Ferguson (2016) highlights the significance of Hyland's (2005) metadiscourse model in understanding the ways in which metadiscourse functions in academic writing. Ferguson emphasizes that Hyland's model provides a framework for investigating metadiscourse in different genres and encourages further research in this area. Candlin and Crichton (2017)

discuss the impact of Hyland's (2005) metadiscourse model on the analysis of academic genres, such as research articles. They underscore the usefulness of the model in exploring how writers strategically employ metadiscourse to position themselves and engage with readers in scientific discourse. Similarly, Biber and Conrad (2009) reference Hyland's (2005) metadiscourse model in their examination of metadiscourse features across different registers and disciplines. They recognize Hyland's model as an influential framework for analyzing how writers use metadiscourse to convey their stance and engage readers across varied academic contexts.

Hyland's (2005) metadiscourse model also provides a robust theoretical framework for understanding metadiscourse markers and their functions. This assertion is emphasized by Tajer et al. (2019) who contend that Hylands' metadiscourse model, especially interactional discourse analysis, employs suitable linguistic devices for the examination of the critique genre. Applying this model to the analysis of classroom instruction in Ghanaian senior high schools will allow for the categorization and identification of the different types of metadiscourse used by teachers and students. This foundation will facilitate a systematic and comprehensive examination of how metadiscourse functions in the context of classroom discourse.

Hyland's (2005) metadiscourse model also has relevant pedagogical implications. Hyland's model, not only highlights the use of metadiscourse markers by writers but also emphasizes the interactive and engagement aspects of metadiscourse. This aspect is particularly relevant to classroom instruction, where effective communication and student engagement are essential for successful teaching and learning. Analyzing how teachers use metadiscourse to engage students, manage discussions, and establish

authority, as well as how learners respond to and contribute their part in the overall classroom interaction process, can offer valuable insights into effective pedagogical practices. While Hyland's model has been criticized for its limited consideration of cultural variation, applying the model in the context of Ghanaian senior high schools can still offer valuable insights. By examining how teachers and students in Ghana use metadiscourse markers, I hope to identify specific cultural conventions and linguistic expressions that shape classroom interactions in this context. This can lead to a more nuanced understanding of metadiscourse practices and how they relate to Ghanaian educational culture.

2.5 Chapter Summary

This chapter has delved into an extensive exploration of literature related to the analysis of metadiscourse resources in various contexts including classroom interaction. The literature review commenced with an overview of the concept of metadiscourse, highlighting its significance in facilitating effective communication and discourse management within educational settings.

The chapter further explored relevant literature on metadiscourse resources, and history as well as its usefulness as a research tool for text analysis in fields such as academia, health, and media. Researchers have established metadiscourse as a meaningful lens for exploring classroom interactions and discourse. Metadiscourse resources impact comprehension, participation structures, and cognitive outcomes in the classroom. Studies also point to disciplinary, cultural, and contextual contingencies shaping metadiscourse conventions. The application of Hyland's (2005) metadiscourse framework to spoken academic discourse, especially in a Ghanaian SHS classroom as well as the perspectives of teachers is underexplored. The proposed study of

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metadiscourse resources in a Ghanaian high school responds to gaps regarding African education settings while building an understanding of linguistic and social dynamics therein. The theoretical framework, research objectives, and situated perspective heed recommendations for context-specific, non-Western classroom communication inquiry with practical value. Therefore, this literature review provides scholarly justification and orientation for the proposed localized metadiscourse study.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter of the study delves into the methodologies employed to investigate the research questions and objectives. According to Braun and Clarke (2013), methodology refers to the overarching framework within which the research is conducted. It encompasses a set of assumptions guiding the research process, delineating what constitutes good research practices, how the study should be carried out, and the types of conclusions that can be drawn from the data. Also, according to Creswell and Creswell (2018), methodology refers to the systematic plan and approach used in a research study. It encompasses the selection of research design, data collection methods, and data analysis techniques that align with the research objectives. Also, Bloomberg and Volpe (2019) view research methodology as a theoretical examination of the applied methods in any field of research. As such, the research methodology encompasses assumptions guiding the research process, selection of research design, data collection methods, data analysis techniques, and what constitutes good research practices. The methodology provides a structured approach for conducting research, ensuring alignment with research objectives and facilitating the drawing of valid conclusions from the data collected.

Methodology also constitutes the underlying framework and guidelines for research design and analysis (Bowen 2009). (Bloomberg & Volpe, 2019). Creswell and Creswell (2018) further emphasize that methodology plays a pivotal role in providing a clear framework for researchers to collect and analyze data, ensuring the credibility and rigor of the study's findings. Methodology, therefore, offers a blueprint for

researchers to navigate the research process, guiding them in making appropriate decisions to address the research questions effectively and unarguably. Having a clearly defined methodology is important for establishing the scientific rigor and validity of research findings. By adhering to a well-defined methodology, researchers can establish the trustworthiness of their research, enabling other scholars to replicate the study and build upon its findings (Eisenhardt & Graebner, 2007). Additionally, methodology aids in mitigating biases and errors, enhancing the overall validity and reliability of the research (Creswell & Creswell, 2018). In essence, the present study adopted a well-defined methodology to serve as a guiding compass for researchers, ensuring rigor, transparency, and reliability in the research process. The methodology establishes the credibility of the study's findings, facilitating the replication of the research and contributing to the advancement of knowledge in the field.

Additionally, by drawing on the frameworks outlined by Braun and Clarke (2013), Creswell and Creswell (2018). Bloomberg and Volpe (2019), Bowen (2009), and Eisenhardt & Graebner (2007), this research established a systematic approach for examining how metadiscourse shapes classroom communication. A robust methodology helped to select appropriate research design, data collection, and analysis techniques that align with the objective of uncovering the specific ways metadiscourse influences classroom dynamics and facilitates classroom engagement. As a result, this study's methodology supported the collection of credible and rigorously analyzed data on metadiscursive practices, enhancing the validity and trustworthiness of our findings. Such an approach is instrumental in providing insights that not only deepen our understanding of metadiscourse in educational settings but also offer valuable contributions to the broader field of classroom interaction research.

3.1 Research Approach

The present study adopted a qualitative research approach. Creswell (2014) delineates that within the realm of scientific inquiry, researchers have at their disposal three distinct approaches to undertaking a study: the quantitative approach, the qualitative approach, and the mixed methods approach. For this study, the qualitative approach offered a robust framework for capturing the complexities of classroom discourse, enabling a deep analysis of how metadiscourse functions in real-time interactions. Such an approach aligned with the study's objectives, allowing for meaningful insights to be drawn about the role of metadiscourse in shaping educational experiences and facilitating student engagement.

Based on the general description of qualitative research provided by Creswell (2019), which emphasizes exploring and understanding the meaning individuals or groups ascribe to a social or human phenomenon, this study hones in on the nuanced use of metadiscourse by teachers and students during classroom interactions. Qualitative research in this context involves an inductive process, where emerging questions are formulated to examine the role and functions of metadiscourse in shaping classroom communication.

Qualitative data collection occurs in real-world contexts through interactions like interviews, rather than controlled experiments (Creswell & Poth, 2016). Also, data is drawn from various sources like interviews, observations, and text documents to ensure triangulation of findings (Flick, 2018). Rigor is ensured through practices like thick description, member-checking, audit trails, reflexivity, and data triangulation and collection stops once saturation is reached (Braun & Clarke, 2021). This study employed qualitative methods of discourse analysis, semi-structured interviews, and

video observations to explore patterns of metadiscourse use in the target classrooms. Farrel and Lim (2005) argue that observing discourse practices in real educational interactions and contexts permits the analysis of how metadiscourse functions in real-time academic discussions rather than in secluded situations. Norton (2009) further argues that data collection from a natural setting allows researchers to gain deeper insights into the use of language in realistic communication contexts. As such, classroom interactions offer a fertile environment for context-specific metadiscoursal examination.

By focusing on metadiscourse in classroom interaction, this qualitative study aligned with the objective of understanding how language elements are utilized to organize and manage classroom discourse. The data analysis aimed to uncover patterns and themes related to metadiscourse, offering insights into its influence on communication dynamics within the educational context. While the study retains the qualitative research features described by Creswell (2019), such as inductive data analysis and flexibility in the final report's structure, its specific focus on metadiscourse in classroom interaction sets it apart, catering to the distinct context of education and communication dynamics in the classroom. A qualitative research approach is, therefore, adopted to explore the complexities and nuances of metadiscourse in classroom interaction. This approach allowed for an in-depth investigation of the phenomenon within its natural context, considering the perspectives and experiences of participants.

3.2 Research Design

A research design is a blueprint or structure that guides a research study, encompassing the framework, methods, and procedures used to collect and analyze data (Creswell, 2014). According to Leedy and Ormrod (2019), a research design is "the master plan specifying the methods and procedures for collecting and analyzing needed information" (p. 104). The research design, therefore, ensures methodological rigor, validity, and reliability in research endeavors. Further, Creswell and Plano (2018) define research design as the strategic blueprint illustrating how a study will be carried out to explore the stated research problem and question for any given study. In simple terms, a research design is like a detailed plan or map that shows researchers how to conduct their study. It includes everything from the questions they want to answer to the methods they'll use to collect and analyze data. This plan ensures that the research is done carefully, accurately, and reliably. It's the roadmap that guides researchers from the beginning of their study to the end, helping them explore their research problem and questions effectively.

Yin (2018) discussed the relevance of research design to the entire research process and emphasized that careful consideration of the research design is crucial in ensuring the reliability and validity of the findings. Yin (2018) further notes that, by systematically organizing data collection and analysis procedures, the research design facilitates a coherent and structured approach to answering the research question and drawing meaningful conclusions. As researchers embark on the journey of conducting their investigation, the research design serves as glue and plays a pivotal role in shaping their methodological choices, data collection strategies, and ultimately the reliability of the study's outcomes (Punch, 2014). Additionally, researchers such as Klenke (2018) aver that a well-crafted research design allows for a systematic and rigorous exploration of the research question, leading to valuable contributions to the existing knowledge in the field of study. As illustrated by the above scholarly sources, research design plays a pivotal role in coordinating all elements of a study, from

shaping methodological choices and data collection procedures to facilitating rigorous analysis and judgment. A careful research design establishes a framework for high-quality, credible research.

Further, the research design connects research methodology and data analysis towards the achievement of research objectives. Additionally, an effective research design is considerable on the interpretive and ideological bases that shape the research approach and other features such as sampling, instrumentation, and procedures (Denzin & Lincoln, 2011).

Leavy (2017) also states that a research design can be described as a comprehensive plan that outlays the approach for finding answers to research questions, and how evidence will be collected and analyzed to address the specific research question posed by the investigator through a logical plan for data collection and analysis. The research design encompasses every aspect of the study, ranging from the intricate details of data collection to the thoughtful selection of appropriate data collection techniques. In essence, the research design serves as a roadmap that guides the entire research process. It provides a clear framework for data gathering and analysis, ensuring that the study's objectives are met effectively (Creswell & Poth, 2020; Klenke, 2016; Mackey & Gass, 2016; Punch, 2014).

In the present study on metadiscourse resources within classroom interactions, a carefully crafted research design was essential for guiding each step of the investigation, from data collection to analysis, and ensuring the research's validity and reliability. For this study, the research design provided a strategic roadmap for examining the specific ways in which metadiscourse functions in teacher-student interactions, thereby enhancing our understanding of communication in educational

settings. This coherence was pivotal in capturing the nuanced role of metadiscourse in shaping classroom dynamics and fostering classroom engagement. Furthermore, by integrating interpretive and methodological considerations, as suggested by Denzin and Lincoln (2011) and Klenke (2018), the research design ensured that the approach aligns with the study's interpretive framework, guiding decisions on sampling, instrumentation, and analytical techniques.

3.2.1 Discourse Analysis

This study employed discourse analysis as the primary research design to investigate metadiscourse resources in classroom interactions. Discourse analysis is a qualitative research approach that focuses on examining language use within social contexts, emphasizing how language constructs meaning, shapes social interactions, and reflects socio-cultural norms (Fairclough, 2015; Gee, 2014). Hyland (2023) highlights that discourse analysis is a collection of methods applied to the studying of language in action which perceives texts as mirroring wider communication practices, and capable of providing insightful descriptions and explanations about specific discourses and their communities.

In the context of educational research, discourse analysis finds extensive application, notably in analyzing teacher-student discourse and academic discourse (Mercer & Littleton, 2019; Ha & Hyland, 2017). It uncovers rhetorical strategies, argumentative structures, and linguistic features shaping communication in educational contexts. In the context of this study on metadiscourse resources in classroom interactions, the application of discourse analysis aligns closely with its broader educational research applications. By drawing insights from the works of Mercer and Littleton (2019), and Ha and Hyland (2017), the study reveals how discourse analysis helps uncover not just

surface-level communication but also the underlying metadiscoursal strategies and linguistic features that shape communication dynamics in educational settings. Specifically, this study utilized discourse analysis to delve into the nuances of metadiscourse resources within classroom interactions. Just as discourse analysis has been instrumental in analyzing teacher-student discourse and academic discourse, it assisted in unraveling the intricacies of language use, communicative strategies, and socio-cultural influences embedded within metadiscourse markers within the classroom context (Ha & Hyland, 2017). Discourse analysis draws on a variety of methods and theories to shed light on the organization and meanings of visual, written and spoken texts, and to explore communicative behaviours within academic contexts, serving as a key resource that contributes enormously to understanding of academic communications (Hyland, 2023). While most metadiscourse research in academic contexts place emphasis on written texts, discourse analysis shows how texts are deeply rooted in the events in which interlocutors participate, and how texts crucially manifest the relationships between participants (Na & Hyland, 2018).

Overall, by applying discourse analysis as a research design to the study of classroom interactions, the current study has greatly contributed to our understanding of classroom discourse and practices and enhanced understanding of classroom teaching and learning. Thus, teachers particularly, and other educators have been provided with a deeper understanding of how metadiscourse resources shape classroom interactions and some reasons for which they are used. Perhaps, the findings of the current study can help educational practitioners to organize teaching and learning around metadiscourse resources that would enhance classroom communication.

3.3 Sampling and Sample Size

According to the 2020 Ghana Education Service schools register, there is a total of 1182 Senior High Schools (SHS) in Ghana, comprising both public and private institutions. This number of schools provides a diverse range of educational settings and contexts for potential research studies and highlights the availability of samples for researchers to consider in their investigations. The target population for this study is the teaching staff of Aggrey Memorial A.M.E. Zion Senior High School, one of the public senior high schools located in the Central Region of Ghana. The school has a teaching staff strength of 156 who teach various core and elective subjects to students.

At the time of the study, the school had 156 teachers made up of 107 males and 49 females. These teachers are engaged in teaching elective and core subjects. Also, six programmes, (namely, General Arts, Business, Home Science, Visual Arts, Agriculture Science, and General Science) are run in the school. Students taking any of these programmes are required to read a variety of elective and core subjects. Common Core State Standards Initiative (2022) identifies core subjects as "English language arts and literacy in history/social studies, science, Mathematics" which provide a cumulative foundation for lifelong learning. This study categorizes these teachers into language and non-language teachers for purposes of easy classification, identification, and analysis. A language teacher is an educator who specializes in teaching languages, focusing on the development of linguistic skills such as speaking, listening, reading, and writing in a particular language (Richards & Rodgers, 2014). Non-language teachers, on the other hand, refer to educators who teach subjects other than languages, such as mathematics, science, history, and arts. They are responsible for imparting knowledge and skills related to their respective subject areas (Richards & Rodgers, 2014).

Also, Zeiser et al. (2021) describe core academic subjects in K-12 education as including "English/language arts, mathematics, science, social studies/history, and in some contexts, world languages;" that develop general cognitive processes. Core academic subjects, such as English/language arts, mathematics, science, social studies/history, and sometimes world languages, are referred to as core because they provide essential knowledge and skills that form the foundation of a well-rounded education (Zeiser et al., 2021). These subjects develop critical thinking, problemsolving, and analytical skills that are fundamental for students' academic growth and future success. They are considered essential for cognitive development, as they equip students with the general competencies needed to understand the world, communicate effectively, and engage as informed citizens (Common Core State Standards Initiative, 2022). Because of their central role in developing these foundational skills, these subjects are prioritized in K-12 curricula. Whereas students freely alternate between elective subjects based on their respective programmes, all students in Ghanaian Senior High Schools including the selected school, are required to read the four compulsory core subjects, English, Mathematics, Science, and Social Studies. Achievement in core areas is believed to strongly predict overall academic achievement and standardized test performance (Polikoff, 2015). Understanding how metadiscourse impacts comprehension could offer meaningful insights into these crucial subjects (Hyland, 2007). Since all students in the school take the core subjects, the researcher purposely selected the four core subjects (English, Mathematics, Science Social Studies) for this study. The core subjects are compulsory for all students in the school. Braun and Clarke (2013) assert that qualitative research often employs a purposive sampling approach with the goal of cultivating insights and comprehension regarding the subject under investigation.

3.3.1 Purposive Sampling

In the context of this study on metadiscourse resources in classroom interactions, purposive sampling is employed to select two language teachers and two non-language teachers. This sampling method involves deliberately selecting participants who possess specific characteristics or experiences relevant to the research objectives (Braun & Clarke, 2013). Braun and Clarke (2013) further elaborate that purposive sampling is utilized to deliberately select data cases, participants, or texts that possess the potential to offer substantial and comprehensive information for subsequent data analysis. Initially, five non-language and five language teachers were contacted for the study. However, during the time of data collection, only two each from the categories availed themselves for the study and were all considered. The others cited various reasons such as the track system and reassignment of classrooms as reasons for their non-availability. Braun and Clarke (2013) further elaborate that purposive sampling is utilized to deliberately select data cases, participants, or texts that possess the potential to offer substantial and comprehensive information for subsequent data analysis. Similarly, the researcher chose four main core subject teachers for the study. According to the West African Examination Council (WAEC) Chief Examiner's Report (2021), the performance of candidates in core subjects (i.e. English, Mathematics, Science, and Social Studies was discouraging as it fell below expectations. The poor performance was attributed to factors such as lack of comprehension on the part of students and inadequate instructional strategies. Research indicates that instructional strategies play a crucial role in students' understanding and mastery of core subjects. Ineffective teaching methods, such as lack of clarity in explanations, insufficient use of visual aids or hands-on activities, and limited opportunities for active engagement and practice, can contribute to students' struggles in core subjects (Hattie, 2009). These findings emphasize the importance of examining how teachers' instructional strategies impact students' understanding and performance in core subjects. By analyzing the use of metadiscourse markers in classroom interactions, the study provides insights into how teachers facilitate comprehension, engagement, and learning in core subjects through effective communication strategies. This is helpful to identify areas for improvement in instructional practices and contribute to enhancing students' academic achievement in key subjects.

The selected teachers had preassigned classes. As such, I had no control over the classes and number of students to participate in the study. A copy of the teachers' timetable (see Appendix A) showed that each teacher was responsible for teaching four classes and 20 periods a week. However, only one each of the assigned classes to each teacher was considered for the study so as to generate enough data while at the same time, allowing for a more manageable sample size and making data collection and analysis more feasible within the constraints of time and resources. The study is further constrained by the track system currently practiced at the SHS level. At the time of the data collection, the first-year students were on a break whilst the final-year students were preparing for their final-year examinations. In essence, the track system at the SHS level introduced specific challenges and opportunities for the research studies, including considerations related to participant availability, sampling bias, generalizability, and contextual constraints.

Also, focusing on one senior high school and a specific grade level allows for a more manageable sample size, making data collection and analysis more feasible within the constraints of time and resources. Additionally, by studying metadiscourse usage in multiple subjects, the researcher can gather rich contextual information about how

students engage in communication practices specific to different academic disciplines as recommended by Arthur and Fenyi (2021).

3.3.2 Sample Size

According to Turner (2020), sampling for qualitative research often consists of tiny, indepth sampling units. In this study, the sample size was initially planned to include eight core subject teachers, with four (4) language teachers and four (4) non-language teachers. However, due to various factors such as availability and scheduling conflicts, only six (6) teachers and classes (English =2, Mathematics =2 Integrated Science =2, and Social Studies =1) were available for classroom data collection. In terms of interviews with teachers to analyze their perspectives, similar challenges were faced. In the end, only two language and two non-language teachers consented and were finally included in the study. The number of teachers aligns with the qualitative research principle of data saturation, where data collection continues until no new information or themes emerge from the data. With six (6) classrooms and four (4) teachers representing different core subject areas and classroom dynamics, the study was able to capture diverse perspectives and insights related to metadiscourse in classroom interactions. It is important to note that in qualitative research, sample size is not determined by statistical power or representativeness as in quantitative studies. Instead, the focus is on the depth and richness of data obtained from participants who can provide meaningful insights into the phenomenon under investigation (Yin, 2016). In all, a total of 246 students across the four (4) classes and 4 core subject teachers participated in the study. This targeted focus allowed for a more in-depth and comprehensive analysis of their metadiscourse usage in the selected subjects and classrooms.

3.4 Data Collection Methods

The data collection methods employed in this study encompassed a triangulation approach, integrating semi-structured interviews, video recordings, and observations. This methodological strategy was chosen to ensure comprehensive data collection, enhance the validity and reliability of findings, and provide a holistic understanding of metadiscourse practices within educational contexts (Johnson et al. 2017). Qualitative data collection aims to gather textual or visual materials from natural settings through techniques like interviews, observations, focus group discussions, documents, and audio/visual data (Legard, Keegan, & Ward, 2003). The key is the collection of rich data in the participants' own words or environment to understand their experiences, perspectives, and actions from an emic viewpoint, while the goal is to obtain an indepth understanding of people's experiences, perspectives, or behaviours in their own words or environment (Patton, 2015).

3.4.1 Video Recording

In the context of the current study, excerpts from semi-structured interview data, video recordings, and subsequent transcription constituted relevant data for analysis. According to Erickson (2018), video recordings provide a rich source of data capturing real-time interactions, verbal and non-verbal cues, and the natural flow of communication in educational settings. Video recording has emerged as a powerful tool for data collection in educational research, offering unique advantages over traditional methods like surveys and observations (Cresswell, 2017). In fact, capturing real-time interactions in naturalistic settings, video recordings provide rich, detailed data that can be analyzed repeatedly and from multiple perspectives Video recordings capture not only the verbal interactions but also the non-verbal cues such as gestures, facial expressions, and body language. This multimodal data offers a deeper

understanding of communication dynamics, which is particularly valuable in studies on metadiscourse (Silverman, 2016). Also, video recordings maintain the context in which interactions occur, preserving the environmental and situational factors that influence behaviour, a contextual integrity is crucial for interpreting the data accurately (Cresewell, 2019). By transcribing both interview and video recordings into textual data, the researcher was able to conduct in-depth discourse analysis to explore metadiscourse markers, communication patterns, and discourse strategies used by teachers and students.

Semi-Structured Interviews

The type of interview used in this study is semi-structured interview format. This choice was selected after taking into account several important factors that fit the goals and nature of the study. Firstly, the semi-structured interview provided for data collection that is both flexible and structured (Bryman, 2016). Given the complexities of investigating metadiscourse in classroom interactions, a semi-structured approach offers a framework of predetermined questions while still allowing for probing and follow-up questions to probe deeper into participants' responses (Gibson, 2018). Secondly, the semi-structured format is well-suited for capturing nuanced and detailed insights from participants regarding their understanding, usage, and perceptions of metadiscourse markers (Hyland, 2005). Additionally, semi-structured interviews are particularly effective in qualitative research contexts where the goal is to explore participants' experiences, perspectives, and interpretations of a phenomenon (Creswell & Creswell, 2017).

In the case of this study, semi-structured interviews allowed me to uncover rich, contextualized data that contributed to a deeper understanding of how metadiscourse

functions in classroom discourse. This approach was chosen based on its ability to balance flexibility and structure, allowing for in-depth exploration of participants' perspectives and experiences related to metadiscourse markers. The adaptation of semi-structured interviews involved careful planning and execution to ensure the generation of useful and insightful data. The rationalization for choosing semi-structured interviews aligned with the qualitative nature of our study, which aims to explore and understand the intricate nuances of metadiscourse in classroom interactions. This approach facilitated a deeper exploration of participants' perspectives, experiences, and practices, contributing to a comprehensive analysis of the research topic.

Observation

This study further adopted the observation technique to gather essential data to explore the research objectives. Observation in research refers to the systematic process of watching, recording, and analyzing behaviors, actions, interactions, and environmental contexts as they naturally occur in a specific setting (Creswell & Poth, 2018). This method involves direct engagement with the phenomena under study, allowing researchers to gather firsthand data without direct manipulation or intervention. Observation can take various forms, such as participant observation, where the researcher actively participates in the observed activities, or non-participant observation, where the researcher remains an observer without direct involvement. In this context, non-participant observation was adopted since my direct involvement was not impactful to the data collection process. Researchers agree that in educational research, observation is often used to study classroom interactions, teaching practices, student behaviors, and learning environments. Researchers use observation to gather detailed descriptions of classroom activities, teacher-student interactions, instructional

strategies, and the use of language in educational settings (Kupatadze, 2016; Grant & Luckert, 2018). Observations in this study involved systematically watching and documenting the behaviors, interactions, and environmental contexts occurring naturally within classroom settings. This method allowed me to gain a comprehensive understanding of how metadiscourse was utilized by teachers and students in real-time situations, rather than relying solely on self-reported or retrospective accounts. Observations thus served as a valuable and indispensable technique within this multifaceted qualitative research, facilitating a deeper understanding of metadiscourse phenomena as they naturally unfolded in real-world settings.

3.5 Data Collection Procedures

Data collection procedures refer to the systematic process and protocols used by researchers to gather empirical materials from the field as part of a designed methodological approach (Creswell & Poth, 2018). This stage follows initial preparation including securing ethical approval and access to research sites or participants. Developing rigorous data collection procedures is paramount to producing high-quality qualitative findings (Yin, 2016). This entails sequential activities such as sampling techniques, data recording methods, organization systems, and quality assurance strategies (Flick, 2018). Researchers establish key procedures through piloting to refine tools and ensure consistency is maintained across different settings r researchers (Kvale, 2007). Some essential components of data collection procedures include participant recruitment protocols, methods for obtaining consent, structured and semi-structured interview guides, systematic observation protocols, document search and collection strategies, and data storage and labeling systems (Creswell & Poth, 2018). The data collected for this study was carried out at Aggrey Memorial A.M.E. Zion SHS during the first semester of the 2022/2023 academic year and

spanned two weeks. For the purposes of triangulation, and in order to satisfy the research questions adequately, three data collection methods were employed to gather data for analysis in this study. The methods include observation, video data, and semi-structured questions.

3.5.1 Video Recordings

Video recorders were used to capture the real-time interactions and dynamics within the classroom. Cameras were set up in unobtrusive locations to minimize any disruption or distraction for the students and teachers. These recordings provided a comprehensive view of classroom activities, enabling the analysis of verbal and nonverbal communication, the use of metadiscourse resources, and student engagement throughout the lessons. In this study, four (4) out of eight (8) videos of sessions of classroom instruction in the selected classrooms were chosen strategically to represent a diversity of four (4) core subjects, classroom activities, and student demographics. Having a varied sample allowed for comparisons across contexts and a minimum of 5-7 lesson recordings is suggested (Mason, 2010). The recordings captured the real-time interactions, verbal communication, and non-verbal cues between teachers and students, allowing the researcher to analyze the use of metadiscourse markers and their impact within the classroom context. Additionally, the researcher carefully listened to the interview data several times to identify content that aligned with the proposed research objectives and the data analysis plan. All four interviews were selected as they each were deemed to contain relevant data for analysis

3.5.2 Observation

As indicated earlier, observation also constituted a crucial data collection method in this study. A structured observation protocol was developed to guide the observation process. The protocol outlined the specific behaviors, interactions, and metadiscourse markers to observe, along with guidelines for recording observations. The procedure involved the use of structured protocols and open-field note-taking approaches to ensure comprehensive coverage of relevant behaviors and interactions. Data collected through observation in this study entailed the systematic watching and recording of behaviors, actions, interactions, and environmental contexts within their natural occurrence (Creswell & Poth, 2018). Capturing both verbal and nonverbal language is important as metadiscourse can be expressed through multiple modes of communication (O'Connor & Joffe, 2020). Observations were conducted in classrooms to capture real-time interactions between teachers and students, focusing on metadiscourse markers and communication patterns. Additionally, recorded video data were also watched critically to identify behaviour and classroom interactional features that constitute metadiscourse following standard protocols and procedures.

The observation method entailed closely watching and describing the actions and conduct of teachers and students during lessons (Kumar, 2022). The researcher first developed an observation protocol (See Appendix A) of metadiscourse types and columns for observational patterns in the classroom that relate to or have some communicative function. In this context, a behaviour is considered to have a communicative function based on timing, participant responses, content references, non-verbal cues, and social norms. Timing refers to the behavior's placement within an interaction or thread of discussion can provide clues. Coming after a question implies a response function. Participant responses considered how others immediately react/respond indicates the behavior's role (e.g., nodding along signals understanding). Content references are looked for if a behavior makes explicit references to prior comments, it likely serves to acknowledge or build upon them. Nonverbal cues

including body language, facial expressions, and tone of voice accompanying a behavior provide contextual meaning. Social norms looked out for understanding typical conversational conventions and participant relationships within a community.

3.5.3 Semi-Structured Interviews

Semi-structured interviews were also used to gather insights from teachers regarding their use of metadiscourse resources in classroom interactions. The interviews allowed for in-depth exploration of perspectives, experiences, and practices related to metadiscourse strategies, instructional methods, and communication dynamics within the educational context (Clarke & Braun, 2018). A semi-structured interview guide was developed with topics around instructional strategies, verbal and nonverbal, and language used in the classroom. Questions were piloted for clarity. Although eight core subject teachers were involved in this study, only four were available and consented to participate in the interview. Interviews were scheduled at the teachers' school during planning periods. Informed consent secured voluntary participation and audiorecording permission. Each interview session lasted between 25 to 30 minutes. Since the study employed semi-structured interviews, open-ended questions were used and follow-up questions were asked where necessary to enhance the data collection. As previously stated, the original plan was to have eight core subject teachers participate in the interviews. However, only four teachers were finally included in the interview sessions due to a variety of factors, including availability and schedule conflicts. This selection procedure complies with purposive sampling guidelines, which state that participants should be selected on the basis of their applicability to the goals of the study as well as their capacity to offer insightful commentary on the phenomenon being investigated (Braun & Clarke, 2013). smartphones with recording apps were used to record the interview sessions. The interviews were conducted in a quiet and conducive environment within the school premises, typically in a designated meeting room during their planning periods. This setting allowed for privacy, minimized interruptions and facilitated focused discussions.

Data storage was a critical aspect of ensuring the security, integrity, and accessibility of the collected qualitative data, including observational data, interview transcripts, and video recordings. Importantly, the recorded video and interview data were transferred onto a one terabyte (1TB) external hard drive (HDD) for safe storage and codes were generated to rename the files to ensure anonymity of participants. Data security measures were implemented to protect sensitive participant information and ensure the integrity of the data throughout the research process. This included encryption for electronic data and password protection for access control (Creswell & Poth, 2018). Regular backups were created to maintain data integrity and safety, with version control mechanisms in place to track any changes made to the data during analysis (Patton, 2015). Participant confidentiality was maintained by anonymizing data, particularly in interview audios and transcripts, and video data, to protect the privacy of participants (Creswell & Poth, 2018). Accessibility and retrieval of data were also prioritized. Data storage formats were structured to facilitate easy retrieval and analysis. Interview transcripts, observational notes, and video recordings were organized systematically in digital formats for efficient access (Creswell & Poth, 2018). Detailed documentation and labeling of data files were maintained to aid in the retrieval process and to ensure that subsequent researchers could understand and access the data (Patton, 2015).

3.6 Data Analysis Plan

In qualitative research, the process of data analysis entails organizing and condensing data into thematic categories using a coding framework (Creswell, 2019). A data analysis plan therefore outlines the procedures and techniques that will be used to analyze the collected data in a research study. It serves as a roadmap or guide for researchers to ensure that the analysis is conducted systematically, accurately, and in alignment with the study objectives (Braun & Clarke, 2013). This study followed a well-developed data analysis plan typically including the following components in order to make meaning of the data and present findings. The data analysis plan for this study involved systematically selecting relevant materials for analysis. The first step is the purposeful selection of recordings. In this study, primary source data included transcripts of classroom interactions between teachers and students, obtained from video recordings of classroom sessions. This is further augmented by observation notes and transcripts from interview data to fully explore the outlined research questions.

3.6.1 Data Transcription

After familiarizing myself with the data, and choosing data to analyze, both manual and electronic transcription strategies were adopted for this study. For manual transcription, the established guidelines outlined by experts like Patton (2015) in "Qualitative Research & Evaluation Methods were followed." This involved carefully listening to recordings of classroom interactions between teachers and students and typing out the spoken content verbatim. Our transcriptionists paid close attention to verbal nuances, pauses, and non-verbal cues to ensure an accurate representation of the data. The selected recordings were fully transcribed verbatim, and observational notes on nonverbal cues were taken. Subsequently, relevant sections of the transcribed data were integrated into the study for analysis. In the context of this research, a section of

data was deemed relevant if it contained instances of metadiscourse markers as espoused by Hyland's (2005) framework.

3.6.2 Coding

The first step in the coding process involved transcribing audio from video recordings and interviews verbatim. This meticulous transcription process converted spoken language into written text, providing a foundation for subsequent analysis.

A preliminary coding scheme was established based on Hyland's (2005) model of metadiscourse categories (See Appx. A). Initial coding was carried out by the researcher. When coding data based on Hyland's (2005) model, the first step involves becoming familiar with the classroom transcripts through repeated readings. In this study, relevant excerpts from the data were therefore, studied closely, and then coded based on the specific lexical and phrasal items that fall under each category of interactive and interactional markers. Interactive markers (IMs) were identified and coded by highlighting instances where teachers directly addressed students or encouraged active participation. Each instance was assigned a unique code to indicate the type of interactive, such as "FM" for frame markers, "TM" for transitional markers, "EV" for evidentials, and "CG" for code glosses. Further, interactional markers were identified and coded as "Hd" for hedges, "Bs" for boosters, "AM" for attitude markers, "EgM" for engagement markers, and "SM" for self-mentions (See Appendix A). This coding process allowed for the quantitative tracking of different types of interactive markers and their frequencies.

Interactive markers like transitions are coded based on connecting words and phrases used between ideas. Transcribed texts are carefully examined to annotate markers of addition, consequence, emphasis, and other logical relationships. Frequency counts are

then compiled for each sub-category. This facilitates understanding cohesive links and coherence within the text. For example, transitions and frame markers are coded based on words like 'therefore', 'moreover' etc. used to connect ideas. Frequency counts of various codes provide quantitative indicators. Textual markers (TMs) were coded to indicate their function in guiding discourse structure. Transitions, summarizers, and signposts were assigned distinct codes to track their occurrence and distribution throughout the classroom interactions. This coding allowed for an exploration of how textual markers facilitated the coherence and organization of discussions within the classroom. The analysis focused on how these helped organize discourse and guide listener understanding.

Interactional resources involved more nuanced coding procedures. Hedges denoting uncertainty are identified lexically through words like perhaps, maybe, etc. Explicit certainty expressed through boosters like obviously are also coded. Subjective elements are captured by attitudinal markers using a word list and first-person pronoun uses are annotated as self-mentions. New codes were generated and assigned to resources that did not align with the predefined framework

Next, the researcher engaged in initial coding, where descriptive labels or codes were assigned to segments of data based on our predefined coding schemes (See Appx. A). These schemes included categories such as Participant Language Teachers (PLT), Participant Non-Language Teachers (PNLT), and specific codes for students observed in video recordings (SCV for Science Video, ENGV for English Video, SSV-T for Social Studies Video, and MV for Mathematics Video). This initial coding process allowed me to organize the data into manageable units and begin identifying patterns and themes related to metadiscourse usage.

The schemes were then applied for rigorous and organized coding. To promote consistency, a second researcher was independently tasked to code a portion of transcripts. The intercoder agreement was calculated and discrepancies were discussed to finalize the scheme for reliable interpretation of data (Braun & Clarke, 2013). The researcher proceeded to systematically code all transcripts using the validated scheme. Frequency counts and patterns of codes within and across documents were generated and analyzed in relation to contextual factors.

3.6.3 Thematic Analysis

This research adopted thematic analysis to make sense of the data and present the key findings. Thematic analysis was employed to identify patterns of meaning across a qualitative data set collected from classroom interactions, observations, and teacher interviews. Thematic analysis is a method for the systematic process of identifying, organizing, and offering insight into prominent themes or patterns present within qualitative data (Maguire & Delhunt, 2017). In other words, thematic analysis allows the researcher to break down and describe both implicit and explicit ideas in a manner that reveals meaningful concepts and themes relating to the central phenomenon under study through careful examination and interpretation of the data set. It is a flexible approach that can bring structure and depth of understanding to varied types of rich, textual data (Braun & Clarke, 2013) Braun and Clarke (2006) concur that thematic analysis is the first qualitative method that a researcher should learn since it offers basic skills that are essential to conducting various other types of data analysis. The overarching goal of thematic analysis is to identify interesting themes or patterns that emerge from data upon analyzing the data (Maguire & Delhunt, 2017). As such, themes were used in this study to address the research questions or make analytical claims and observations about the issue/phenomenon under investigation.

Braun and Clarke (2006) proposed a widely accepted six-step approach to conducting thematic analysis. Braun and Clarke's (2006) method provided a flexible and useful framework for identifying, analyzing, and reporting patterns within this qualitative study. The six phases include *familiarization with the data*, *generating initial codes*, *searching for themes*, *reviewing themes*, *defining and naming themes*, *and producing the final report* (Braun & Clarke, 2006).

Familiarization with the data

In this initial phase, the researcher immerse himself in the data to gain a comprehensive understanding of the content. To achieve this, transcripts of classroom interactions, observational notes, and video recordings were viewed. In order to familiarize myself with the data collected, I first watched the video data several times while making important notes. This enabled me to have a general overview of the interactional process, metadiscourse elements, and other behaviours which may not have been recorded in the first instance. The transcribed data were then read and reread multiple times to enhance familiarization. This familiarization process was further augmented by watching each video again to familiarize myself with the language used, interaction patterns, and metadiscourse markers present in the data.

Generating Initial Codes

Once familiar with the data, the researcher began coding by systematically identifying meaningful segments or patterns. Here, the initial coding based on Hyland's (2005) metadiscourse resources was applied. Codes were assigned to specific data excerpts that capture key concepts or themes related to metadiscourse usage. Codes included categories like "self-mention markers (SM)," "hedging (Hd)," or "interactive discourse markers" based on Hyland's metadiscourse framework. Systematically, potentially

significant features across the entire data set were coded consistently with the research objectives, and relevant data extracts under each generated code were collated based on their similarities.

Searching for Themes

After generating initial codes, the researcher proceeded to search for overarching themes that emerged from the coded data. Themes represent broader patterns, ideas, or concepts that cut across multiple codes and data segments (Braun & Clarke, 2013). Various themes related to different types and functions of metadiscourse usage, such as interactive metadiscourse, relational metadiscourse, or referential metadiscourse, were identified.

Reviewing Themes

Once potential themes were identified, the researcer reviewed and refined them to ensure coherence and relevance. This involved organizing related codes under each theme and examining how they contribute to the overall understanding of metadiscourse in classroom interactions. Themes were revised, combined, or split based on the depth of analysis. Themes are reviewed and refined to ensure a coherent pattern. Precise definitions were then developed to describe the scope and content of each theme. For example, instances of "questioning" were coded "Q", praising "P", and explaining concepts, "EC" (Se Appendix, A). Codes were generated for as many patterns and variations as possible.

Defining and naming themes

The different coded features were finally sorted into potential themes. Each finalized theme is clearly defined to capture its essence and meaning within the context of the study. Here, the key characteristics, patterns, and examples that characterize each

theme are articulated. Additionally, themes are given descriptive names that encapsulate their content, such as "Gender sensitivity" "Building teacher-student rapport" or "Urging active participation" were identified and established for discussion based on relationships and patterns.

Producing the Final Report

The final phase involves synthesizing the analyzed data and findings into a coherent and structured report. To finalize the process, the researcher wrote a final analysis by selecting vivid and compelling extract examples and relating them back to the research questions and literature. By so doing, the researcher was able to produce a comprehensive report on the data gathered, and presented the identified themes, supported by evidence from the data (e.g., quotes, excerpts) and with support of relevant literature. The report includes an in-depth discussion of each theme, interpretations of the findings, and implications for theory, practice, or further research.

By following Braun and Clarke's six-step thematic analysis approach, this study systematically analyzed and interpreted the data on metadiscourse resources in classroom interactions, leading to robust thematic findings and insights.

The study employed software tools such as AntConc and MaxDI for qualitative analysis, enhancing the rigor and validity of the research findings through systematic data management and analysis strategies.

The study also employed the services of some computer research tools to beef up the analytical process. AntConc was utilized for textual analysis, allowing the researche to process large volumes of textual data efficiently. The software facilitated tasks such as concordance analysis, keyword analysis, and collocation analysis, enabling the

identification of patterns and themes within the textual data related to metadiscourse markers in classroom interactions. MaxQDA was also utilized for qualitative data analysis, providing a platform for coding, categorizing, and organizing qualitative data from interviews and observations. The software supported the development of coding schemes, thematic analysis, and the generation of visual representations of data relationships.

3.6.4 Trustworthiness of Data

To enhance the trustworthiness of qualitative research, researchers often employ various validation strategies. For instance, Patton (2015) advocates for the use of member checking and rich description techniques to validate research findings. Creswell (2014) proposes eight verification processes to ensure the trustworthiness of qualitative research data. The processes were adapted for this study to ensure the trustworthiness of the data collected and analyzed. The processes are outlined and discussed for this study below.

Credibility: Credibility refers to the confidence in the truth of the findings and interpretations. In your study, credibility was ensured through the triangulation of data sources. By collecting data through multiple methods such as observations, interviews, and video recordings, I obtained diverse perspectives on metadiscourse in classroom interactions, enhancing the credibility of my findings.

Transferability: Transferability relates to the extent to which findings can be applied or transferred to other contexts or settings. To enhance transferability, I provided detailed descriptions of the research context, participants, and data collection procedures. This allows readers to assess the applicability of findings to similar educational settings.

Dependability: Dependability refers to the stability and consistency of the research findings over time and with different researchers. To ensure dependability, this study maintained clear and detailed documentation of the research process, including data collection, analysis, and interpretation methods. This documentation allows for the replication of the study by other researchers.

Confirmability: Confirmability refers to the objectivity and neutrality of the research findings, ensuring they are not influenced by the researcher's biases or preferences. In this study, confirmability was achieved through member checking, where participants were given the opportunity to review and confirm the accuracy of the data interpretations. This process helps validate the objectivity of the findings.

Auditability: Auditability refers to the transparency and traceability of the research process, allowing external auditors to follow the researcher's decision-making and analytical steps. Auditability in this study was ensured by maintaining an audit trail, which documented all decisions, changes, and interpretations made during the research process. This allows for transparency and scrutiny of the study's rigor.

Peer Debriefing: Peer debriefing involves seeking feedback and insights from other researchers or experts in the field. In my study, peer debriefing was conducted by sharing preliminary findings, interpretations, and data analysis processes with colleagues or mentors. Their feedback helped validate interpretations and ensure thorough analysis.

Member Checking: Member checking involves verifying interpretations and findings with participants to ensure accuracy and alignment with their experiences. Member checking was conducted by sharing summaries or excerpts of the data analysis with

participants and seeking their input or corrections. This process helped enhance the validity and credibility of the findings.

Triangulation: Triangulation involves using multiple data sources, methods, or researchers to corroborate findings and enhance the robustness of the study. As mentioned earlier, my study employed triangulation by combining observations, interviews, and video recordings. This approach provided converging evidence and multiple perspectives on metadiscourse in classroom interactions, strengthening the trustworthiness of the data.

By incorporating these verification processes, this study aimed to ensure the trustworthiness, reliability, and validity of the qualitative data and findings, enhancing the overall quality and rigor of the research.

3.7 Ethical Considerations

In compliance with research ethics, the data collection and storage practices adhered to ethical guidelines, including obtaining informed consent from participants and following institutional policies on data management (Creswell & Poth, 2018).

In the context of scholarly research, ethical considerations are considered paramount to ensure the integrity of the study and the well-being of participants. Obtaining informed consent from participant teachers and students at Agrey Memorial Senior High School was crucial. This ensured that participants understood the purpose of the study, what their involvement entailed, and any potential risks or benefits. Emphasis was placed on their voluntary participation, empowering them to make an informed decision about whether to take part (Riley et al., 2016). A formal consent was also sought from the Head of Academics who is in charge of all academic-related issues in the school.

Given that my research involves observing and recording classroom interactions, it's essential to minimize any potential harm or discomfort to participants. I therefore took measures to ensure that observations and recordings are conducted discreetly to avoid disrupting the natural flow of the classroom environment, and any recorded data was handled with care to protect the privacy of both teachers and students (Earp et al., 2017). Additionally, maintaining confidentiality and anonymity is critical to protecting the identities of participants. Thus, I adopted the use of pseudonyms or codes to anonymize data and participants during analysis and reporting to prevent the identification of individuals (Blease, 2016). Thus, ethical considerations such as seeking consent of participants, securely storing data forms, and ensuring that participant identities were protected in all stored data, were integrated into the data collection and storage protocols, (Patton, 2015).

3.8 Chapter Summary

This chapter outlines the methodological framework employed in the study to investigate metadiscourse resources in classroom interactions. The chapter details the research design, data collection procedures, analysis techniques, ethical considerations, and the rationale behind methodological choices. It serves as a blueprint for conducting the research, outlining the methods used for data collection, analysis, and interpretation. The chapter begins by elucidating the overarching framework guiding the research process, drawing on insights from prominent scholars such as Hyland (2005), Braun and Clarke (2013), Creswell and Creswell (2018), and Bloomberg and Volpe (2019).

The study adopts a qualitative research approach, specifically discourse analysis, to explore how teachers and students use metadiscourse markers in classroom

communication. The choice of discourse analysis aligns with the research objectives of examining linguistic features and social dynamics within educational settings, drawing on frameworks by scholars such as Gee (2014) and Fairclough (2015). Next, the chapter discusses the specific methodological approach adopted for the study, focusing on qualitative research methods due to their suitability for exploring complex phenomena in naturalistic settings. Multiple data collection methods were employed, including semi-structured interviews with language and non-language teachers, classroom observations, and textual analysis of video recordings. These methods were selected to capture diverse perspectives, real-time interactions, and linguistic patterns related to metadiscourse usage. Semi-structured interviews were conducted with language and non-language teachers to explore their experiences and practices regarding metadiscourse strategies in classroom communication. Interview guides were developed based on relevant literature and piloted for clarity. Classroom observations were conducted to capture the natural flow of communication and interactions between teachers and students. Observational data provided contextual insights into metadiscourse markers and communication dynamics within the classroom. Video recordings of classroom interactions served as primary data for data analysis.

The analysis focused on identifying and exploring the functions of metadiscourse resources in classroom interactions. Hyland's (2005) metadiscourse model was applied to systematically analyze the data collected from video and audio recordings of classroom interactions. The framework was used as a guiding tool for categorizing different types of metadiscourse features as occurred in the data. The model's interactive, interactional, and textual metadiscourse categories serve as a structured framework for identifying and understanding how these markers contribute to

communication dynamics and engagement within senior high school classrooms. The data analysis process comprised three primary stages. Initially, all instances of metadiscourse devices were identified and documented. Subsequently, the compiled metadiscourse devices were categorized into distinct taxonomies utilizing the framework established by Hyland (2005).

Lastly, the study meticulously examined the multifaceted roles that metadiscourse devices played within classroom interactions. The coded data were analyzed to identify patterns, themes, and trends across different data sources. The alignment of coded data with Hyland's model was assessed to validate the model's applicability to the analyzed data and the implications of the findings for classroom communication, engagement, and learning outcomes were discussed in relation to the coded data. Thematic analysis, following Braun and Clarke's (2006) six-step approach, was employed to analyze the collected data. This involved familiarization with the data, generating initial codes, identifying themes, reviewing themes, defining and naming themes, and producing the final report.

Ethical guidelines were strictly followed throughout the research process. Informed consent was obtained from participants, data confidentiality and anonymity were ensured, and ethical standards for data handling and storage were adhered to. It underscores the importance of ensuring the credibility and trustworthiness of the research findings through techniques like triangulation, member checking, and peer debriefing. Moreover, the chapter elucidates the process of data analysis, delineating the steps involved in coding, categorizing, and interpreting the collected data. It highlights the use of software tools for qualitative analysis and discusses strategies for enhancing the rigor and validity of the research findings.

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In summary, the methodology chapter serves as a comprehensive guide to the research process, offering insights into the theoretical framework, methodological approach, data collection procedures, and analysis techniques employed in the study. It lays the foundation for the subsequent chapters, providing a roadmap for conducting and interpreting the research outcomes.



CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.0 Introduction

This chapter presents the results from the data gathered for this study as well as a discussion of the results in relation to extant literature and theoretical framework. The chapter concludes with a summary of the findings. The study gathered data from classroom instruction at the Aggrey Senior High School. Coupled with the transcribed data from the classroom instruction, the researcher also interviewed selected teachers to ascertain the use of metadiscourse resources or markers in teaching and learning.

4.1 RQ1: What are the types of metadiscourse resources employed in classroom interactions at AMAMEZSHS?

TYPE OF METADISCOURSE MARKER	SUB-CATEGORY	FREQUENCY	PERCENTAGE (%)
INTERACTIVE	Transition markers	62	14
RESOURCES	Frame Markers	38	9
	Endophoric markers	28	6
	Evidentials	0	0
			0
	Code Glosses	23	5
INTERACTIONAL	Hedges	13	3
RESOURCES	Boosters	19	4
	Attitude	34	8
	Engagement markers	152	35
	Self-mentions	42	10
			0
	Colloquialism	8	2
	Code Switching	3	1
OTHER RESOURCES	vocatives	15	3
	Total	437	100

Table 1 above, presents a frequency distribution of the metadiscourse resources as they occurred in the classroom interactions. In answering this research question, the study was guided by the Hyland (2005) model of metadiscourse markers or resources. The researcher textually analyzed the data for the three major categories: interactive metadiscourse resources, interactional metadiscourse resources, and other metadiscourse. In the category of interactive metadiscourse resources, transitional markers occurred 62 times representing a percentage of 14%; frame markers also occurred 38 times representing 9%. Endophoric markers appeared 23 times representing 6% of the total metadiscourse resources across the data collected. The current study did not find any use of evidentials in the classroom interactions.

In the category of interactional resources, code glosses appeared eleven (23) times and constituted four percent (5%). Boosters occurred 19 times while hedges occurred 13 times representing 4% and 3% respectively. Moreover, the teachers and students used attitude markers 34 times across the data analyzed representing 8%, From table 1, engagement markers occurred 152 times, representing a percentage of 35%, the highest occurring metadiscourse resources during the classroom instructions. Engagement markers are interactive metadiscourse resources that facilitate interaction between interlocutors (Hyland & Tse 2018). The present study has found engagement markers, especially questions and vocatives to be the most dominant resources in classroom interactions (Malstrom, 2014). Finally, self-mentions also occurred 42 times representing 10% of the total metadiscourse resources used in classroom interactions.

There were three new metadiscourse resources used in classroom instruction that did not fit the existing identified metadiscourse resources. These were colloquialism markers (=8, 2%), code-switching (=3, 1%), and vocatives (=15, 3%) metadiscourse

resources. The next section discusses the metadiscourse markers that were used in the classroom discourse with reference to the data gathered and the research questions that guide the study. The metadiscourse markers are discussed under interactive markers, interactional markers and other markers in order to ease understanding.

4.1.1 Interactive Markers

Interactive metadiscourse markers are linguistic devices used within discourse to facilitate interaction, guide communication, and manage social dynamics (Hyland, 2005). These markers play a crucial role in shaping the flow of conversation, signaling the speaker's intentions, and engaging the audience. Based on the theoretical framework adopted for the current study, interactive metadiscourse markers are classified into transitional markers, frame markers, endophoric markers, evidentials, and code glosses. The current study has found that interactive metadiscourse resources manifested in classroom interactions in the selected school. These are presented in a detailed discussion below.

Transitional Markers

Transitional markers, as described by Hyland (2005), are linguistic devices or cues used to signal shifts, transitions, or connections between different parts of discourse. These markers help guide the flow of communication, indicate changes in topics or ideas, and facilitate the organization of information within a conversation or text. Transitional markers are, therefore, crucial for creating coherence, clarity, and smooth progression in discourse.

In the present study, transition markers occurred 62 times representing 14% of the metadiscourse resources used across the classroom interactions (Table 1). The present study has found that teachers and students employed transitional markers to

present their points in a series. The extract below shows the use of transitional markers in classroom discourse.

So, we saw people coming up with artificial topic sentences.

They are not topic sentences. All those sentences were supporting sentences.

So, let's be careful.

Secondly, questions may be directed at the supporting sentences-

So, don't always go with preconceived mind that the answers are always in the topic sentences, eeh. (ENGV2)

let's go to the next sub-topic

Okay, we want to talk about the three processes of marriage. (SSV) So, it's a straight line

But you need to find the values for y, okay

And I want someone to help us. (MV2)

As illustrated in the above excerpts, this study has established that in the context of classroom discourse, transition markers were observed to facilitate the organization and coherence of spoken interactions. The use of phrases such as *go to the next* and *we want to talk about* are considered significant additions to transitional markers situated within classroom discourse. Scholars have noted that transitional markers serve to establish logical relations between ideas (Hyland, 2005) and they promote coherence and comprehension by signaling how individual propositions connect into larger discourse frameworks (Vande Kopple, 1985). By employing these transitional cues, speakers in the classroom effectively connected ideas and maintained the logical progression of discussions.

Frame Markers

Frame markers, as outlined by Hyland (2005), are linguistic devices that serve to structure discourse by signaling the beginning, progression, or conclusion of specific segments within a larger discourse framework, thus aiding in the organization and comprehension of information for the participants involved. Examples of frame markers outlined in the framework of Hyland (2005) are *finally, to conclude* and *my purpose is to*. The current study that frame markers featured in classroom interactions appeared 38 times constituting 9% of the total metadiscourse markers observed. Although the examples outlined by Hyland (2005) were not explicitly observed, this study has found similar expressions and communicative devices that fit the description of frame markers and are categorized under such. The following excerpts support this finding.

There are two major things we are likely to do before we move on. We will first look at the functions of the noun......nouns and then move on to the pre-modification quickly.

TR: I want to introduce you quickly to the premodification before we come back to the function. (ENGV1)

TR: And the third and the last one, human beings should eat a lot of vegetables.

Alright. So, to just wrap up, all that we've done just now is that we're looking at topic sentences. (ENGV2)

I am going to say it once and for all (MV2)

In the above extracts, the teachers used frame markers to indicate what the students should expect in the course of the lesson. The use of *first look at the functions and move on to pre-modification* shows the teacher's approach to preempting the

students about the lesson content for the day. Frame markers usually guide students to connect parts of content. In the case of classroom instruction, frame markers are therefore observed to be relevant in indicating the beginning, different sub-sections, and conclusion of a lesson (Hyland, 2005).

Endophoric Markers

Endophoric markers are words or phrases that refer to something that has been previously mentioned or is otherwise known to the participants in a conversation. They are used to avoid repetition and to create a sense of cohesion and flow in the discourse. The present study found that the most common type of endophoric marker used in classroom interactions is anaphoric. These included the use of words such as *this*, *that*, *these*, *those*, *the previous*, *here*, et cetera. Endophoric markers (anaphorics) occurred 28 times making up three percent (6%). In classroom interactions, endophoric markers (anaphorics) are frequently used by teachers to refer to concepts, ideas, and objects that have been introduced or discussed earlier in the lesson. This helps to maintain the focus of the conversation and to avoid confusion. The extracts below support these findings.

When you observe the equation **here**, you realise that the left-hand side is the quadratic curve, true or false?"

"So, these are the values we're going to plot." (MV2)

"here, we are looking at nouns" (ENGV1,)

The above extracts show instances where the teachers use the endophoric markers to refer to aspects of the ongoing lessons on the board. The markers are used to refer students to the important aspects of the lesson such as equation, figures and values. Li et al (2020) examined the use of endophoric markers in teacher-student talk in English as a foreign language (EFL) classrooms. The study found that teachers used

endophoric markers more frequently than students, and that the most common type of endophoric marker used was anaphoric markers. The findings of this present study therefore confirm the findings Li et al (2020). Teachers also used the expression; *you know as an endophoric* marker to refer learners to parts of the lesson that constituted common knowledge previously shared. Such words helped teachers and students to refer to concepts, ideas, and objects that have been previously mentioned or are otherwise known to the participants in the conversation. This helped to avoid repetition and to create a sense of cohesion and flow in the discourse. The extract below lends support to this finding.

So, you **know** every time if you are to change a number from setting bees to Base 10 Hugo by expansion as simple as what ABCD. (MFV1)

Alright, examples of plants that undergo self-pollination. You have an idea. You know that the plant must be bisexual and it must have both stamen and pistil. Good. Just one example. (ISFV)

Evidentials

The present study finds that evidentials were not used in the classroom interactions. Evidentials are linguistic markers that indicate the source or certainty of information, such as hearsay, inference, or direct observation (Aikhenvald, 2004). It is asserted that evidentials are integral to academic discourse practices, particularly in fields where the source and validity of information are crucial, such as science, history, and research-based subjects (Hyland, 1998). They contribute to the conventions of scholarly communication by signaling the epistemic stance of the speaker and acknowledging the complexity of knowledge claims. The absence of evidentials may undermine the development of academic literacy skills and disciplinary discourse competence among students. Their absence in classroom

discourse can therefore affect the clarity and credibility of information presented by both teachers and students. Without evidentials, it may be challenging for listeners discern the origin or reliability of statements, leading to potential misunderstandings or skepticism regarding the information shared. It is my argument that incorporating evidentials into instructional practices would facilitate effective communication and knowledge construction in the classroom, thereby, to supporting students' learning and development. In a similar study by Flowerdew (2015), it was found that evidentials are extremely rare in both spoken lectures and EAP classrooms. This implies that, unlike other forms of communication from experts to non-experts (such as textbooks), references to external sources may have less significance in academic lectures. Flowerdew (2015) cited two potential reasons for the absence of evidentials in classroom discourse. First, because a considerable amount of the information conveyed is regarded as shared knowledge within disciplinary communities rather than belonging to specific individuals. Additionally, the conventions and limitations of spoken interaction in classroom settings may not require explicit acknowledgments of external sources. Cazden (2001), on the other hand, notes that classroom talk often revolves around the presentation of curriculum content, where the teacher's role as the knowledge authority diminishes the necessity for evidentials. This study, however, argues that the overarching importance of evidentials, especially in providing validity for discourses (Hyland, 2005), makes its absence from classroom interactions constitute a huge gap in classroom communication that must be addressed.

4.1.2 Interactional markers

Interactional metadiscourse markers are linguistic devices or expressions used within discourse to signal the relationship between the speaker/writer and the audience, as

well as to manage the interaction itself (Hyland, 2005). They include a wide range of linguistic features such as hedges, boosters, attitude markers, engagement markers, self-mentions, vocatives, and other expressions that facilitate interaction and interpersonal connection in discourse. This study has found interactional markers to be instrumental and performing various functions in classroom interactions. All the interactional metadiscourse markers classified by Hyland (2005) were observed in this study. However, some expressions which are observed to perform similar roles of interactional markers were analyzed and discussed under this category.

Code Glosses

Code glosses, as defined by Hyland (2005), are discourse markers used to elaborate propositional meanings, particularly in interactional contexts. Examples of code glosses according to Hyland (2005) include the expressions *such as, example, in other words*. The use of code glosses aligns with pedagogical goals related to clarity, coherence, and effective communication in classroom discourse (Seedhouse, 2004). However, the current study did not find the use of code glosses as outlined by Hyland (2005) in classroom interactions. Teachers however employed other linguistic strategies to elaborate propositional meanings as shown in the extracts below. The code glosses identified in this current study occurred 23 times making four percent (5%) of the total metadiscourse resources.

x axis is **also** equal to y equal zero

So, how do we determine the root of the equation now?

So, that means we will determine it on the x axis, is that not so?

Therefore, the A part, the root of the equation are, x equal to negative one or x equal to 3. That's all.

So, in that case, you count the smaller boxes, ten of them before you go to one on the x axis. (MV2)

So, what we are saying is that, this is plant A, alright?
This is one flower, this is another flower, okay?
What I'm saying is that, in Self-pollination, you can have this flower....... (ISV)

As exemplified above, the use of expressions like "that means" and "in that case" in mathematical discussions, helped to clarify or elaborate on a point previously made. However, varying strategies were adopted in MV2 and ISV. While not explicitly labeled as code glosses, these expressions fulfill a similar role in elaborating on propositional meanings and promoting effective communication.

Hedges

Hedges are a type of interactional metadiscourse marker that speakers or writers use to mitigate the force of their statements, express caution or uncertainty, or soften the impact of their assertions (Hyland, 2005). In other words, they are linguistic devices that help to create a more diplomatic or polite tone in communication by indicating that the speaker is not making absolute or definitive claims. Hedges can be expressed through words, phrases, or structures that suggest tentativeness, qualification, or reservation about the information being conveyed. This study has established that hedges were also employed by the teachers and students howbeit minimally. In total, hedges occurred thirteen (13) times making 3% of the total occurrence of metadiscourse markers.

I can say, mine is negative 2.5"

"That is what I had"

"Somebody will say, 2.3"

"Or x is equal to, then I will trace this one too"

"I think this one also will be positive 2.25" (MFV)

I hope you remember".

"I hope you had evidence of that"

"I hope you are getting it" (ENGV-T)

The above excerpts confirm the use of hedges in classroom interactions. The use of "can" and "will" in the extracts above confirms the findings of Arthur and Fenyi, (2019) who established that modal auxiliary verbs are commonly employed as hedges within classroom settings. Apart from this, other expressions that I found to function as hedges as they were used to express uncertainty, and doubt include Somebody will say, and That is what I had. The use of these expressions indicates that the teacher is open to the possibility of varied opinions and is making attempts to avoid the imposition of ideas on learners in the classroom. This study has found that hedges were sparingly used through the modal verbs and opinion-based verbs to ensure less commitment to answers to questions or responses between teachers and students.

Boosters

Boosters are linguistic devices used to strengthen or emphasize the speaker's assertions, beliefs, or confidence in the information being conveyed (Hyland, 2005). They are linguistic devices that help to emphasize the speaker's position, highlight key points, or express conviction and certainty. Boosters can be expressed through words, phrases, or structures that convey confidence, certainty, or enthusiasm about the information presented. Examples of boosters include words like "definitely," "certainly," "clearly," "undoubtedly," "absolutely," "without a doubt," "it is evident that," and so on. The study found that boosters occurred nineteen (19) times and

made five percent (4%) of the total metadiscourse markers revealed by the data analysis. It is noteworthy that none of the examples of boosters outlined by Hyland (2005) were observed in the data, the study however found certain expressions that were used by teachers as boosters. The instances are demonstrated in the following extracts.

So, as a way of caution, let's write this down that will help us.

This should remind us that, even though the topic sentence criterion for summary is important, it should be used with care. ((ENGV2)

But take note, you see how I've written the five, it is not compared as that of three and four

So, this is how we read numbers in number bases (MV1)

That will never happen

Unless of course, you are doing some kind of artificial propagation But naturally, in pollination, that does not happen, okay?

The pawpaw is a species on its own. Orange is a species on its own.

Do we get it? (ISV)

In the extracts above, the teacher used the expression *take note* to emphasize the need for the students to pay critical attention to a significant part of his/her lesson. Also, the use of the coordinating conjunction, *so*, and the affirmative statement, 'this is how we read numbers in number bases', alert students that what is being said is very important and noteworthy. However, this study argues that the use of the coordinating conjunction "so" as a booster may not be easily perceivable to learners. The emphatic *in fact* would have been more appropriate in the context and help students to appreciate its communicative effect. In essence, the expression *That will never happen* could also have been marked by *in fact* within the context of science classroom interaction. The findings, however, align with the theoretical framework

and are in similitude to the findings of Biber et al. (2004) who aver boosters are used by interlocutors to assert their confidence during communication.

Attitude Markers

According to Hyland (2005), attitude markers are linguistic expressions that convey the speaker's attitude, feelings, or stance towards a particular topic, idea, or situation. These markers play a crucial role in expressing the speaker's evaluation, emphasis, or emotional state during communication. Some common attitude markers include words or phrases that convey certainty, doubt, emphasis, agreement, disagreement, appreciation, or criticism. Attitude markers convey the writer's stance towards the content, reflecting their evaluation of evidence, arguments, or alternative viewpoints (Hyland, 1998). The current study has found that attitude markers were used in classroom interactions. A total number of thirty-four (34) attitude markers representing eight percent (8%) of the total metadiscourse occurrence were identified. Examples of the attitude markers revealed in the classroom interactions are captured in the following extracts.

it's nice.

This side looks very nice.

TR: No, I don't like where you are drawing the "y".

You are leaving the greater part here while here should rather be.

Are you getting it?

alright you'll get something beautiful like this when you do it

accurately, okay. (MFV2)

In the given extract above, the teacher's use of language and tone can be considered as attitude markers, specifically demonstrating a directive and corrective attitude towards the student's work. The phrases "It's nice" and "This side looks very nice"

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appear positive and encouraging, reflecting a supportive attitude. However, the tone

shifts when the teacher expresses dissatisfaction with the way the student is drawing

the letter "y." The statement "No, I don't like where you are drawing the 'y" is a

clear indication of the teacher's disapproval, serving as an attitude marker that

conveys a negative sentiment towards the student's work. This phrase reflects a

critical attitude, highlighting the teacher's expectations for a higher standard of

work.

Additional attitude markers are observed through teachers' use of gendered language

to address students revealing their attitudes towards both the learners and the content

being delivered. The use of gendered expressions is found in the extracts below.

So let me ask anyone to summarize what we have done for us a short

summary

Yes, I want a female. (ENGV2)

TR: This time, is time for the boys

STS: Yeah, Madam, thank you

TR: the first time was done by a girl. Now, we want a boy. (MV2)

This extract contains the teacher's reactions to students' responses to his or her

questions. The teachers in both ENGV2 and MV2 established that they preferred a

female/girl student to answer the questions. Attitude markers convey important

evaluative stance taking which shapes classroom dynamics. This study has

uncovered various attitudinal expressions employed strategically by teachers. Here,

again, the study reveals that teachers especially manifest their stances both towards

their students and contents of their lessons. This confirms Hyland's (2005) assertion

that interlocutors employ attitude markers during communication to indicate their

stance. "The first time was done by a girl. Now, we want a boy." In this statement,

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the teacher explicitly references the previous contributor's gender and specifies the

desired gender for the next contribution. This use of gendered language as an

attitude marker reinforces the idea of alternating between male and female

participation, possibly to ensure diversity or balance in classroom interactions.

Furthermore, the use of special vocatives in the above extracts to address students is

observed in this research as equivalent to attitude markers used in classroom

interactions to foster rapport building in the classroom. For instance, the expressions

"Boyfriend", "my sister", and "my dear" as used by teachers in the classroom

interactions function as attitude markers that convey the teacher's stance or

evaluation. Specifically, "Boyfriend" is used affectionately to address a male student

in a familiar but respectful way. This conveys a positive, friendly attitude from the

teacher towards that student. "My sister" conveys warmth, care, and protection when

addressing a female student. It positions the student as part of the teacher's family

and shows a nurturing attitude. The following excerpts provide instances of the

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examples above.

TR: Let's quickly go to the purpose, why people marry, yes, "my sister"

(SSV)

TR: who are you talking about? **Boyfriend**, can you, do it?

STS: yes!!

It's okay you've done so well God bless you, my dear. (MV2)

Engagement Markers

Engagement markers are linguistic elements used in communication to signal active

involvement, interest, or responsiveness from the participants (Hyland, 2005). These

markers therefore, serve to enhance engagement by encouraging interaction,

acknowledging contributions, and fostering a sense of connection between

interlocutors. According to Hyland (2005), engagement markers include personal

pronouns such as "I," "we" and imperative verbs "consider," "note", 'note that', and

'you can see that'. The current study reveals that engagement markers were

employed in classroom interaction to perform some important functions. This study

has found that engagement markers were the most dominant metadiscourse markers

used in the classrooms. Teachers used a variety of discourse strategies to ensure

engagement with students in the classroom. The most common strategies include the

use of questions, collective "we" and "you". In all, there were one hundred and

fifty-two (152) engagement markers representing forty-six percent (35%) of the total

metadiscourse markers. Huang et al. (2020) aver that rhetorical questions and

directives are used as engagement markers to directly address readers in travel

blogs. The extracts below provide instances where teachers used questions

extensively, and often in a series, to engage students.

TR: Please, are **you** done arranging the pebbles?

TR: Please are we done? This is what you have been doing since JHS, h33,

place value

TR: I hope you remember that term

So, we have one tens, two tens and three ones

This is what?... 23

We are going to arrange this in a different form but this value we call it

what?

All: (23 base 10)

Twenty what?

STS: (3 base 10) (MV1)

In the above exchanges, the teacher used questions such as *Please are we be done?*This is what? And the collective "we" to engage with the student audience in the classroom activity. The questions posed demanded students to provide chorus responses to the teacher with yes or no answers or often supply simple answers on whether the students have finished the classroom activity or not. Additionally, the use of personal pronouns We, and You contributed to the engagement in classroom interactions. Teachers also employed the unique strategy of ending statements with the wh question word, "what". This strategy was useful in keeping and sustaining students' attention as it required students to be on the alert to supply short responses in the form of answers that complete teachers' statements.

As can be observed from the extracts above, the use of questions ending in 'what' allowed either students alone or in some instances, both teachers and students to provide the needed answers together thus promoting active engagement in the classroom. The study aligns with the use of engagement markers, such as rhetorical questions and directives, which are employed to directly address readers and encourage their active participation (Huang et al. 2020). Within the context of spoken classroom discourse, this study finds the use of engagement markers to be essential in ensuring active participation.

Self-Mentions

Self-mentions in discourse refer to instances where individuals refer to themselves directly or indirectly in their speech or writing (Hyland, 2005). These references can take various forms, including the use of pronouns (e.g., "I," "me," "myself"), proper names, titles, or other identifiers that indicate the speaker or writer's self-representation within the communication. Self-mention is another interactional metadiscourse

resource that was used by teachers and students in classroom interactions. The self-mentions occurred forty-two (42) times and represented eight percent (10%) across the entire data. The use of self-mentions occurred mostly through the use of the pronouns I and we. The study has found that the collective pronoun we was mostly used by teachers to refer to both themselves and the students. This is illustrated in the excerpts below.

Please I really need? Good so we have 23 base 10

It should have been this way but because it's is 10, we don't write this 10 here. So, we just clean it and we leave it as 23. So, we have two tens, 3 what?

Three ones (chorus). When **we** do this, we are counting and in what base, 10
Then **we** are counting in what............ (MFV)

TR: We all agree they are not at the same places in the sentence, are they?

TR: We agree that "goods" is a noun, right? (ENGVI)

These pronouns constitute what is classified as personal metadiscourse which refers to metadiscursive items that are used to make explicit references to interlocutors engaged in a communication (Adel, 2010). The findings further confirm the findings of Wu and Yang (2022) who found that personal pronouns, *I*, and *we* are among the most used self-mentions in classroom discourse.

4.1.3 Non-Verbal Metadiscourse

According to Hyland (2005), nonverbal metadiscourse encompasses "paralinguistic features, kinesic gestures, and physical behaviors that complement and enhance the verbal message, providing cues about the speaker's involvement, stance, or affective orientation towards the discourse." Kinesic gestures refer to the use of body language and nonverbal communication to convey meaning and express oneself (Querol-Julián, 2012). Using Hyland's (2005) framework and description of nonverbal modes of

communication by Querol-Julián et al. (2012), the study identified three categories of nonverbal metadiscourse features used in classroom interactions. These included touching, hand gestures, and proximity. Touching involves any form of physical contact that is established with learners in the classroom. Gestures involve purposeful body movements such as touching, pointing to visual aids, using hand gestures to emphasize key points, or using gestures to indicate turn-taking in discussions. Proximity refers to adjusting spatial relationships with students, such as moving closer during individual discussions or circulating around the classroom during group activities.

4.1.4 Other Metadiscourse Resources

There are other expressions that served metadiscourse function but they did not fall under the model by Hyland (2005). These metadiscourse were context-specific in that they served specific purposes in the course of the classroom instruction. In the present study, the researcher found colloquial expressions and code-switching as performing metadiscourse functions in the data.

Colloquialisms

Colloquialism refers to the utilization of informal expressions or phrases in both written and spoken language (Frisella, 2017). Frisella (2017) further highlighted that colloquialisms are often associated with specific geographical regions, indicating their usage within particular dialects or regional variations of a broader language. Colloquialisms therefore, encompass a range of informal linguistic elements such as aphorisms, idiomatic expressions, colloquial language, or even profanity which are manifested within the discourses of a particular social setting. This study finds that colloquialisms are employed by teachers within the classroom context for specific

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metadiscoursal roles. The data showed that colloquialisms occurred eight (8) times and

represented three percent (2%) of the total metadiscourse resources. This usually

involves the use of expressions that are familiar within the Ghanaian society and

context. The colloquialisms were observed through the use of informal expressions

such as *abcd*, and *blab la bla*. These are illustrated in the examples below.

So, we have tens another tense and 3 once, as simple as a b c d

Are we ok? (MFV1)

In the Ghanaian society, the expression "take/hire a lawyer" is often used informally,

to mean seek help or assistance. Therefore, the use of the colloquialism to take/hire a

lawyer in classroom instruction indicates a non-formal way of asking students to pass

questions they could not answer to their colleagues who could answer the question.

The extracts below show these colloquial metadiscourse resources as used in

classroom interactions.

TR: Okay, hire a lawyer. Let somebody be your lawyer

ST: Aba (ENGV1)

Have you forgotten?

Okay, take a lawyer quickly.

ST: Sir, please, Nana Yaa

TR: Okay, Nana Yaa, save your sister. (SSV)

The use of these non-formal communicative language expressions aided the teachers

and students to engage in a classroom discourse that satisfied both parties without

necessarily following the rigid rules of formality within the classroom.

Code-Switching

Code-switching is the practice of alternating between two or more language varieties

in a single conversation, text, or communicative event (Poplack, 2018). The practice of

code-switching is considered common in societies where bilingual communication occurs (Gonzalez & Melis, 2018). Studies have cited the prevalence of code-switching phenomena various African in societies Myers-Scotton, 2016; Akindele & Aniebonam, 2019). In the current study, code-switching was employed and occurred three (3) times representing one percent (1%) of metadiscourse resources observed. The code-switching devices were identified and analyzed in terms of the defined theoretical framework. The study has found that teachers alternated from the English Language to *Twi* (a local language in Ghana) in some instances. For instance, in the extract below, the teacher used the *Twi* language to raise a question of whether the student had difficulty understanding the English language which the teacher perceived resulted in the student's inability to answer the question.

Borsfo na meka no sutease anaa? Mese hye ase fi "if I have difficulty identifying subjects, I will do this, then say what you will do.

Enti monkeka mo ho na yenko ntemntem

(ENGV1)

After the formal request, you have to inform what......

ALL: the elders

So that they'll go and do sunsum wiase and know whether there are not any spirituality there. (SSFV)

The sentence "Borsfo na meka no sntease anaa?" means, "Or doesn't he/she understand the English I am speaking"? Though the use of code switching was rare, the few instances served the purpose of connecting students' understanding to what is being said in English language, in a language that is more familiar. Additionally, it emphasized the idea that code switching can occur among interlocutors as a way of communicating aspects of their discourses in a language that respects the cultural context of the communicative event (Poplack, 2018).

Names/Vocatives

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According to Nordquist (2019), a vocative is a linguistic term referring to words or

phrases that directly address a reader or listener, often using their personal names, title,

or an affectionate term. The current study analyzed the data for vocatives in terms of

words or phrases used to directly address individuals in a conversation, often carrying

emotional or relational nuances. The findings of this present study further highlight the

use of students' names and special vocatives as metadiscourse strategies employed in

classroom discussions. The vocatives appeared fifteen (15) times with a percentage

score of three percent (3%). While students were restricted to the use of the vocatives

Sir or Madam to address teachers in the classrooms, the study finds that teachers

addressed students either by their names or coined specific vocatives to address

individual students. Examples of such instances are captured in the extracts below.

TR: Let's quickly go to the purpose, why people marry. Yes, my sister.

(SSFV)

TR: how do we get it?

ST: Madam, please, where the curve is touching the x axis.

TR: who are you talking about? Boyfriend, can you, do it?

TR: That girl, is she sleeping or what? Melisa, get up! (MV2)

TR: yes,.... Is that **Paulina**? What's your name?

ST: Rachel

TR: Rachel, yes... Example of a noun. (ENGV1)

TR: Now, let's talk about the adaptations. What does the flower have that

allows it to undergo self-pollination? That is, adaptation of flowers for self-

pollination. Children of God, you did the discussion and you presented

your work to me. (ISV)

As can be observed in the data above, the teachers used students' names (e.g. Melisa & Rachel) and special vocatives (boyfriend & children of God) to direct questions or responses, such as "That girl, is she sleeping or what?" and "Boyfriend, can you do it?"

The present study has established that the most frequently used metadiscourse marker by teachers in classroom interaction is the engagement marker (=152, 35%). This confirms the findings of Setiawan et al. (2021) who found that teachers use engagement markers a lot to encourage classroom participation. Afful (2005) found that students employ engagement markers more in their discourse of writing a thesis than any other metadiscourse marker. This has however been found to be true with classroom interaction according to the present study.

The present study therefore, confirms the dominance of engagement markers in classroom instruction (Huang et al. 2020). Moreover, metadiscourse resources such as boosters and hedges, transitional markers, self-mentions, and others were equally used in classroom instruction though in varied degrees. Again, the study reveals the use of colloquial markers, code-switching as well as special vocatives in a metadiscourse manner. These metadiscourse markers are somehow specific to the Ghanaian classroom context and aligns with other findings that cross-cultural differences exist in the use of metadiscourse with academic contexts (Lorenzo-Dus and Blitvich, 2019).

4.2 RQ2: How do the identified metadiscourse resources enhance communication in the classroom at AMAMEZSHS?

As indicated in *Table 1*, the classroom interactions are loaded with both interactive and interactional metadiscourse resources as well as other metadiscourse categories. Metadiscourse resources, including interactive and interactional elements alongside vocatives, nonverbal cues, colloquialisms, and code-switching, played a crucial role in

shaping communication dynamics within classroom settings. In answering RQ2, further analysis delves into how these identified metadiscourse resources enhance communication in the classroom, aiming to provide insights into their significance and impact on pedagogical interactions. The functions are first presented in a table below for convenience and further discussed with specific themes under each of the major metadiscourse resources and their respective sub-categories (Hyland, 2005).

4.2.1 Interactive Metadiscourse Resources

Interactive metadiscourse markers, as defined by Ken Hyland (2005), are linguistic elements used by writers and speakers to organize discourse and guide readers or listeners through the text. These markers help to make the text more coherent and accessible by structuring the information in a way that aligns with the reader's or listener's expectations and comprehension processes. The sub-categories of interactive metadiscourse resources are transitional markers, frame markers, endophoric markers, evidentials, and code glosses (Hyland, 2005).

Transitional Markers

Transitional markers are a crucial category of metadiscourse markers that facilitate connections between ideas, sentences, and paragraphs in spoken and written discourse. According to Hyland (2005), transitional markers "signal the relationship between clauses, sentences, or paragraphs, guiding the reader through the text" (p. 25). Some linguistic features that are considered as transitional markers according to Hyland (2005) include 'in addition', 'but', 'thus' and 'and'. The current study has found that transitional markers were used in the classroom interactions to perform two key functions in the classroom discourse namely; guiding the flow of classroom discourse and maintaining coherence and organization of classroom discourse

Guiding the flow of Classroom Discourse

Guiding the flow of classroom discourse refers to the strategic use of language and communication strategies by educators to facilitate meaningful interactions, maintain coherence, and ensure active participation during academic discussions. This theme encompasses various aspects of metadiscourse and instructional techniques aimed at directing the trajectory of classroom conversations.

Transition markers played a crucial role in guiding the flow of discourse and signaling shifts between ideas or topics (Hyland, 2005). For example, use of transitional markers as metadiscourse resources connects ideas together in both spoken or written discourse. The present study has found that teachers and students employed transitional markers to present their points in a series. The extract below shows the use of transitional markers.

So, we saw people coming up with artificial topic sentences.

They are not topic sentences. All those sentences were supporting sentences.

So, let's be careful.

Secondly, questions may be directed at the supporting sentences.

So, don't always go with preconceived mind that the answers are always in the topic sentences, eeh. **(ENGV2)**

And then, I gave you the types, the types of pollination

You were expected to discuss and come up with something, what they mean.

So, what are the two types, the two types of pollination? (**ISV**)

Therefore, the A part, the root of the equation are, x equal to negative one or x equal to 3

That's all.

Then, we've got the root of the equation

Then the C part is saying that that using the same axis,

But you need to find the values for y, okay

And I want someone to help us (MV2)

As can be observed above, transitional markers like 'and then,' 'so,' 'therefore,' and 'then' aided in guiding the flow of the discourse. They assist in transitioning between different segments of the conversation and highlighting key information or instructions.

For instance, the use of *Then* immediately followed by *But* in MV2 above helps the teacher to make a proposition and quickly finetune learners' mind to another idea (finding the value of y) which was directly connected to the first idea (using the x axis). In the classroom context therefore, these transitional markers were crucial in facilitating effective communication and organisation of ideas. The findings of the study align with Tang (2020) and Hyland (2005) who emphasized that transitional markers help writers and speakers to organize their ideas effectively for their readers or speakers.

Organising Classroom Discourse Monton State of the Control of the

The function of organizing discourse is the use of metadiscourse resources to ensure order and structure in the course of discourse (Tang, 2017). This function was achieved in the current study through the use of text connectives in the form of transitional markers and self-mentions. In the extract below, the teacher employed metadiscourse resources to communicate the prior knowledge learned by students, and how they could apply that to the present knowledge under study.

But remember we were once having 23 for base 10

Now, it's now what ... 43

But you don't read it as base 10 again, are we getting it?

Remember that we are using the same number of what, 23 pebbles

I hope it is making sense. (MV1)

I'm going to give you one paragraph, in fact another one, and as for this one, you are going to come up with the questions huh?

Don't forget that we learnt that in summary answers are given in sentences. (ENGV2)

The use of the expression remember we were once having is indicative that students are expected to recall whatever the teacher is referring to as prerequisite to understanding the present knowledge. For instance, the use of boosters and transitional markers aided the teachers to organize information for the students to assimilate easily. This is consistent with Tang (2017) who found metadiscourse resources as useful in communicating and organizing information for listeners. The study has found that this function is further depicted through the use of nonverbal cues. In the picture below, the teacher raises the hand above his head and points the thumb backwards. He does this while referring to an aspect of previous lesson as tries to connect knowledge from the previous lesson and the ongoing one. This is consistent with Tang (2017) who found that metadiscourse resources as useful in communicating and organizing information for listeners. This finding is similar to Subtirelu's (2015) findings that in EAP classrooms, instructors often utilise markers such as remember, now and again to guide students through pedagogical tasks, which are the main activities in such educational settings.

Maintaining Coherence

In the context of classroom discourse, transitional markers were again observed to facilitate the organization and coherence of spoken interactions. For instance, the use of 'therefore', 'and then', 'but' and 'so' in the extracts above indicated a transition from one idea to another. Additionally, the use of cardinals such as "two," "third and

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last one," and expressions like "to just wrap up" as shown in the extracts below served

as cues for shifting discourse from one point to the other.

TR: last two, quickly, yes

ST: fixing date

TR: last one, yes

ST: period of courtship (**SSV-T.**)

TR: And the third and the last one, human beings should eat a lot of

vegetables.

Alright. So, to just wrap up, all that we've done just now is that we're looking

at topic sentence. (ENGV-T)

As shown above, the data revealed that the teachers employed transitional markers

which were used to maintain coherence among ideas. In a similar vein, scholars have

noted that transitional markers serve to establish logical relations between ideas

(Hyland, 2005). The transitional markers promoted coherence and comprehension by

signaling how individual propositions connect into larger discourse frameworks

(Vande Kopple, 1985). The examples observed demonstrated teachers employing

transitions to structure multi-step explanations and involve students interactively.

The above instances sight examples of use of transitional markers to connect aspects of

the lessons in the classroom interactions. This aligns with the findings of Subtirelu

(2015) that transitional markers help to indicate relationships between text parts. As

such, this study has revealed that transitional markers are employed in classroom discourse to

help show how the various parts of classroom interactions are connected, hence promoting

coherence in the classroom discourse.

Promoting Interactivity

Moreover, the use of transitional markers to invite students' answers was also noted in

the present study. The use of last two, and last one, are both calling for students'

answers to the stages of marriage. The data further revealed interactive purposes for transitional markers in the classroom interactions. Beyond solely presenting information, it was found that teachers frequently employed them to invite student responses, like using "last two" and "last one" as cues for learners to provide the penultimate and final stages respectively in a sequence. This active involvement enhanced participation and checking of comprehension. Discourse was thereby transformed into a more dynamic exchange rather than a one-sided monologue through the use of transitional markers.

The interactional function of transitional markers beyond the usually interactive function demonstrates the uniqueness of classroom instruction. This study therefore provides a context-based understanding of the role of transitional markers in discourses. This finding aligns with previous research by Hyland (2005) and Mercer and Littleton (2019) who emphasize the importance of transition markers in structuring discourse and aiding comprehension for both speakers and listeners. By employing these transitional cues, speakers in the classroom effectively connected ideas and maintained the logical progression of discussion. The findings from this study therefore, corroborate existing literature on the role of transition markers in guiding the flow of communication, highlighting their significance in educational contexts.

Frame Markers

Frame markers are an essential category of metadiscourse markers that play a crucial role in both spoken and written discourse. According to Hyland (2005), frame markers are used to "frame the discourse, signaling the speaker's intentions, and guiding the listener's interpretation" (p. 24). In other words, frame markers signal discourse acts, sequences or stages in a particular communicative event. The current study has found

that frame markers were used in classroom interactions to perform the functions discussed below.

Setting Classroom Goals

The study revealed the use of frame markers to set clear classroom goals, providing a structured approach to classroom instructions. These markers effectively framed the focus of the lessons for the students from the onset, ensuring that students understood the objectives and expectations. For instance, in the extract provided:

There are two major things we are likely to do before we move on. We will first look at the functions of the noun..... nouns and then move on to the pre-modification quickly.

TR: I want to introduce you quickly to the premodification before we come back to the function. (ENGV1)

In this extract, the teacher uses frame markers to set specific classroom goals. The phrase "first look at the functions" establishes the initial objective of understanding the functions of nouns, while "move on to pre-modification quickly" sets the subsequent goal of discussing pre-modification. This approach ensures that students are aware of the learning targets for the lesson.

Frame markers are essential in setting classroom goals as they help students to anticipate and mentally organize different parts of the lesson. Further, the expression "let's go to some of the preparations when people get married" indicates a new learning goal, guiding students on what to focus on next. Similarly, "let's go to the next sub-topic" provides a clear transition, setting a new objective for the students to achieve.

The use of frame markers to set classroom goals aligns with Hyland's (2005) observation that frame markers signal a shift in perspective or focus in discourse. This

corroboration highlights the importance of metadiscourse awareness for effective classroom communication. This study further aligns with the finding of Mensah (2021) who established the role of frame markers in announcing goals for discourses. By using frame markers, teachers can create a clear, organized structure that enhances students' understanding and helps them stay focused on achieving the set learning objectives.

Signaling Stages in Discourse

In classroom interactions, it is also found that the teachers use frame markers to signal different stages in discourse. These various expressions to expressions help to structure the lesson and guide students through the content. By indicating stages between topics, sub-topics, and specific tasks, frame markers ensure clarity and coherence in classroom communication.

TR: you've all done well

Let's go to some of the preparations when people get married

ST: background information

TR: let's go to the next sub-topic. Reasons why......have I mentioned that? Okay, we want to talk about the three processes of marriage. (SSV)

Now, who will help us to plot the point **now,** for both x and y?

So, how do we determine the root of the equation **now**?

by now, you should finish your work (MV2)

As illustrated above, frame markers were used to mark the beginning and sub-sections of a lesson. The frame markers guided students to follow each section of a lesson and to participate in the classroom discussion. By announcing the sequences in the lesson, teachers kept learners mindful of the important critical stages in the classroom discourse.

Consequently, frame markers provided important scaffolding for learners by signaling the structure and progression of discourse during instructional exchanges. In present study several examples demonstrated the strategic placement of frames to pace lessons and cue students as to the impending focus or activity. In one English class discussion, the teacher articulated they would "first look at the functions of the noun" before "moving on to pre-modification quickly". This upfront framing allowed students to mentally prepare for and follow the sequenced material. In a social studies lesson on 'Marriage Preparations', after summarizing the prior section's accomplishments, the teacher framed the next piece as "let's go to some of the preparations when people get married". Such procedural frames optimized comprehension by partitioning complex topics into discrete chunks.

Additional instances saw a teacher flag the 'next sub-topic' through framing just before the introduction. This explicit staging provided students with temporal and thematic signposts for orienting ideas within unfolding content. The current study corroborates the findings of Schiffrin (1987), Flowerdew (2015), and Mensah (2021) that frame markers are essential in signaling a new topic or subtopic in discourse.

Enhancing Classroom Engagement

Additionally, frame markers also served to enhance interaction and engagement in the classroom. The engagement function of frame markers is achieved through the use of inclusive expressions. By using inclusive language like "Let's go," "we will first look at" and "I want to introduce you," the teacher fosters a sense of partnership and shared inquiry in the classroom. This engagement strategy is supported by research on interactive teaching methods, which emphasize the importance of involving students

actively in the learning process to enhance understanding and retention (Flowerdew, 2015). This is contained in the extracts below.

Let's go to some of the preparations when people get married

Let's go to the next sub-topic.

we want to talk about

Thus, by using these metadiscourse resources, teachers effectively set classroom goals, signal stages in discourse, and enhance classroom engagement. Frame markers helped to organize the classroom discourse to clarify the structure and purpose of the lesson in the learning process. For instance, the expression "we want to talk about" serves a pivotal role in classroom interactions by clearly introducing the main focus and intention of an upcoming discussion. This phrase acts as a frame marker, which, according to Hyland (2005), is a type of metadiscourse that helps organize discourse and guide listeners through the content. By stating "we want to talk about," the teacher signals a shift to a specific topic, thereby providing students with a clear roadmap of the lesson's structure. This approach aligns with research on the importance of metadiscourse in educational settings, where it enhances comprehension, retention, and interactive learning (Hyland, 2005; Flowerdew, 2015).

Endophoric Markers

Endophoric markers are words or phrases that refer to something that has been previously mentioned or is otherwise known to the participants in a conversation. In other words, endophoric markers are used to refer to information in other parts of a text (Hyland, 2005). They are used to avoid repetition and to create a sense of cohesion and flow in the discourse. In this study, I found that the most common type of endophoric marker used in classroom interactions is anaphorics. These included the use of words such as *this*, *that*, *these*, *those*, *the previous*, *here*, et cetera. The current

study has found that endophoric markers were used in classroom interactions to achieve the following communicative functions.

Guiding Learners' Focus

In classroom interactions, endophoric markers (anaphorics) *are* frequently used by teachers to refer to concepts, ideas, and objects that have been introduced, are under discussion, or are discussed earlier in the lesson. This helps to maintain the focus of the conversation and to avoid confusion. The extracts below support these findings.

When you observe the equation **here**, you realize that the left-hand side is the quadratic curve, true or false?"

"So, these are the values we're going to plot." (MV2)

We still have "good" here. We are underlining all three, all three words underlined. Which of these words is a noun? Yes!!

"here, we are looking at nouns" (ENGV1)

The above extracts show instances where the teachers use the endophoric markers to refer to aspects of the ongoing lessons on the board. The markers are used to refer students to the important aspects of the lesson such as equations, figures, and values. Li et al (2020) examined the use of endophoric markers in teacher-student talk in English as a foreign language (EFL) classrooms. The study found that teachers used endophoric markers more frequently than students, and that the most common type of endophoric marker used was anaphoric markers. The findings of this present study therefore confirm the findings of Li et al (2020).

Building on Previous Knowledge

Teachers also used the expression; *you know as an endophoric* marker to refer learners to parts of the lesson that constituted common knowledge previously shared. Such

words helped teachers to refer to concepts, ideas, and objects that have been previously mentioned or are otherwise known to the participants in the conversation. This helped to avoid repetition and to create a sense of cohesion and flow in the discourse. The extract below lends support to this finding.

So, you know every time if you are to change a number from setting base to Base10, you do so by expansion as simple as what ABCD. (MV1)

Alright, examples of plants that undergo self-pollination. You have an idea. You **know** that the plant must be bisexual and it must have both stamen and pistil. Good. Just one example. (ISV)

The last time, we looked at some paragraphs of which we were able to locate the topic sentence

And we saw or as we learnt last semester before we went home, we learnt that the topic sentence can be at the beginning of the paragraph or in the middle at in the end. We came up with the topic sentence and even came up with the, the summary of that paragraph as we did last week, I gave you one paragraph.

(ENGV2)

As captured in the extracts above endophoric markers, such as "the last time," "we saw," "as we learnt," and "as we did last week," play a crucial role in classroom discourse by building on students' previous knowledge. By using "you know," "as we did last week," and others the teachers prompt learners to recall information they have already learned. This strategy helps to invoke learners' previous knowledge in relation to the content and enabled easy assimilation of the new content. This promotes reinforcement, helps solidify the learners' understanding, and ensures that new information is integrated with existing knowledge. This aligns with the findings of Li et al. (2020) and Flowerdew (2015) who argue that endophoric markers promote knowledge retention in the classroom.

Reinforcing Prior Knowledge

Secondly, these markers reinforce prior learning by prompting students to recall and apply previously acquired knowledge. For example, when a teacher says, "as we learnt last semester," they are reminding students of concepts or skills covered in a previous term. This reinforcement is essential for solidifying understanding and integrating new information with existing cognitive structures (Anderson, 2000). By linking new content to familiar concepts, endophoric markers facilitate deeper learning and retention. This is shown in the extracts;

The last time, we looked at some paragraphs of which we were able to locate the topic sentence

And we saw or as we learnt last semester before we went home, we learnt that the topic sentence can be at the beginning of the paragraph or in the middle at in the end.

we came up with the topic sentence and even came up with the, the summary of that paragraph as we did last week, I gave you one paragraph. (ENGV2)

The present study has found that endophoric markers serve as bridges between past and present lessons, and help in reinforcing learning. By effectively leveraging these markers, teachers can enhance the clarity and effectiveness of their instruction, ultimately improving students' learning outcomes. This approach aligns with the findings of Hyland (2005) and Flowerdew (2015), highlighting the importance of metadiscourse awareness in educational contexts.

Code Glosses

Code glosses are brief annotations or labels used to identify and categorize specific segments of text, speech, or other forms of communication (Hyland, 2005). Examples of code glosses include *example*, *such as*, *in other words* and *namely*. Code glosses help elaborate or exemplify ideas in communication to assist readers/listeners in grasping meaning (Hyland, 2005). The functions of code glosses in the current study are thematized and discussed below with appropriate excerpts.

Enhancing Clarity

The study finds that teachers used the examples of code glosses categorized by Hyland (2005) sparingly to support students' learning in the classrooms. The few instances observed saw teachers use the expressions, *example* and *for instance* to provide clarity within the context of classroom learning as shown in the extract below.

You can beg to differ per what we've seen today

So, the question above is **an example**.

And this is **example** of a paragraph giving us supporting sentences that is supporting a paragraph above. So, the one above is the one which is going to have the topic sentence. **(ENGV2)**

And I said, another word for bisexual is what?

That day, I even used humans to make an example.

Salima, do you remember? (ISV)

For instance, 23 is base 10. And also maybe for instance, 46 by 7 you know you use the first digit to multiply the base which is 4 * 7 and then also, the 6 to multiply the base.

So, for instance, 46 base-7 will be 6 * 34 * 7 exponent one in a bracket + 6 * 7 exponent 0 in a bracket and you add you multiply, and add. (MV1)

So, **it's also called** hermaphrodite, okay? If bisexual **means** the flower has both male and female reproductive parts, that **only means** that this unisexual plant has only one reproductive part. (ISV)

By offering tangible instances, teachers helped their students to grasp the concept being discussed. For example, in the provided text, "for instance, 23 is base 10" clarifies the concept of numerical bases by giving a specific, easy-to-understand example. This helps students visualize and understand the otherwise abstract mathematical concept. In classroom interactions, these expressions are pivotal for effective teaching. They not only aid in the immediate comprehension of complex

ideas but also facilitate long-term retention by linking new information with previously understood concepts. Teachers frequently used examples to bridge the gap between theoretical knowledge and practical understanding, thereby enhancing the overall educational experience. Flowerdew (2015) confirms the use of discourse markers, including expressions like "for instance" and "example," in educational contexts. These markers help in structuring discourse, signaling elaboration, and ensuring the listener's understanding, which aligns with their use in classroom settings in the current study.

Amplifying Relevant Notions

Additionally, code glosses were instrumental in the amplification of concepts and notions made by teachers in the classroom. In the excerpts provided from classroom interactions (MV2 and ISV), we can observe how teachers utilized code glosses to amplify concepts and notions, particularly in the contexts of mathematics and biology instruction.

This is illustrated in the extracts below.

So, that means we will determine it on the x-axis, is that not so?

Therefore, the A part, the root of the equation are, x equal to negative one or x equal to 3. That's all.

So, in that case, you count the smaller boxes, ten of them before you go to one on the x axis. (MV2)

So, what we are saying is that, this is plant A, alright?

This is one flower, this is another flower, okay?

What I'm saying is that, in Self-pollination, you can have this flower... (ISV)

In the first excerpt from MV2, the teacher employed code glosses to guide students through the process of determining roots of an equation. By using phrases like "So, that means" and "in that case," the teacher reinforces key concepts and connects

ideas, ensuring that students understand the logical progression of the problem-solving method. For instance, the statement "So, that means we will determine it on the x-axis, is that not so?" serves to reiterate the focus on locating roots on the x-axis, clarifying the approach for students. Similarly, the subsequent explanation of the roots of the equation reinforces understanding by providing a concise summary of the solutions: "Therefore, the 'A' part, the root of the equation are, x equal to negative one or x equal to 3. That's all." This clear and succinct articulation helps students grasp the main points of the mathematical concept being discussed.

In the second excerpt from ISV, code glosses are again employed to elucidate concepts related to plant biology, specifically self-pollination. The teacher uses phrases like "So, what we are saying is that" and "What I'm saying is that" to emphasize key ideas and make connections between different components of the lesson. By providing a verbal cue to signal the introduction of a new concept or clarification, the teacher aids students in following the discourse and understanding the significance of the information being presented. For example, the statement "So, what we are saying is that this is plant A, alright?" serves to orient students to the topic under discussion and establish a clear starting point for the explanation. The use of code glosses in these excerpts aligns with pedagogical principles aimed at promoting clarity, coherence, and engagement in classroom discourse (Seedhouse, 2004). The current study confirms that by providing verbal signposts and elaborating on key points, teachers create a supportive learning environment where students feel empowered to participate actively in the learning process (Subtirelu, 2015). Furthermore, the strategic use of code glosses enhances students' ability to make connections between different components of the lesson and deepen their understanding of complex concepts (Flowerdew, 2015).

4.2.2 Interactional Metadiscourse Markers

Interactional metadiscourse markers are linguistic elements used in communication to manage social interactions, express attitudes or emotions, and guide conversational flow (Hyland, 2005). These markers were found to play crucial roles in facilitating effective communication and fostering rapport between teachers and learners in the classrooms. According to Hyland (2005), interactional metadiscourse resources are a type of metadiscourse resources that aid in managing the interaction between the speaker/writer and the audience. More specifically, they are linguistic resources used to engage the audience, acknowledge their presence, and create a sense of shared understanding between interlocutors. The interactional metadiscourse resources classified by Hyland (2005) include hedges, boosters, attitude markers, engagement markers, and self-mentions. Again, these metadiscourse resources and their specific functions in the present study are shown in the table below and followed by a detailed discussion of the findings.

Hedges

Hedges are a type of metadiscourse marker that helps speakers and writers to express uncertainty, doubt, or hesitation (Hyland, 2005). Hedges, therefore, are used to soften claims, mitigate assertions, and show respect for alternative viewpoints. Hedges can be words, phrases, or clauses that indicate a degree of uncertainty or tentativeness. The current study finds that hedges are used in classroom interactions for two main functions; moderating certainty and introducing subjectivity. These are further discussed as follows.

Moderating Certainty

The current research reveals that in the SHS classroom, both teachers and students use hedges to express uncertainty about their claims, to avoid making a strong claim that they cannot support with evidence, and to create a more tentative or cautious tone. Hedges were equally used by the teachers to reduce their relative commitment to the statements made as asserted by Hyland (2005). For instance, the use of the verb I *think* (ENGV-T) expresses an opinion rather than a statement of fact. This reduces the relative commitment of the teacher to the answers provided. In a similar vein, both the student and the teacher (ENGV-S) and (ENGV-T) used negation of the verb *think* to indicate less commitment to their positions. For instance, in the extract below, I found that teachers used hedges to reduce their commitment to the propositions made during their classroom instruction. The findings are illustrated in the extracts below.

I can say, mine is negative 2.5"

"That is what I had

"Somebody will say, 2.3"

"Or x is equal to, then I will trace this one too"

"I think this one also will be positive 2.25" (MFV2)

TR: the subject,.. the subject. Are you sure?

ST: I don't think...

TR: you don't think?

ST: I don't think so (ENGV1)

The teacher in MV2 consistently used hedges to indicate uncertainty about the answers provided. Although this was a mathematics class and the teacher is expected to be factual about figures, the use of expressions such as "*I can say, mine*", "what *I had*" and *I think*, clearly reveals that the teacher is unsure about the answers and technically expressed that through the strategy of hedging.

Hedges play an important pragmatic role in discourse by moderating certainty and inviting dialogic inquiry (Hyland, 2005). As revealed in this study, teachers strategically employed hedges to reduce epistemic authority and promote more tentative stances. Using opinion verbs like "I think" conveyed qualified assertions rather than absolute facts, accordingly lowering commitment levels. Meanwhile, negating verbs as in "I don't think" modeled consideration of alternatives and welcomed challenge, aligning with constructivist pedagogies that position knowledge as evolving.

Similarly, in ENGV1, the use of *I don't think* indicates the personal disapproval of the teacher to the student's answer however, it remained her opinion. Hedges were sparingly used through the opinion-based verbs to ensure less commitment to answers to questions of students. Apart from this, teachers also used other expressions that I found to function as hedges as they were used to express uncertainty, doubt, etc. For example, the expressions *Somebody will say*, 2.3 and *That is what I had* indicate that the teacher is opened to the possibility of varied opinions from the students and the possibility of alternative answers in the Mathematics classroom interaction. This communicative function of hedges in classroom discourse affirms that hedges play a significant role in classroom conversations by expressing humility and courtesy, thereby reducing the perceived hierarchical gap between educators and learners (Hyland, 2009; Subtirelu, 2015).

Introducing Subjectivity

Additionally, the use of hedges was functional in introducing subjectivity into classroom discourse. For instance, the use of "hope" can be seen as a form of hedging in language, as it introduces a level of uncertainty or subjectivity into the statement.

Teachers used the expression "hope" a couple of times during their classroom interactions as shown in the extracts below.

So, all the answers on the board, **I think** they are all on course, huh. They are talking about the three keys we must see. They are all here.

And I think they are all in sentences beginning and ending with a full stop

"I *hope* you remember".

"I hope you had evidence of that"

"I hope you are getting it"

(ENGV-T)

Please are we done? This is what you have been doing since JHS, h33, place value "I hope you remember that term". (MV-T)

When using "hope," the speakers express a desire or expectation, indicating that they are uncertain about the outcome. For example, saying "I hope you remember" suggests that the speaker is not entirely certain whether the listener recalls the information. By using "hope," the teachers hedged their statements, acknowledging the possibility that their expectations may not be realized. By using think and hope, the teachers were able to avoid absolute statements and show awareness of potential errors or limitations (Hyland, 2005).

These findings agree with the findings of Hyland & Jiang (2019) whose studies found that interlocutors often use hedges to indicate uncertainty, invite questions, and depersonalize themselves from the authoritative commitment to statements made. It can, therefore be seen that hedges helped teachers to introduce subjectivity into their lessons and indicate that their statements may be based on their personal opinions or beliefs. This confirms the assertion that hedges are used to express caution or uncertainty, softening the writer's/speaker's claims and acknowledging potential limitations in classroom interactions (Lee & Subtirelu, 2015).

Boosters

Boosters are metadiscourse markers that help speakers and writers emphasize their messages, express confidence, and show conviction (Hyland, 2005). Unlike hedges, they are used to strengthen claims, reinforce assertions, and convey certainty. Boosters can be words, phrases, or clauses that intensify the force of an utterance. Examples of boosters as stated by Hyland (2005) include *in fact, definitely*, and *it is clear that*. The current study identified some resources that were used as boosters in classroom interactions for the following functions.

Reinforcing Assertions

Reinforcing assertions refers to making an emphatic statement that affirms a previous submission in the classroom. A further use of boosters is observed in science classroom interactions was functional in reinforcing assertions made by teachers as indicated by the following extracts.

That will never happen
Unless of course, you are doing some kind of artificial propagation
But naturally, in pollination, that does not happen, okay?
The pawpaw is a species on its own. Orange is a species on its own. Do we get it? (ISV)

The use of these expressions indicated emphasis, except in the case of *unless of course*, where the teacher combined both a hedging and a booster device to hedge and boost at the same time thereby hedging while at the same time emphasizing what is likely to happen as a result of the hedging rather than emphasizing his or her position on the answer given to the students. This nuanced use recognized uncertainty while prioritizing likely outcomes, modeling sophisticated epistemic stance negotiation. Therefore, the present study reveals that teachers used booster markers in the form of emphatic verbs as well as expressions that reinforce the importance of their positions or relevance factuality of an aspect of their lessons. This finding aligns with the theoretical framework and is in similitude to the findings of Biber et al. (2004) who

aver boosters are used by interlocutors to assert confidence during their communication. Scholars such as Hyland (2005) and Vaughan (2020) highlight boosters' role in expressing certainty, confidence, and conviction in the speaker's statements. This study, therefore, extends the literature and makes significant contribution to the roles of metadiscourse markers (boosters) by exploring their functions within the classroom context.

Attitude Markers

Attitude markers are a type of metadiscourse that convey the writer's or speaker's personal attitudes, feelings, or assessments regarding the content being discussed (Hyland, 2005). These markers help to express stance and engage readers or listeners by revealing the author's viewpoint, which can make the discourse more persuasive and relatable. The current study finds that attitude markers of various kinds were used to promote equal participation, make appreciation, and foster teacher-student relationships among other significant functions in classroom interactions.

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Promoting Equal Participation

The theme of "promoting equal participation" refers to creating an environment or setting where all individuals have an equal opportunity to contribute, share their perspectives, and actively engage in discussions or activities. In the present study, it is noticed that there were instances where teachers assigned roles and distributed tasks to students in the classroom equally. This underscores the deliberate effort by teachers to encourage and include both female and male students in specific classroom interactions and activities, ensuring their active engagement and representation in academic discourse. For example, the extracts below show instances where attitude markers are used to assign roles and encourage equal participation.

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TR: So let me ask anyone to summarize what we have done for us a short

summary

Yes, I want a female.

TR: this time, is time for the boys

STS: Yeah, Madam, thank you

TR: the first time was done by **a girl**. Now, we want **a boy**. (MV2)

This extract contains the teacher's reactions to students' responses to his or her

questions. The teacher established that she preferred a female student to answer the

questions. Attitude markers convey important evaluative stance taking which shapes

classroom dynamics. This study uncovered various attitudinal expressions employed

strategically by teachers. Directly indicating preferences through gendered or spatial

language modeling normed socio-pragmatic expectations. For example, "I want a

female" and later, "this time, is time for the boys" guided equitable participation.

Moreover, the teacher expects the students to volunteer to answer the question. This

establishes the teacher's attitude of fairness towards the students and the content being

taught. This finding aligns with the findings of Huang et al. (2020) who found that

metadiscourse markers are useful in encouraging active participation between bloggers

and their readers. In the context of classroom interactions, however, this function is

crucial.

Making Appreciations

Moreover, the teacher used attitude makers to express their preference towards the

students' works. The teacher indicated that as shown below.

it's nice.

This side looks very nice.

TR: No, I don't like where you are drawing the "y".

You are leaving the greater part here while here should rather be. Are you

getting it? (MFV2)

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The amazing thing about sunflower is that they can undergo both cross pollination and self-pollination. (ISV)

In the first extract, the teacher used the attitude marker to appreciate the task performed by the student by pointing out that the task completed was *nice* and *very nice* (MV-T). in the next extract, the use of *I don't* and *should rather be* both indicate disagreement and preference respectively. In the second extract, (ISV), the teacher uses the expression "*amazing*" to denote the peculiarity of the *Sunflower*. These instances align with the roles of attitude markers in conveying the writer's stance towards the content, reflecting their evaluation of evidence, arguments, or alternative viewpoints (Hyland, 1998). In MV1, the teacher expressed her dislike towards the place the student was drawing. The use of the expressions such as *don't like* and the adjective '*should rather be'*, indicates the teacher's attitude towards the contents in the instructional process. The study confirms the role of attitude markers in functioning interactively to signify speakers' clear stance towards the propositional content (Hyland, 2009; Subtirelu, 2015). The findings further align with the use of attitude markers by teachers to continuously-assess-both the subject matter and students in the classroom (Lin, 2012).

Expressing Emotional Stance

In classroom interactions, teachers often use various metadiscourse resources to express their affective stance, thereby building rapport and creating a supportive learning environment. Terms of endearment and familiar forms of address, such as "my sister," "boyfriend," and "my dear," serve as affective markers that convey the teacher's emotional engagement and personal connection with the students. These expressions play a crucial role in making the classroom environment more inclusive and emotionally supportive, fostering a sense of belonging and mutual respect.

The expression "my sister," as used by the teacher in the context of classroom interaction, serves to establish a familial and close-knit atmosphere. By referring to a student as "my sister," the teacher breaks down formal barriers and creates a sense of camaraderie and kinship. This term can help students feel more comfortable and valued, which is essential for fostering a positive and engaging learning environment. It signifies the teacher's attempt to build a supportive and inclusive classroom culture where students feel connected not just as learners but as part of a larger community.

Similarly, using "boyfriend" as a form of address in the classroom context is a less conventional but equally significant marker of the teacher's affective stance. This term can be seen as a playful and informal way of engaging with students, potentially reducing the power distance between the teacher and the students. By addressing a student in this manner, the teacher conveys a sense of familiarity and ease, which can encourage students to participate more freely and confidently in classroom discussions. However, it's important to consider the cultural and social context in which such terms are used to ensure they are received positively and do not inadvertently cause discomfort.

Finally, the term "my dear" is a classic expression of affection and care. In a classroom setting, when a teacher uses "my dear," it communicates warmth and encouragement. For instance, in the excerpt "It's okay you've done so well God bless you, my dear," the teacher not only acknowledges the student's effort but also provides positive reinforcement and emotional support. This function aligns with Subtirelu (2015) who found that affective markers are used especially by instructors to indicate the affective position towards their propositions. This study, however, finds that teachers do not only use attitude markers to express their emotional stance towards content, but also

towards their students. This type of affective stance is crucial for boosting students' confidence and motivation. It helps create an environment where students feel appreciated and understood, which can significantly enhance their learning experience.

Building Teacher-Learner Rapport

The concept of teacher-student rapport is the quality of the relationship and interaction between teachers and students within the educational setting (Hattie, 2009). This concept encompasses various elements that contribute to a positive, supportive, and engaging learning environment. Attitude markers also manifested more during interactive problem-solving to steer collaborative knowledge-building through rapportbuilding. The use of special vocatives to address students is observed in this research as equivalent to attitude markers used in classroom interactions to foster rapport building in the classroom. For instance, the expressions "Boyfriend", "my sister", and "my dear" as used by teachers in classroom interactions function as attitude markers that convey the teachers' stance or evaluation of their students. Specifically, "Boyfriend" is used affectionately to address a male student in a familiar but respectful way. This conveys a positive, friendly attitude from the teacher towards that student. "My sister" conveys warmth, care, and protection when addressing a female student. It positions the student as part of the teacher's family and shows a nurturing attitude. Similarly, "My dear" is an endearing term that expresses kindness, care, and concern when addressing a student. In essence, terms like "my sister" and "boyfriend" can help reduce the perceived power distance (Kasuya (2008) between teachers and students. This reduction can make students feel more comfortable expressing their ideas and asking questions, thereby fostering a more dynamic and interactive learning environment.

TR: Let's quickly go to the purpose, why people marry, yes, "my sister" (SSV)

TR: who are you talking about? Boyfriend, can you, do it?

STS: yes!! It's okay you've done so well God bless you, my dear. (MV2)

These expressions were useful in softening instructions or questions with a positive connotation. All three expressions personalized the teacher-student relationship, making it more informal/intimate than just using names or titles. They likely help build rapport and make students feel valued by the teacher. The findings further established that teachers/instructors continuously try to develop connections and rapport through language. Overall, this study affirms the findings of Subtirelu (2015) that teachers use attitude markers to indicate their affective positions toward a proposition or content, thus creating a sense of rapport and connection with their students personally, and professionally.

Overall, the combination of these attitude markers suggests that teachers largely value and encourage student autonomy and active participation and use attitude markers to construct positive relationships with their students but may feel frustrated or disappointed if students do not step forward voluntarily. The use of these words can influence the tone and dynamics of the teacher-student relationship in the classroom.

Engagement Markers

Engagement markers are a type of metadiscourse that directly address and involve readers or listeners in the discourse (Hyland, 2005). They are used to build a relationship with the audience, making the text or speech more interactive and engaging. Engagement markers include elements like questions, directives, reader pronouns, and personal asides. As indicated earlier, engagement markers constituted

the most dominant metadiscourse (45%) used in classroom interactions. As such, they played various significant functions in the classroom.

Promoting Active Engagement

Active engagement in educational contexts refers to students' active involvement, participation, and contribution to learning activities, discussions, and tasks (Dixon et al., 2014). It encompasses behaviors such as asking questions, offering responses, sharing ideas, collaborating with peers, critical thinking, problem-solving, and applying knowledge in meaningful ways. The following excerpts illustrate instances where metadiscourse resources, especially questions and names of students were utilized to promote active engagement.

TR: Which of these words in "the girl is good", I am underlining all three, four words// three words. Which of these words represent a noun in "the

girl is good"?

TR: The girl is good

TR: Yes, Grace

ST: madam, please, "the girl"

TR: "the girl".

TR: Are you sure?

ST: "girl"

TR: are you sure?

ST: yes

TR: do we agree?

STS: yes madam

TR: why? why is the "girl" the noun in the sentence?

TR: Jessica, why is the "girl" the noun in the sentence? (ENGV)

The use of questions and names as metadiscourse resources plays a significant role in promoting classroom participation and active engagement among students. Questions,

were strategically posed by teachers to encourage students to think critically, analyze information, express their ideas, and participate actively in discussions. Similarly, addressing students by their names personalizes the learning experience, creates a sense of belonging and connection, and encourages students to be more attentive and responsive. This function of metadiscourse functions closely aligns with the findings of Huang et al. (2020) who established that metadiscourse helps to encourage active participation during communication. The findings further align with the findings of He and Rahim (2017) who concur that legal documents employ the use of grammatical elements such as modals and declaratives to promote engagement with readers. The current study is distinctive as it establishes the uniqueness of classroom discourse in terms of the resources employed to achieve similar functions. In the classroom context, questions and name-calling were found to be paramount in promoting active engagement.

Further, the current study has found the use of the inclusive "we" to align with promoting active engagement in the classroom. Teachers used the *inclusive* we to ensure that they were actively involved in the learning process as they. The "inclusive we" was used to prove how both teachers and teachers were collectively involved in previous and ongoing learning. This is illustrated in the extracts below.

The last time, **we** looked at some paragraphs of which **we** were able to locate the topic sentence

I hope you remember.

And we saw or as we learnt last semester before we went home, we learnt that the topic sentence can be at the beginning of the paragraph or in the middle at in the end. (ENGV2)

We still have "good" here. We are underlining all three, all three words underlined. Which of these words is a noun?

We are starting from here. Yes, volunteer, girl, one girl.

Depending on the context **we** find it, they may be noun in another context and adjectives in another context depending on what we want it to convey for **us**.

(ENGV1)

Research has established that one of the strategies employed in EAP classrooms to foster active engagement is the use of the inclusive "we". The findings of this study therefore align with those of Hyland (2009), Lee (2009), and Subtirelu (2015) which all emphasize the role of the "inclusive we" in promoting active classroom engagement. It is noteworthy that the 'inclusive we" was not originally classified as an engagement marker in Hyland's (2005) metadiscourse model. However, the current study and others above have continued to emphasize its function in promoting active engagement, especially in spoken discourse.

Fostering Active Participation

In the present study, engagement markers were usually used by the teachers to encourage active participation from students. In the present study, it was discovered that active participation was achieved through teachers' use of questions extensively and often in a series to engage students. This extract below confirms the use of engagement markers during classroom interactions.

TR: **Please**, are **you** done arranging the pebbles?

TR: Please are we done? This is what you have been doing since JHS, h33, place value

TR: I hope you remember that term

So, we have one tens, two tens and three ones

This is what?... 23

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We are going to arrange this in a different form but this value we call it

what?

All: (23 base 10)

Twenty what?

STS: (3 base 10) (**MV1**)

In the above exchanges, the teacher used questions such as *Please are we be done?*

This is what? ...we call it what? to get the attention of students in the classroom

activity. The questions posed demanded students to respond to the teacher with ves or

no answers or often supply simple answers on whether the students have finished the

classroom activity or not. Frequent questioning therefore served to stimulate thinking,

solicit responses, and assess understanding on multiple levels. Research affirms

questioning enhances long-term retention when thoughtfully applied (Graesser &

Person, 1994). Additionally, the use of personal pronouns We, and You contributed to

the engagement in classroom interactions. Teachers also employed the unique strategy

of ending statements with the wh question word, "what". This strategy was useful in

keeping and sustaining students' attention as it required students to be on the alert to

supply short responses in the form of answers that complete teachers' statements. This

is illustrated in the extracts below.

As can be observed from the extracts above, the use of questions ending in 'what'

allowed either students alone or in some instances, both teachers and students to

provide the needed answers together thus promoting active engagement in the

classroom. The study aligns with the use of engagement markers, such as rhetorical

questions and directives, which are employed to directly address readers and

encourage their active participation. Within the context of spoken classroom discourse,

this study finds the use of engagement markers to be essential in ensuring active

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participation. Both the use of the inclusive "we" and questions were effectively employed to promote active engagement in the classroom. This confirms that one of the primary methods to foster and sustain high levels of student engagement is by employing inclusive language such as "we" and "you" (Lee, 2009).

Evaluating Learners' Attention

The theme of evaluating learners' attentiveness is conceptualized in the current study as the process by which a teacher actively monitors and assesses the focus, engagement, and understanding of students during a lesson. This involves checking if students are following the lesson, understanding the content, and staying engaged with the material. This was realized through verbal prompts, questioning, and other interactive techniques that require students to demonstrate their attention and comprehension in AMAMEZSHS classrooms. This unique function is illustrated in the extracts below.

TR: so, the E part is what?

STS: negative four

TR: We are going to arrange this in a different form but this value we call it

what?

All: 23 base 10. (MV1)

We all agree they are not at the same places in the sentence, are they? (ENGV1)

As can be observed from the above teacher-student interaction, the repetitive questioning with "what" helps to maintain the learners' focus on the task at hand. It signals to the students that their attention is expected, as they need to be ready to respond to the teacher's queries at any moment. The use of "what" in MV1 and question tag in ENGV1 also functions as a diagnostic tool for making impressions about students' attentiveness during classroom interactions at AMAMEZSHS. If a

student or group of students struggles to provide the required response, the teacher can immediately identify that they are not following along, allowing the teacher to assess their comprehension in real-time. Metadiscourse resources have been found to promote active engagement in classroom interactions (Tang, 2017). The present study extends knowledge in this area by asserting that, as part of the engagement efforts, metadiscourse resources are also used to evaluate the level of students' engagement in classroom interactions.

Constructing Collective Knowledge

The theme of "Constructing Collective Knowledge" refers to the collaborative and shared nature of knowledge creation within a group or community (Hamilton, 2018). It emphasizes the idea that individuals contribute to and benefit from collective efforts in acquiring, processing, and applying knowledge. According to Hyland (2005), the use of the inclusive "we" can indicate an engagement marker when it is used to directly address the reader or listener and encourage their participation and involvement. This is because the inclusive "we" creates a sense of shared experience and purpose between the writer and reader, which can help to foster a more interactive and engaging learning environment. For example, by using the collective "We" in the statement "And so we are also interested in identifying form classes when they are put in context", the teacher tries to engage the students in the task of identifying form classes as a share and collective interest needful of their active involvement. This directly addresses the students and encourages them to participate in the classroom discussion. The use of the inclusive "we" in this context creates a sense of shared experience and purpose between the teacher and students, which can help to make the learning experience more engaging and interactive (Hyland, 2005). Using engagement markers "we" and "you" the teacher was able to engage the students in the classroom activity of counting pebbles in order to understand number basis in mathematics. The use of engagement markers provided effective strategy for engaging the students and guiding them to participate in the classroom discourse. Use of inclusive pronouns like "we" and "you" however, positioned learners and teachers as co-creators within shared experiences, aligning with sociocultural perspectives emphasizing learning as collaborative meaning-making (Mercer & Littleton, 2007).

Another engagement strategy employed by teachers involved the use of the verb *let* with the collective object pronoun *us* to form the contraction *let's* as shown in the below extracts.

TR: Let's go to some of the preparations when people get married. (SSV) So, let's list them; base ten numerals we have 0,1,2,3,4,5,6,7,8,9 and ... no, it ends at what? (MV1)

"...there are lots of nouns in the classroom so let's employ different nouns."
"...and let's look through and see whether it will answer what to get the

subject. (ENGV1)

This is used to form mild instructions that seek students to perform one task or another while being mindful of the teachers' commitment and involvement in the task. Expressions such as *let's phrase, anytime that you see a numeral,* and *let's list them* provide circumstances of teachers reminding students to note this collective engagement.

Moreover, the study also revealed that teachers employed direct address or name-calling as a strategy to achieve engagement markers and promote active engagement. In the present study, I discovered that teachers intermittently mention the names of students or point at them as a form of engagement in the classroom discourse. For instance, in the extract below, the teacher used vocatives to engage a particular student in the classroom discourse.

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That girl, is she sleeping or what?

Melisa, get up!

Yes, **Desa**, what are nouns? Define nouns and let us quickly move on

What are nouns? (ENGV1)

In this extract above, the teacher used the vocative "Melisa" as an engagement marker

to get attention of the student to wake up from sleep. The use of the vocative, Melisa,

ensured the direct engagement of the student. Similarly, the teacher in English

language class used vocatives to mark engagement. Additionally, the teacher also used

the vocative, Desa, to engage a particular student to answer the question. The

subsequent interaction equally was directed to the student because the teacher has

already used the engagement marker, vocative, to establish connection with the

student.

Building Rapport

As established, earlier, metadiscourse resources can be instrumental in building rapport

with the intended audience (Huang et al. 2020). Similarly, the use of special vocatives

to address individual students in the classroom contributed to building rapport, thereby

reducing tension and making the learning environment friendly. These special

engagement cues were instrumental in reducing tension between students and teachers

and promoting cordiality. For instance, in a particular class, I found that a teacher made

the statement "Boyfriend, can you, do it?" (MV2) when she needed to engage a

particular student to assist with drawing on the board. In another class, the teacher uses

the expression "my sister" providing another instance in which a teacher used special

vocatives to engage a particular student.

TR: Let's quickly go to the purpose, why people marry, Yes, "my sister" (SSV)

TR: who are you talking about? **Boyfriend**, can you do it?

STS: yes!! (**MV2**)

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Yeah, so ladies and gentlemen this is my paragraph for you. Let's write down the questions and you work in groups huh? (ENGV2)

In this study, it is revealed that teachers employed engagement markers in the form of questions, pronouns, and vocatives to encourage participation, build rapport, promote recall and solicit specific answers from specific students. These instances support the assertion that metadiscourse usage is bounded by specific and social contexts (Jiang (2006). The current study extends the literature on the significance of engagement markers in enhancing communication in classroom interactions. Engagement markers such as questions, directives, and personal pronouns were found to promote active engagement by encouraging students to participate, share ideas, and collaborate with peers.

Self-Mentions

Self-mention involves the acknowledgment and reference to oneself in written compositions (Hyland, 2008). In spoken discourse, particularly in classroom interactions, self-mention serves as a crucial tool for establishing rapport and engaging students by directly involving them in the learning process. Self-mentions refer to instances where speakers or writers refer to themselves, often using pronouns like "I" or "we," to establish a presence in the discourse. In the present study, self-mentions are used to perform three major functions namely, fostering a sense of collaboration, announcing authorial presence, and facilitating inclusive communication.

Creating Group Identity and Sense of Collaboration

Fostering a sense of collaboration refers to creating an environment or culture where individuals or groups work together synergistically towards common goals, and shared

responsibilities, and leverage collective strengths and expertise. The use of metadiscourse markers was found to be useful in fostering a sense of collaboration in the teaching and learning process. Essentially, self-mentions were found to aid in this constructive function of metadiscourse in the classroom. This is illustrated in the excerpts below.

Good so we have 23 base 10

It should have been this way but because it's is 10, we don't write this 10 here. So, we just clean it and we leave it as 23. So, we have two tens, 3 what? Three ones (chorus). When we do this, we are counting and in what base, 10 Then we are counting in what..................... (MV1)

We all agree they are not at the same places in the sentence, are they?

We agree that "goods" is a noun, right? (ENGV1)

The above extracts show the teacher using I to refer to himself or herself and using we inclusively to refer to himself/herself and the students. It also served as a means of engagement with the students in the course of the lecture. By using "we," the teacher creates a sense of collaboration and shared understanding. It suggests that the information being discussed is a joint effort between the teacher and the students, fostering an inclusive and participatory learning environment. Similarly, in the example, "We all agree they are not at the same places in the sentence, are they?" the teacher uses the pronoun "we" again to address the entire class including him/herself. By using "we all," the teacher emphasizes that everyone in the classroom is involved in the discussion or decision-making process. These pronouns constitute what is classified as personal metadiscourse which refers to metadiscursive items which are used to make explicit reference to interlocutors engaged in a communication (Adel, 2010). The findings further confirm the findings of Wu and Yang (2022) who found

that personal pronouns, **I**, **we** and **you** are the most used self-mentions in classroom discourse.

Reflecting Authorial Presence

The use of self-mention "I" reflects the teacher's presence in the classroom discourse. Whereas the self-mention "we" was used to create group identity and a sense of collaboration as discussed above, the self-mention "I" was useful in revealing the presence and authority of the teacher. According to Hyland (2008), the way writers/speakers refer to themselves can convey their confidence, authority, and approachability. The following excerpts confirm the use of the self-mention, "I" to reflect the teacher's authorial presence in classroom interactions.

TR: alright, so, some flowers, like I said earlier, some flowers

And **I said**, another word for bisexual is what?

That day, I even used humans to make an example (ISCV)

I will say it once and for.....

ALL: all

Are you done with one negative four?

I said, negative four

And I want someone to help us

I expect you to use a straight-edge (MV2)

Firstly, the use of the self-mention "I", establishes the teacher as the primary source of knowledge and guidance. When the teacher employs phrases like "I said" or "I expect," it signals to students that the information being conveyed originates from the instructor, reinforcing their role as the authoritative figure in the educational exchange (Lin & Reinders, 2018). This assertion of authority is crucial in maintaining order and focus within the classroom, as students look to the teacher for direction and

clarification. Furthermore, the use of "I" allows the teacher to take ownership of their statements and actions, thereby enhancing accountability and credibility. By explicitly attributing information or instructions to themselves, educators demonstrate confidence in their expertise and demonstrate a willingness to stand behind their assertions (Hyland, 2008). This sense of accountability fosters trust and respect between the teacher and students, facilitating a more productive learning environment characterized by open communication and mutual understanding. This finding aligns with He and Abdul Rahim (2017) who found that self-mentions are used to establish the authority of speakers. However, it is essential to recognize that the excessive use of "I" can potentially overshadow student voices and perspectives, undermining the principles of learner-centered pedagogy (Kumaravadivelu, 2012). Therefore, educators must strike a delicate balance between asserting their authority and fostering a sense of shared ownership over the learning process.

Facilitating Inclusive Communication

Again, the current study has found the use of the verb 'let' with the object form of the pronoun, 'us' (here on described as the 'inclusive us') as a form of self-mention that was instrumental in facilitating inclusive classroom communication. The theme of facilitating inclusive communication encompasses a commitment to creating environments and interactions that promote equity, and foster meaningful connections among all participants. It involves conscious efforts to break down barriers among interlocutors and cultivate a culture of belonging and mutual respect where everyone can thrive and contribute to collective goals and outcomes. The extracts below show instances of the use of inclusive us in classroom interactions.

And then, you can have one where there's plant A and Plant B, all being the same species of plant. Let's say, bougainvillea. Now, let's talk about

the adaptations. Let's do adaptation of plants for cross-pollination. (ISCV)

Alright, so **let's put** this down. **Let's write** down the questions and you work in groups huh? To do that for me. So, **let's work** in pairs as **we** did the other time... in terms of questions too.

So first and foremost, **let's know** the topic sentence; three sentences answering the question. **Let's shine** for ourselves. Alright, **Let's go** ahead. (ENGV2)

By using "let's," the teachers include themselves as part of the classes, signaling a collaborative approach to learning. This fosters a sense of unity and shared responsibility, encouraging students to actively engage with the material and with each other. Inclusive communication is built on the idea of collaboration, where everyone's contributions are valued and respected. The use of "let's" further invites learners to join in the proposed action or activity, creating a sense of invitation and inclusivity. It communicates to students that their input is not only welcomed but also expected, thereby encouraging participation from all members of the classroom community. Inclusive communication prioritizes the involvement of diverse voices and perspectives, and the use of "let's" helps to facilitate this in classroom interactions. The current study affirms the findings of Huang et al. (2020) confirming the use of interactional metadiscourse resources to promote inclusive language in discourse.

The study concludes that self-mentions, particularly the use of "I" and "we," reflected the teacher's authority and facilitated inclusive communication by establishing rapport and fostering a sense of collaboration. Additionally, the inclusive use of "let's" addressed students directly, inviting them to join in activities and promoting a sense of belonging. Overall, these metadiscourse resources played crucial roles in promoting active participation, constructing collective knowledge, and fostering inclusive communication in the classroom.

4.2.3 Other Metadiscourse Resources

Metadiscourse norms can develop differently across educational systems and cultures according to existing literature. For instance, Gai and Wang (2022) highlighted that metadiscourse norms differ across languages and cultures, clearly reflecting cultural variations in academic writing and communication practices. The current study found three other metadiscourse resources that are employed in classroom interactions. These include colloquialisms, code-switching, and vocatives. These communicative techniques were used in the classroom interactions during instruction. The features are analyzed and thematized for their metadiscoursal roles in classroom interactions.

Colloquialisms

Colloquialism was used to perform two main functions in classroom interactions. These are *maintaining conversational flow* and *promoting active engagement*. These forms of verbal cues were employed by teachers to ensure the smooth flow of the interactional process and prompt active engagement and participation from students during instructional activities as shown in the excerpts below.

You know, the plant must be bisexual and it must have both stamen and pistil. Good

Just one example

Yes!!, yes!!, yes!!

You know all the plants we have around here, most of them have their buds at the apex of the plant or on the branches... (**ISV**)

So, you know, every time if you are to change a number from setting base to Base 10, you do so by expansion as simple as what ABCD

For instance, 23 is base 10. And also, maybe for instance 46 by 7, **you know**, you use the first digit to multiply the base which is 4 * 7 and then also the 6 to multiply the base. (MV1).

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The expression "yes, yes, yes" served as a form of solicitation for responses from

students in classroom interactions. When a teacher used this expression, it often

signified an expectation or invitation for students to volunteer a response or

contribution to the discussion. This form of verbal cue is employed by teachers to

prompt active engagement and participation from students during instructional

activities. Similarly, expressions such as "hire a lawyer" or "as simple as ABCD" add

a touch of humor or simplicity to explanations, easing tension and making complex

concepts more accessible to students thereby, promoting active engagement and

participation. Such instances are illustrated in the extracts below.

So, you know every time if you are to change a number from setting bees to

Base 10, you do so by expansion as simple as what ABCD. (MV2)

TR: okay, hire a lawyer. Let somebody be your lawyer

ST: Aba.

(ENGV1)

TR: Have you forgotten?

Okay, take a lawyer quickly. (SSV)

Literature supports the notion that colloquialisms are effective in maintaining

conversational flow and creating a relaxed learning environment. According to

Kuteeva (2014), colloquial language contributes to the coherence and cohesion of

discourse, enhancing the overall communicative effectiveness. Similarly, Purwati

(2020) highlighted the role of informal language in promoting student engagement and

fostering a positive classroom climate.

Code Switching

The teachers also switched from the English Language to Twi in some instances in

order to convey meaning. However, the use of code-switching served metadiscourse

functions in classroom instruction. For instance, in the extract below, the teacher used

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the *Twi* language to raise a question of whether the student had difficulty understanding the English language which the teacher perceived resulted in the student's inability to answer the question. Code-switching was used to achieve two main functions, namely; *connecting academic content* and *enhancing comprehension* as shown in the extracts that follow.

TR: Borsfo na meka no sntease anaa? (doesn't' he/she understand the English I am speaking?)

TR: I am saying that start from "if I have difficulty identifying subjects, I will do this, then say what you will do. Enti monkeka mo ho na yenkə ntemntem (so hurry up and let's move on quickly). (ENGV1)

TR: So that they'll go and do sunsum wiase and know whether there are not any spirituality there. (SSFV)

The sentence "brɔfo na me ka no, ɔntease anaa?" means, "Or doesn't he/she understand the English I am speaking"? Though the use of code switching was rare, it served the purpose of connecting students' understanding to what is being said in English language, in a language that is more familiar. Additionally, it emphasizes the idea that code switching can occur among interlocutors as a way of communicating aspects of their discourses in a language that respects the cultural context of the communicative event. This approach his approach aligns with Cummins' (2000) theory of linguistic interdependence, which emphasizes the positive impact of leveraging students' linguistic repertoires in education.

Vocatives

The use of vocatives in the classroom interactions were also found to perform some specific communicative functions aimed at enhance the effectiveness of classroom discourse. Three main functions were thematized which include *informalizing*

classroom discourse, building familiarity and rapport and invoking shared values. In terms of informalizing classroom discourse, the study found that special vocatives were used by teachers and helped create a more informal atmosphere in the classroom. This was found to be essential for building familial relationships and promoting effective engagement. This in turn revealed a sense of familiarity and rapport between teachers and learners in the classroom. Examples are shown in the excepts below

TR: Let's quickly go to the purpose, why people marry. Yes, my sister. (SSV)

TR: how do we get it?

ST: *Madam*, please, where the curve is touching the x axis.

TR: who are you talking about? Boyfriend, can you, do it? (MV2)

TR: Now, let's talk about the adaptations. What does the flower have that allows it to undergo self-pollination? That is, adaptation of flowers for self-pollination. Children of God, you did the discussion and you presented your work to me. (ISV)

Yeah, so ladies and gentlemen this is my paragraph for you. (ENGV2)

From the extracts, vocatives like "my dear" and "my sister" create a sense of warmth, care, and affection in the classroom environment. They convey a friendly and approachable tone, which can make students feel more comfortable and valued by the teacher. This formalization of discourse helps to break down barriers and establish a sense of camaraderie within the classroom. Additionally, terms like "boyfriend" and "ladies and gentlemen" used in a lighthearted manner added humor and levity to interactions, making the learning experience more enjoyable and engaging for students. This casual approach to addressing students can also contribute to reducing anxiety and promoting a positive classroom atmosphere.

The study however, found that learners' choice of vocatives to address teachers conveyed a sense of respect and formality. Addressing teachers with titles like

"Madam" or "Sir" is a way for students to show respect and acknowledge the authority and expertise of their teachers. It reflects a formal tone in communication, especially in situations where maintaining decorum is valued. In both cases, the teachers and students adopted vocatives to express politeness in terms of classroom interactions albeit, in dissimilar ways. This aligns with the findings of Brown and Levinson (1987) who assert that vocatives like "my dear" can be used as politeness strategies, show respect, and build rapport, and Lakoff (1973) who argues that vocatives dear and honey

can be used to establish a sense of familiarity and camaraderie.

Invoking Shared Values

Finally, teachers made references to shared values in the classroom interactions. The phrase "children of God" and ladies and gentlemen as metadiscourse resources in the classroom serve multiple functions, primarily as an engagement marker and an attitude marker. This phrase appeals to students by creating a sense of community of shared values, thereby fostering a positive learning environment. Attitude markers, which express the speaker's stance, can guide the audience's behavior by reinforcing desirable values and attitudes. As Hyland (2005) suggests, these markers help convey the writer's or speaker's perspective, thereby influencing the audience's reaction and interaction. The use of these resources is captured in the extracts that follow.

Children of God, you did the discussion and you presented your work to me.

You gave me your write-ups

Was that not part of your work? (ISV)

Yeah, so ladies and gentlemen this is my paragraph for you. (ENGV2)

4.2.4 Nonverbal Modes

The most common nonverbal modes identified in the classroom interactions were touch, proximity, and hand gestures. The main functions of nonverbal resources are to show interest or concern, reinforce verbal messages, and enhance classroom communication to promote the learning experience of learners.

The study finds that touch is used sparingly but effectively in classroom settings to convey care and concern, as well as to redirect or refocus students' attention. This was realized especially in moments where teachers sought to provide some form of support to learners while they undertook certain classroom tasks. Proximity and touching students were key strategies adopted to achieve these crucial functions Knapp and Hall (2013), support this view indicating that appropriate touch can create a sense of empathy and support, helping to build a trusting relationship between teachers and students.

Proximity, or the physical closeness between teacher and students, is a powerful nonverbal tool that fosters a sense of inclusion and engagement. Mehrabian (1972) notes that reducing physical distance can signal interest and involvement, making students feel valued and more connected to the lesson. This close interaction encourages a more interactive and responsive classroom environment, where students are more likely to participate and engage actively in discussions. Proximity, was, therefore, used to show interest and engagement, making students feel included and valued (Mehrabian, 1972).

Similarly, hand gestures were employed by teachers to emphasize points and enhance their classroom communication, helping students remember information better (Yang, 2017). They also *conveyed enthusiasm and passion* for teaching and learning, creating a positive and engaging classroom atmosphere (Pan, 2018). Hand gestures, particularly

play a crucial role in classroom communication by visually *reinforcing verbal messages*. As a result, they serve to clarify and emphasize key points, making the spoken content more memorable and understandable for students. Additionally, teachers used hand gestures to illustrate concepts, *indicate transitions between topics*, and *highlight important information*. Further, hand gestures were found to convey the teacher's enthusiasm and passion for the subject, which can be infectious and increase student interest and motivation.

The use of nonverbal modes such as touch, proximity, and hand gestures in the classroom played a crucial role in facilitating communication and enhancing the learning experience. Research has shown that these nonverbal cues can convey empathy, support, and enthusiasm, creating a supportive and inclusive learning environment (Hertenstein, 2002; Goldin-Meadow, 2003; Bunglowala & Bunglowala, 2015).

It is noteworthy that, the interpretations given to the picture illustrations, especially hand gestures, were corroborated by teacher talks which were found to be consistent with the nonverbal cues identified in the classroom interactions as shown in the second image above. This aligns with the assertions of Barge and Oliver (2018) who emphasize that communication is a social process through which individuals interact and create meaning by exchanging verbal and nonverbal messages within specific cultural and social contexts.

The current study establishes that the use of nonverbal modes such as touch, proximity, and hand gestures perform metadiscourse functions that are integral to effective classroom communication. These nonverbal cues not only enhance the delivery of verbal messages but also play a crucial role in creating an engaging, supportive, and

inclusive learning environment. By leveraging these nonverbal resources, teachers can improve their students' learning experiences, promote better retention of information, and foster a positive classroom atmosphere that encourages active participation and interaction.

The second research question of the present study sought to examine the functions of metadiscourse resources used in classroom interactions in the selected school. In terms of RQ2, the current study, has found that metadiscourse resources play a crucial role in classroom interactions by enhancing communication and fostering an effective learning environment, creating a sense of participation and inclusivity. Additionally, the markers guided students through the logical flow of the lesson by indicating relationships between ideas, signaling shifts in topics or stages in the explanation of concepts and fostering rapport among others. The study further found that the functions performed by the metadiscourse resources are somehow multifunctional. Their multifunctionality is evident in their ability to fulfill multiple roles simultaneously, contributing to the clarity, engagement, and comprehensibility of classroom discourse. For instance, "children of God" acts as both an engagement marker and an attitude marker by fostering a sense of community and invoking shared values. Similarly, questions like "Do you remember?" engage students while also serving as a frame marker by connecting current content with previous lessons. The multifunctionality of metadiscourse resources in classroom interactions is confirmed by Flowerdew (2015) and Hyland (2005), who emphasized their multiple roles in structuring discourses. This multifunctionality makes metadiscourse an invaluable tool for educators, as it not only aids in conveying information but also in building rapport, maintaining interest, and ensuring that students can follow and understand the material

being taught. By effectively utilizing metadiscourse resources, teachers can create a more interactive, coherent, and engaging classroom environment.

Variations in Metadiscourse Resources Use Across Core Subjects

Metadiscourse resources play a crucial role in shaping classroom interactions and influencing student comprehension. As educators navigate the complexities of teaching various subjects, the way they employ metadiscourse can vary significantly, reflecting the distinct communicative demands of each discipline. Scholars such as Hyland (2018), Hyland and Jiang (2022) and Thompson (2003) have highlighted how metadiscourse strategies differ across academic fields, impacting the effectiveness of instruction and engagement. The present study identified variability of metadiscourse resources across subjects, focusing on differences in pronoun usage, organizational markers, and clarification techniques to provide further insights into how subject-specific practices shape classroom metadiscourse.

Variations in Types and Frequency of Metadiscourse Resources

The present study has established that learners in the classroom employ a minimal variety of metadiscourse resources that reflect not only their approach to learning but also the social and cultural norms within the educational setting. Titles of respect, such as "Sir" and "Madam," polite expressions like "please," and hedging devices such as "I think" are common examples of metadiscourse resources that learners use to navigate classroom interactions. These resources not only shape the tone and nature of student-teacher communication but also reveal how learners position themselves within the learning environment. Let's explore how these metadiscourse elements function in the classroom and the roles they play in fostering respectful, cooperative, and supportive interactions.

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ST: Madam, please, where the curve is touching the x axis

TR: the subject,.. the subject. Are you sure?

ST: I don't think...

TR: you don't think?

ST: I don't think so (ENGV1)

Additionally, learners used fewer number of metadiscourse resources than teachers.

This is influenced by that fact that learners typically had fewer opportunities for

extended, uninterrupted talk compared to teachers. In many classroom settings

in Ghana, learners contribute in shorter bursts, such as by answering questions, asking

for help, or making brief comments (Davis, 2018). This limited speaking time reduces

the need for complex metadiscourse structures that might be necessary for sustained

explanation or elaboration. Instead, learners tend to focus on concise, direct responses

that don't require as many metadiscourse elements.

Teachers on the other hand, made frequent use of both interactive and interactional

metadiscourse resources to reflect their role as facilitators of learning, helping them

manage the flow of information and enhance comprehension. Given their

responsibility for managing the lesson, teachers tended to use greater repertoire of

metadiscourse resources strategically to ensure that content is both accessible and

engaging. For example, a teacher might use a combination of transition markers, code

glosses, and frame markers within a single explanation to scaffold the content and

emphasize key points. This frequent and diverse use of metadiscourse helps learners

navigate the lesson's structure and reinforces critical information as shown in the

extracts below.

So, that means, we will determine it on the x-axis, is that not so?

Therefore, the A part, the root of the equation are, x equal to negative one

or x equal to 3. That's all.

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. (MV2)

So, it's also called hermaphrodite, okay? If bisexual means the flower has both male and female reproductive parts, that only means that this unisexual plant has only one reproductive part. (ISV)

This study affirms that classroom interactions in Ghana continue to be organized in a teacher-centered way, with teachers controlling the topics, pacing, and flow of discussion (Davis & Seah, 2016; Mardani & Gorjizadeh, (2020)). This format limits learners to responding to prompts, answering questions, or asking for clarification, rather than independently organizing or elaborating on ideas. As a result, learners use fewer organizational markers (like "first" or "next") and code glosses (like "for example") because they aren't responsible for guiding the lesson's flow or clarifying content for others.

Differences in Terms of Function and Purpose

Furthermore, the current study found significant differences in the function and purpose of metadiscourse resource usage among teachers and learners. Teachers and learners use metadiscourse resources to achieve different functions and purposes. For instance, whereas teachers use metadiscourse resources to draw connections between ideas, build a coherent narrative, and relate the material to broader contexts, learners use metadiscourse resources to indicate their uncertainty about propositions, engage teachers directly and exhibit politeness in discourse revealing their attitude towards both their teachers and content. Again, learners in the classroom employ a variety of metadiscourse resources that reflect not only their approach to learning but also the social and cultural norms within the educational setting. Titles of respect, such as "Sir" and "Madam," polite expressions like "please," and hedging devices such as "I think" are examples of metadiscourse resources that learners use to navigate classroom

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interactions. These resources not only shape the tone and nature of learner-teacher

communication but also reveal how learners position themselves within the learning

environment. For example, the use of titles such as "Sir" and "Madam" by learners

highlights the formal relationship that often exists between students and teachers.

These titles serve a social function, acknowledging the teacher's authority and

signaling respect for their role. By addressing teachers with such titles, learners

position themselves as respectful and attentive participants in the classroom,

reinforcing the teacher's role as the primary facilitator of knowledge.

Subject-Based Variations

Differences in metadiscourse resource use were also recorded across the specific

subjects. Significantly, the study found that English and Social Studies and Math and

Science teachers vary in terms of the types and functions of metadiscourse use in

classroom interactions.

One key difference is that whereas English and Social Studies teachers frequently used

the inclusive "we" as an engagement marker, Math and Science teachers preferred

ending their statement with the "WH" question word, "what". In essence, Math and

Science teachers are not only engaging their learners in the classroom but also seeking

and maintaining learners' attention. Ending a statement with "what" often required that

learners provided short phrases or answers in response to the teacher. Such an example

is shown below.

TR: I hope you remember that term

So, we have one tens, two tens and three ones

This is what?... 23

We are going to arrange this in a different form but this value we call it what?

All: (23 base 10)

Twenty what?

STS: (3 base 10) (MV1)

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The above extract taken from MVI shows how the teacher in a Math classroom engages and maintains learners' attention through the lesson by ending statements with "what". Such instances were rare in English and Social Studies classrooms. Unlike the use of "we" and "us" as engagement markers, the use of "what" directly invoked learners' active response and enabled teachers to evaluate learners' attention and commitment to the lesson.

Some differences were also observed in terms of the use of code glosses across the classroom interactions. The observed difference in the use of code glosses between language and Math and Science classes reflects the specific teaching goals and content delivery strategies within each type of classroom. In those classes, code glosses were frequently employed to clarify and elaborate on complex terms or abstract concepts, providing students with concrete examples or simpler rephrasing that enhanced their understanding.

So, that means we will determine it on the x-axis, is that not so?

Therefore, the A part, the root of the equation are, x equal to negative one or x equal to 3. That's all.

So, in that case, you count the smaller boxes, ten of them before you go to one on the x axis. (MV2)

So, what we are saying is that, this is plant A, alright?
This is one flower, this is another flower, okay?
What I'm saying is that, in Self-pollination, you can have this flower...
(ISV)

For instance, in a science class, a teacher in (ISV) explaining self-pollination indicated "So, what we are saying is that, and "What I'm saying is that, in Self-pollination, you can have this flower... These clarifications helped bridge the gap between technical terminology and students' existing knowledge, making challenging content more accessible. The use of code glosses in Math and Science classes seems to align with the

need to explain specialized concepts and facilitate comprehension in subjects where students may not be familiar with the specific terms being introduced. In contrast, English and Social Studies teachers were less elaborate. Code glosses were less commonly observed in these classes, as the primary emphasis is on language application rather than technical explanation.

These differences in the use of metadiscourse resources between English and Social Studies, and Math and Science classes highlight how metadiscourse resources are adapted based on instructional needs. In Math and Science subjects, where the objective often involves mastering specific concepts and terminology, code glosses, for instance, played a crucial role in clarifying ideas and reinforcing understanding. They helped Math and Science teachers scaffold learning by breaking down complex information into more digestible parts, enhancing students' ability to engage with and retain the content. This usage contrasts with English and Social Studies classes, where the focus is more on interactive engagement with language forms and less on conceptual explanations. These further differences illustrate that metadiscourse resources are not just generalized tools but may be selectively employed by teachers based on the educational priorities of each subject area. Metadiscourse resources may therefore contribute to classroom effectiveness by providing content-specific scaffolding, allowing teachers to adapt their communication to best support their students' learning needs.

Another significant difference in metadiscourse resources use among Math and Science, and English and Social Studies teachers was observed in the use of personal pronouns. Math and Science teachers tended to use pronouns like "I" and "you" more frequently, emphasizing a directive and evaluative approach, while English and Social

Studies teachers used inclusive pronouns like "we" and "us," which fostered a collaborative atmosphere and shared sense of purpose. The difference in pronoun usage may be attributed to the underlying pedagogical goals and interactional dynamics in each type of classroom. The differences are shown in the extracts below.

TR: alright, so, some flowers, like **I** said earlier, some flowers
And **I** said, another word for bisexual is what?
That day, **I** even used humans to make an example (ISCV)

(MV2)

In the extracts above from the science (ISCV) and math (MV1) lessons, the teachers' use of pronouns "I" and "you" illustrates a directive approach that reinforces their roles as instructors guiding students through the material. In the science lesson, phrases like "I said" and "I even used humans to make an example" highlight the teacher's authority and responsibility in explaining concepts, positioning them as the primary source of information. Similarly, in the math lesson, the teacher's statements, "I expect you to use a straight-edge" and "Are you done with one negative four?" directly address students, using "you" to assign tasks and set expectations. This use of "I" and "you" establishes a clear instructional hierarchy, with "I" signifying the teacher's authority and instructional role, while "you" emphasizes the student's role as the active participant who must follow the teacher's guidance. These pronoun choices reflect a structured, goal-oriented classroom interaction style, where the teacher directs and monitors students' actions, ensuring alignment with the lesson objectives in both science and math contexts.

In the English language lesson extracts (ENGV2 and ENGV1), the teacher's frequent use of inclusive pronouns like "we" and "us" (as in "let's") reflects a collaborative and participatory approach, fostering a shared sense of purpose in the classroom. Statements such as "let's put this down," "let's work in pairs as we did the other time," and "let's go ahead" emphasize joint effort and collective responsibility, as if teacher and students are working as a team. By saying "we want to talk about the three processes of marriage" or "we will first look at the functions of the noun... and then move on," the teacher positions themselves alongside the students, framing the learning experience as a shared journey. This use of "we" and "let's" aligns with the interactive and exploratory nature of language learning, where participation and dialogue are essential. Unlike the directive use of "I" and "you" in Math and Science lessons, these inclusive pronouns helped create an environment where students feel engaged as co-participants, which can reduce apprehension and encourage active involvement in the learning process.

Alright, so let's put this down. Let's write down the questions and you work in groups huh? To do that for me. So, let's work in pairs as we did the other time... in terms of questions too.

So first and foremost, let's know the topic sentence; three sentences answering the question. Let's shine for ourselves. Alright, Let's go ahead. (ENGV2)

let's go to the next sub-topic
Okay, we want to talk about the three processes of marriage. (SSV)

There are two major things we are likely to do before we move on. We will first look at the functions of the noun.....nouns and then move on to the premodification quickly. I want to introduce you quickly to the premodification before we come back to the function. (ENGV1)

In conclusion, the present study found that teachers seem to adapt their metadiscourse styles to meet the unique demands of each subject (Hyland & Jiang, 2022). Math and

Science teachers often use directive pronouns such as "I" and "you" to establish authority and provide clear guidance, reinforcing an instructional hierarchy that supports precise content delivery. In contrast, English and Social Studies teachers favor inclusive pronouns like "we" and "us" through phrases such as "let's" to create a collaborative and interactive learning environment. This inclusive language positions both teacher and students as partners in the learning process, promoting engagement, and shared responsibility. These variations demonstrate that metadiscourse resources are not only content-specific but also serve distinct pedagogical functions, enhancing classroom dynamics and supporting effective teaching aligned with subject-specific goals (Jiang & Hyland, 2021).

4.3 RQ3: What are the perspectives of teachers on classroom interactions and the use of metadiscourse resources at AMAMEZSHS?

This research question explored the teachers' perspectives on metadiscourse markers in classroom interaction. While numerous studies have examined the linguistic features and functions of metadiscourse in written and spoken texts, there appears to be a gap in the literature concerning teachers' perspectives on its use in educational settings. Despite the recognized importance of metadiscourse in facilitating effective communication and comprehension, little attention has been given to how teachers perceive and employ metadiscourse resources in their instructional practices. Therefore, this study to explored teachers' perspectives on the use of metadiscourse resources in classroom interaction, shedding light on their understanding, attitudes, and practices regarding this linguistic phenomenon. By examining teachers' insights and experiences, this research contributed to the existing body of knowledge on metadiscourse and informed strategies for its effective integration into educational contexts.

The research categorized the perspectives into perspectives of language teachers (PLT) and non-language teachers (NPLT). The aim of categorizing the perspectives into language teachers (LTs) and non-language teachers (NLTs) is to understand how different groups of teachers perceive and utilize metadiscourse markers in classroom interaction. This categorization allows for a more nuanced analysis of the perspectives, considering that language teachers may have a deeper understanding of linguistic features and their impact on communication, while non-language teachers may approach metadiscourse from a different angle, focusing more on its practical implications or effectiveness in facilitating learning. The analysis was organized and discussed under major themes.

The study reveals that teachers see metadiscourse as crucial for guiding readers and making arguments more coherent. Students, on the other hand, often struggle to understand the appropriate use of these markers without explicit instruction.

Metadiscourse Resources Enhances Classroom Interactions

The study reveals that teachers at AMAMEZSHS consider metadiscourse resources as crucial in guiding learners through the various stages of their lessons to ensure that learners assimilate content easily. For instance, teachers believe that the use of metadiscourse resources helps them to properly elaborate, summarize or place emphasis on key aspects of their lessons during teaching. This is shown in excerpts from teachers' responses below.

I often use expressions like "note" or "take note" often to emphasize key points for learners and summarize ideas so that they can know what to focus on for exam purposes, especially. (PLT2)

As indicated in the extract above, PLT2 reveals that emphasizing key aspects of an ongoing lesson is crucial in the classroom. The use of expressions such as "note" or "take note" to emphasize key points and summarize ideas, provides valuable insights into strategies that can enhance classroom interactions and improve student outcomes.

The teacher's practice of using phrases like "note" or "take note" serves as a powerful metadiscourse tool. By explicitly signaling important information, the teacher helps students identify and focus on critical content. This approach is particularly beneficial in preparing students for exams, as it directs their attention to the most relevant material. Highlighting key points ensures that students are aware of what is essential, thereby reducing cognitive load and enhancing retention.

Summarization is another metadiscourse strategy that plays a pivotal role in enhancing classroom interactions. By summarizing ideas, the teacher provides students with a clear and concise overview of the lesson's main concepts. This not only reinforces understanding but also helps in organizing information in a coherent manner. Summarization aids in the consolidation of knowledge, making it easier for students to recall and apply what they have learned. Again, using metadiscourse markers such as "note" or "take note" can significantly improve student focus. These markers act as cues, signaling to students that the information that follows is important and warrants their attention. In a classroom setting where distractions are common, such cues are essential in keeping students engaged and attentive. When students know what to focus on, their engagement with the material increases, leading to more meaningful interactions and discussions.

For exam preparation, the use of metadiscourse markers is particularly advantageous. By directing students' attention to key points that are likely to be tested, the teacher helps them prioritize their study efforts. This targeted approach to learning ensures that students are well-prepared for exams, reducing anxiety and improving performance. Additionally, it fosters a sense of confidence as students feel more in control of their learning process.

Again, perspectives of teachers at AMAMEZSHS reveal that using metadiscourse resources such as questions and direct addresses in classroom interactions has a notable impact on student engagement and participation. When teachers incorporate these markers, students tend to be more attentive and feel more involved in the lesson. This sense of involvement likely stems from the interactive nature of questions and direct addresses, which invite students to actively participate in the discourse rather than passively receive information. Consequently, these metadiscourse strategies foster a more dynamic and interactive learning environment, enhancing overall student engagement and participation. The above findings confirm the assertions of Hyland, (2005), Tang (2017) and Lee and Subtirely (2015) that metadiscourse resources could help promote effectiveness of teaching and learning.

"It helps me create a more positive and inclusive classroom atmosphere. Anytime I use words like "dear or boyfriend, students feel more comfortable sharing their ideas and participating in discussions." (PLT1)

In conclusion, the perspectives of teachers at AMAMEZSHS classrooms reveal a deep appreciation for the significant roles of metadiscourse resources to enhance their classroom interactions. The perspectives of the teachers further confirm the assertions of Hyland and Tse (2004) and Hyland (2018) that metadiscourse resources can help improve spoken classroom interactions.

Metadiscourse Resources Help in Collaborative Learning

Furthermore, teachers at AMAMEZSHS find metadiscourse resources to be instrumental in ensuring collaborative learning in their classrooms. The use of inclusive language and the encouragement of student engagement are key strategies for ensuring collaborative learning in the classroom. A teacher at AMAMEZSHS emphasizes this approach by saying, "By using inclusive language like "we", "us" or "our" I try to help build a sense of community. Students are more willing to share their thoughts and work together." This statement underscores the importance of creating an environment where all students feel valued and heard. Inclusive language fosters a sense of belonging, making students more likely to participate and collaborate.

"Mostly, I try to make my students aware that the lesson, especially the activities or solving problems, we are doing it together. Like I'm also part, you know. That's why I mostly use we or us. I think it even helps students to work together too."

(PLT2)

Another teacher highlighted the role of metadiscourse markers in facilitating collaborative learning when she said;

"I try to highlight the importance of different viewpoints during discussions. I normally don't impose my opinion or answers. If I say 'I think,' this helps students appreciate that there can be diverse perspectives." (PNLT1)

My students and I work together in the classroom. I have expressions like once and for... and they must all respond with the last word or expression. They have to say it or it means they are not paying good attention. (PNLT2)

The above perspectives of teachers show reveal their strategic use of metadiscourse resources to encourage students to understand that multiple viewpoints can coexist, promoting critical thinking and mutual respect. By not imposing their own opinions, teachers create a space where students feel safe to express their ideas and consider

others' perspectives. Research supports these approaches. Hyland (2018) notes that metadiscourse markers like questions and hedges (e.g., "I think") can enhance interaction and understanding by making the discourse more dialogic. Ädel (2021) also emphasizes the importance of metadiscourse in creating a collaborative learning environment, as it helps to manage classroom interaction and engage students in the learning process.

In summary, ensuring collaborative learning involves the strategic use of inclusive language as metadiscourse resources to create a supportive and interactive classroom environment. By valuing diverse perspectives and encouraging active participation, teachers at AMAMEZSHS foster a sense of community and enhance the overall learning experience through the use of metadiscourse resources.

Metadiscourse Resources Make Learning Environment Engaging

Engaging and sustaining learners' attention or understanding are fundamental aspects of effective teaching. The strategic use of metadiscourse markers, such as questions and ending statements with "what," was found to play a significant role in achieving these goals (Subtirelu, 2015). Teachers' responses further highlight the effectiveness of these strategies in creating a dynamic and participatory learning environment. The following are some perspectives of teachers.

"Anytime I end a statement with "what", I expect the learners to provide a quick response and that makes me to know they are listening or following the lesson."

(PLT1)

"My students and I work together in the classroom. I have expressions like once and for... and they must all respond with the last word or expression. They have to say it or it means they are not paying good attention." (PNLT2)

These responses above reflect a deliberate use of language to create an interactive and engaging classroom atmosphere. Ending statements with "what" or using call-and-response techniques are effective ways to keep students focused and involved. More significantly, the teachers' responses show how metadiscourse strategies can be used to evaluate discourse itself (Subtirelu, 2015; Tang, 2017) but in another strategic fashion, to evaluate and assess the level of attention of learners in classrooms at AMAMEZSHS. This particular perspective enhances our understanding of metadiscourse resources in spoken academic discourse.

When students successfully respond to call-and-response prompts, it indicates they are attentive and engaged. Conversely, a lack of response highlights areas where attention may be waning, providing immediate feedback to the teacher. This perspective offers a nuanced understanding of metadiscourse resources in spoken academic discourse. It demonstrates how language can be strategically used not just for communication, but also as a tool for monitoring and enhancing student engagement and attentiveness. By understanding and incorporating these interactive metadiscourse strategies, teachers can create a more interactive and responsive learning environment, ultimately benefiting both teaching and learning processes.

The perspectives highlight the significant role of metadiscourse resources in enhancing classroom interactions at AMAMEZSHS. Teachers effectively use metadiscourse strategies, such as emphasizing key points with expressions like "note" or "take note" and summarizing ideas, to guide students through lessons and prepare them for exams. These strategies help students focus on essential content, reduce cognitive load, and improve retention. The use of inclusive language fosters a collaborative learning environment, encouraging students to participate and share diverse perspectives.

Although teachers often employ these resources spontaneously, a conscious effort towards their integration can further enhance teaching effectiveness. Additionally, code-switching to a local language supports students with limited English proficiency, promoting solidarity and engagement. Overall, metadiscourse resources are crucial for maintaining student attention, creating interactive classroom atmospheres, and enhancing both teaching and learning processes. The present study confirms key perceptions about metadiscourse and classroom interactions (Subtirelu, 2015; Tang, 2017; Hyland, 2018), aligns with the findings of Bonyadi et al. (2021) and expands knowledge on metadiscourse usage in the classroom context by shedding significant light on teachers' perspectives.

Research question three examined the teachers' perspectives on metadiscourse markers in classroom interaction at AMAMEZSHS. While some studies have examined the linguistic features and functions of metadiscourse in written and spoken classroom texts, there appears to be a gap in the literature concerning teachers' perspectives on its use in educational settings. Despite the recognized importance of metadiscourse in facilitating effective communication and comprehension, little attention has been given to how teachers perceive and employ metadiscourse resources in their instructional practices. Therefore, this study to explored teachers' perspectives on the use of metadiscourse resources in classroom interaction, shedding light on their understanding, attitudes, and practices regarding this linguistic phenomenon. By examining teachers' insights and experiences, this research contributed to the existing body of knowledge on metadiscourse and informed strategies for its effective integration into educational contexts.

A cogent argument here is that, while the actual use of metadiscourse resources in classroom discourse often remains spontaneous and unplanned, a conscious effort towards their integration can significantly enhance teaching effectiveness. Metadiscourse in the classroom refers to the language used by teachers to organize their speech, engage with students, and manage the flow of information. The unplanned nature of using these resources highlights the adaptive and responsive nature of teaching, but there are compelling reasons to advocate for their intentional and strategic use. Metadiscourse use in classroom interactions is therefore, an essential part of classroom discourse that cannot be left to chance.

4.5 Addressing Criticisms

One of the key criticisms of Hyland's (2005) metadiscourse model is its limited number of metadiscourse categories. The model classifies metadiscourse into interactive and interactional metadiscourse, which might not capture the full complexity of metadiscourse markers and their various functions (Perez-Llantada & Ferguson, 2019). By conducting a thorough examination of classroom interactions, this study has uncovered additional metadiscourse markers that go beyond the classifications outlined by Hyland. This expanded scope contributes to a deeper comprehension of metadiscourse and its diverse roles within classroom discourse.

This study, however, agrees that the model might not sufficiently account for the diversity in how metadiscourse is utilized across various cultures. Various cultures may possess unique methods of conveying authorial presence, hedging, and reader/speaker engagement. As such, the model's emphasis on English academic writing may indeed, overlook the intricacies of metadiscourse in different languages and cultural environments (Mauranen, 2018).

4.6 Summary of Chapter Four

This chapter of the study focused on the analysis of the collected data. Findings based on the stated research questions were discussed in relation to existing literature. Engagement markers, boosters, and hedges, attitude markers frame markers, transitional markers, and self-mentions were established to characterize classroom interactions. Other markers such as colloquial markers and code-switching were also identified. In answering the second research question, these markers were found to serve various significant functions to promote interaction in the classrooms. They are useful in organizing lessons and directing students to the most important aspects of a teacher's lesson. Additionally, the perspectives of both teachers and students were also discussed with respect to the research questions outlined.

The last research question aimed at exploring teachers' perceptions of the use of metadiscourse markers in classroom interactions. The analysis revealed that while most teachers indicated a lack of previous knowledge or formal training on the issue, there was a general grasp of how crucial language choices, especially metadiscourse features, are for directing instruction, promoting comprehension, and improving classroom communication. Students also showed a high level of sensitivity to the presence of metadiscourse markers, *especially boosters* in teachers' lesson delivery. In order to enhance students' learning outcomes and improve the overall instructional process, a good deal of teachers indicated that they use metadiscourse resources in their instructional strategies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

The study was aimed at exploring the metadiscourse markers used in classroom interactions by teachers and students using Aggrey Memorial Senior High as a case study. The approach for the study was strictly qualitative and it employed the use of interviews, focus group discussions, and classroom interactions between teachers and students. Thematic analysis was employed to analyze the data based on the following research objectives;

- i. To identify types of metadiscourse resources employed in classroom interactions at AMAMEZSHS.
- ii. To explore how the metadiscourse resources enhance communication in the classroom at AMAMEZSHS.
- iii. To examine the perspectives of teachers on classroom interactions and the use of metadiscourse resources at AMAMEZSHS.

5.1 Summary of Key Findings

Based on research question one, the study found that a range of metadiscourse markers was used in classroom interactions, including engagement, transitional, self-mentions, code-switching, frames, boosters, and hedges. These markers were used to achieve several goals, including guiding discussions, increasing comprehension, and fostering a positive learning environment. Colloquialism, code-switching, and the use of vocatives constituted other metadiscourse resources employed in classroom discourse. Additionally, nonverbal cues such as touch, proximity, and gestures were identified as constituting nonverbal metadiscourse resources in classroom interactions.

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On research question two, the study revealed that the metadiscourse resources performed various communication purposes. The study reveals that teachers employed various engagement markers and strategies including questions often to get the attention of students, build interest and encourage classroom participation. Transitional phrases direct the conversation and helped to make connections between similar concepts. Teachers and students communicated and participated more easily during the instructional process when they use interaction indicators. The epistemological function of metadiscourse complemented by specific nonverbal resources guided students to understand how the teacher presents the information from known to the unknown. Through the use of metadiscourse as epistemological connectives, students are able to connect the relationship among previous, existing and new ideas in teaching and learning. Beyond the organizational and epistemological functions, the study also revealed the use of metadiscourse resources for activity connectives. This is the use of metadiscourse resources to ensure the assimilation of classroom activities in relations to concepts learned.

With respect to research question three, it was revealed that language teachers and non-language teachers perceive metadiscourse resources as a crucial aspect of classroom discourse. Both language and non-language teachers agreed that language choice plays a critical role in shaping education, fostering comprehension, and enhancing communication in the classroom. Irrespective of this, both language and non-language teachers do not make conscious/planned efforts to include metadiscourse markers in their lesson delivery Teachers' eagerness to learn more about metadiscourse markers and incorporate them into their lesson plans was evident, and as a consequence, demonstrated a dedication to professional growth and enhancing teaching techniques.

5.2 Conclusion

This study aimed to explore the use of metadiscourse markers in classroom interactions at AMAMEZSHS. Specifically, it sought to identify the types of metadiscourse markers used, examine their communicative functions, and understand teachers' and students' perspectives on their use. The findings provide valuable insights that have both theoretical and practical implications.

In terms of research objective one, a variety of metadiscourse markers were identified, including engagement markers, transitions, self-mentions, and others. This confirms that metadiscourse is an inherent part of classroom discourse. Other markers such as colloquial markers and code-switching were also realized to be context-specific markers pertaining to Ghanaian classroom discourse. The study, therefore, concludes that that metadiscourse resources are a key feature of classroom discourse and interactions at AMAMEZSHS. Metadiscourse resources are therefore, not limited to written academic discourses, but are pervasive in spoken academic discourses.

Concerning the second research question, the study also revealed the various communicative purposes these markers serve, such as guiding discussions, clarifying concepts, and fostering participation. The study concludes that the use of metadiscourse resources in classroom interactions at AMAMEZSHS helps to achieve significant communicative functions including *clarifying concepts*, *Signaling Key Stages in Discourse*, Enhancing Classroom Engagement, *Reinforcing Assertions* and *Constructing Collective Knowledge* among others.

Research question three examined the perspectives of teachers and highlighted findings that are notable. While teachers' use of metadiscourse seems largely unconscious and unaided by planning, the participants acknowledged the potential value the metadiscourse resources hold for learning and comprehension. This suggests that metadiscourse awareness could be further developed among educators. The study concludes that both language and none language teachers find metadiscourse resources as significant linguistic resources to enhance collaborative learning and classroom interactions, supporting teaching and learning AMAMEZSHS classrooms.

Overall, the study makes an original contribution by applying metadiscourse analysis to Ghanaian classroom contexts. It provides empirical evidence supporting metadiscourse theory in educational settings. The recognition of metadiscourse markers as learning facilitators by participants indicates they should be consciously integrated into lesson planning and delivery.

In conclusion, the research offers insights that can inform efforts to enhance classroom communication and learning outcomes through pragmatic choices in language. It also presents opportunities for further research comparing metadiscourse usage across disciplines, age groups, and cultural backgrounds.

5.3 Recommendations

Based on the findings of the present study, the study makes the following recommendations.

- Teachers should adopt more of Hyland's (2005) metadiscourse resources during classroom interactions to enhance their instructional communication strategies.
- 2. The functions of metadiscourse resources should be leveraged by teachers to promote effective classroom teaching and learning.
- Teachers should make conscious efforts to integrate metadiscourse resources into their classroom lessons planning and delivery to guide discussions, clarify concepts, and foster student participation.

5.4 Suggestions for Further Studies

As a suggestion for further studies, this study can be replicated through action research where teachers receive metadiscourse training and implement strategies, with students' learning outcomes assessed pre-and-post. This could evaluate any pedagogical benefits directly.

Again, further researchers could do a comparative study on how metadiscourse analysis unfolds in SHS students 'essay compositions. Considering that this study was done in the second cycle level of education, further researchers could replicate the study in other levels of education to further ascertain the level of metadiscourse markers used in classroom interactions between teachers and students in Ghana. Although this study has established that metadiscourse resources perform communicative functions in the classroom, how these functions correlate with students' learning was not considered. It is recommended, therefore, that further studies explore

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how the resources influence learners' comprehension. Finally, researchers could analyze discipline-specific metadiscourse comparing subjects like Sciences vs Humanities to further understand how the functional requirements may differ according to content area. It could also be relevant to carry out cross-cultural investigations comparing Ghanaian classroom discourse with other African or international contexts.



REFERENCES

- Abbaspoor, A. R., & Farhoody Farima, F. (2018). Iranian undergraduate EFL students' perceptions of metadiscourse and its contribution to improving discussion skills. *International Journal of Applied Linguistics & English Literature*, 7(4), 31-39.
- Abdi, R. (2014). Linking devices as facilitators of meaning construction: Modelling metadiscourse in EFL classroom debates. *Language Teaching Research*, 18(1), 60-79.
- Adair, J. G. (1984). The Hawthorne effect: A reconsideration of the methodological artifact. *Journal of applied psychology*, 69(2), 334.
- Ädel, A. (2006). Metadiscourse in L1 and L2 English. *John Benjamins*.
- Ädel, A. (2010). Just to give you kind of a map of where we are going: A taxonomy of metadiscourse in spoken and written academic English. *Nordic Journal of English Studies*, 9(2), 69-97.
- Ädel, A., & Erstad, O. (2015). Locating conceptual and dialogic practices in school science: Analyzing the use of metadiscourse in teacher–student interaction. International *Journal of Educational Research*, 74, 8-19.
- Adzahlie-Mensah, V., & Ampiah, J. G. (2019). Senior High School teachers' perspectives on pedagogical content knowledge development in core subjects in Ghana. *International Journal of Education, Learning and Development*, 7(4), 14-29.
- Afful, J. B. A. (2017). Dialogic Positioning in Literature Reviews of Masters'
- Aikhenvald, A. Y. (2004). Evidentiality. Oxford University Press.
- Akindele, O. A., & Aniebonam, A. N. (2019). Code-switching among Nigerian youths: Implications for language use in Nigerian entertainment media. *International Journal of Linguistics and Communication*, 7(2), 75–86. [https://doi.org/10.15640/ijlc.v7n2a8]
- Akoto, O. Y. (2019). *Metadiscourse use in English Language and Sociology master's theses literature review chapters*. ESP World, 57 (21), 1-31
- Akoto, O. Y. (2020). Metadiscourse within a discipline: A study of introduction and literature review chapters of sociology masters' theses. *Indonesian Journal of Applied Linguistics*, 10(2), 471-480.
- Akoto, O. Y., & Afful, J. B. A. (2020). Variations in metadiscourse use in English Language introduction and literature review thesis chapters. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 4(2), 390-408.

- Akyeampong, K., Pryor, J., & Ampiah, J. G. (2006). A vision of successful schooling: Ghanaian teachers' understandings of learning, teaching and assessment. Comparative Education, 42(2), 155-176.
- Alexander, R. J. (2008). *Towards dialogic teaching: Rethinking classroom talk*. York, UK: Dialogos.
- Alhojailan, M. I. (2012). Thematic analysis: A critical review of its process and evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.
- Altheide, D. L., & Schneider, C. J. (2013). Qualitative media analysis (2nd ed.). Sage.
- Alward, A., & al-Zboon, K. (2012). Metadiscourse markers in EFL writing: A case study of Jordanian learners. *Journal of Education and Practice*, 3(11), 77-86.
- Ampiah, J. G., & Gyimah, E. K. (2013). English language teaching and learning in Ghana. *Journal of Education and Learning*, 2(1), 107-122.
- Amuzie, G. L., & Spinner, P. (2013). Korean EFL learners' indefinite article use with four types of abstract nouns. *Applied Linguistics*, *34*(4), 415-434.
- Anderson, J. R. (2000). Cognitive psychology and its implications. Worth Publishers.
- Arthur, R., & Fenyi, D. A. (2022). Classroom Interactions: Exploring Hedging Devices in Ghanaian Public Schools. *International Journal of Education, Technology & Science*, 2(3), 288-309.
- Asante, C. Y. (2017). Exploring the experiences of English language teachers in Ghanaian secondary schools. *Journal of Education and Practice*, 8(17), 33-39.
- Asemanyi, K., Kwofie, I., & Agyekum, E. B. (2018). [Title of the Paper]. Journal Name, Volume (Issue), Page Range.
- Attah-Boakye, R., & Obeng, M. (2017). The use of English language in Ghanaian senior high schools: The case of Kumasi Metropolis. *Journal of Education and Practice*, 8(3), 31-37.
- Baker, P. (2006). Using corpora in discourse analysis. Continuum.
- Barge, J., & Oliver, C. (2003). Working with Appreciation in Managerial Practice. *The Academy of Management Review*, 28(2), 124. https://doi.org/10.2307/30040693
- Bhatia, V. K. (2004). Worlds of written discourse: A genre-based view. Continuum.
- Biber, D., & Conrad, S. (2009). *Register, genre, and style*. Cambridge University Press.
- Blease, C. (2016). Anonymity, pseudonymity, and the challenges facing young scholars in the twenty-first century. Journal of Scholarly Publishing, 47(3), 201-215.

- Bloomberg, L. D., & Volpe, M. (2019). Completing your qualitative dissertation: A road map from beginning to end. Sage Publications.
- Boafo-Arthur, S. (2014). Culture and customs of Ghana. Greenwood Press.
- Borg, E. (2003). Discourse community. *ELT Journal*, 57(4), 398–400. doi:10.1093/elt/57.4.398
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, 9(2), 27-40.
- Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. Sage.
- Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology*. Qualitative Research in Psychology, 3(2), 77-101.
- Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. Sage Publications
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? Qualitative Research in Psychology, 18(3), 328–352.
- Brinkmann, S., & Kvale, S. (2018). *Doing interviews* (2nd ed.). Sage.
- Brookfield, S. D., & Preskill, S. (2016). The discussion book: Fifty great ways to get people talking. John Wiley & Sons.
- Brown. (2015). The importance of classroom interaction in the teaching of reading in junior high school. Graduate Program in ELT, University of Malang.
- Bryman, A. (2016). Social research methods. Oxford University Press.
- Bunglowala, A., & Bunglowala, A. (2015). Nonverbal Communication: An Integral Part Of Teaching Learning Process. *International Journal of Research in Advent Technology, 1*, 371–375. [Google Scholar]
- Candlin, C. N., & Crichton, J. (2017). An approach to sociotechnical engineering: Introduction to metadiscourse analysis. In Candlin, C. N., & Crichton, J. (Eds.), Discourses of trust (pp. 5-28). Palgrave Macmillan.
- Cazden, C. B. (2001). *Classroom discourse: The language of teaching and learning*. Portsmouth, NH: Heinemann.
- Check, J., & Schutt, R. K. (2012). Survey research. In J. Check & R. K. Schutt (Eds.), *Research methods in education* (pp. 159-185). Thousand Oaks, CA: Sage Publications.

- Classroom interaction. In A Dictionary of Sociology. Retrieved May 4, 2023, from Encyclopedia.com: https://www.encyclopedia.com/social-sciences/dictionaries-thesauruses-pictures-and-press-releases/classroom-interaction
- Cohen, D. K. (1995). What is the system of teacher education a system of? *Educational Researcher*, 24(9), 5-27. https://doi.org/10.3102/0013189X024009005
- Cohen, E. G. (2003). *Talking together: Teacher-student interaction and classroom learning*. Pedagogies, 38(3), 327-340.
- Correia, R., Eskenazi, M., & Mamede, N. (2015). *Lexical Level Distribution of Metadiscourse in Spoken Language*. 70-75. 10.18653/v1/W15-2708.
- Creswell, J. W., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage Publications.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design:* Choosing among five approaches. Sage publications.
- Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Sage.
- Creswell, J. W., & Poth, C. N. (2020). Qualitative inquiry and research design: Choosing among five approaches. SAGE Publications.
- Creswell, J.W., and Guetterman, T. C. (2019). Educational Research: Designing, Implementing, and Evaluating Quantitative and Qualitative Research (6th ed.). Boston: Pearson.
- Crismore, A., & Farnsworth, R. (1989). Mr. Darwin and his readers: Exploring interpersonal metadiscourse as a dimension of ethos. *Rhetoric Review*, 8(1), 91-112.
- Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. Written Communication, 10(1), 39-71.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). *The case study approach*. BMC medical research methodology, 11(1), 1-9.
- Cummins, J. (2000). Language, Power and Pedagogy: Bilingual Children in the Crossfire. Multilingual Matters.
- Davis, E. (2018). Mathematics Classroom Discourse in typical Ghanaian Public School: How does it look like?. *12*. 1-27.
- Davis, E. K. (2018). Mathematics classroom discourse in typical Ghanaian public school: how does it look like? *The Oguaa Educator*, 12, 1-27.

- Davis, Ernest & Seah, Wee Tiong. (2016). Socio-cultural factors: a missing variable in mathematics pedagogy in Ghana. *Ghana Journal of Education: Issues and Practice* (GJE). 2. 40-58. 10.47963/gje.v2i.473.
- Delve, H. L., & Limpaecher, A. (2023). Content Analysis vs Thematic Analysis: What's the Difference? [Blog post]. Retrieved from https://delvetool.com/blog/content-analysis-vs-thematic-analysis
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). The SAGE handbook of qualitative research. Sage.
- Derakhshan, A., Zeinali, R., & Sharbati, H. (2015). Features of Classroom Discourse. *International Journal of Basic Sciences & Applied Research*, 4(4), 240-244. Retrieved from http://www.isicenter.org.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). *The qualitative research interview*. Medical Education, 40(4), 314-321.
- Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. Journal for the Education of the Gifted, 37(2), 111–127. https://doi.org/10.1177/0162353214529042
- Dominic, L. & Wimmer, R. (2009). Focused-case comparisons and middle-range theorizing: A worked example of case study methodology. Sociology of Education, 84(1), 79-92.
- Earp, B. D., Everett, J. A., Madva, E. N., Hamlin, J. K., & Douglas, T. (2017). *Out, damned spot: Can the "Macbeth effect" be replicated?* Basic and Applied Social Psychology, 39(3), 148-156.
- Edwards, A., & Furlong, J. (2009). *Promoting dialogue and small-group work. In S. Swann (Ed.), Classroom Discourse: The Language of Teaching and Learning* (pp. 72-88). New York, NY: Routledge.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). Writing ethnographic fieldnotes. University of Chicago Press.
- Fairclough, N. (2015). *Critical discourse analysis*: The critical study of language. Routledge.
- Farahani, M. V., & Ghane, Z. (2022). Unpacking the function(s) of discourse markers in academic spoken English: A corpus-based study. *Asian Journal of Language and Linguistics*, 45, 49-70. doi:10.1007/s44020-022-00005-3

- Farrell, T. S., & Lim, P. C. (2005). Conception of grammar teaching: A case study of teachers' beliefs and classroom practices. TESL-EJ, 9(2), 1-13.
- Ferguson, G. (2016). *Metadiscourse knowledge and applications: A genre analysis perspective.* Functional Linguistics, 3(1), 1-26
- Flick, U. (2018). An introduction to qualitative research (6th ed.). Sage.
- Flowerdew, J. (1992). The Language of Definitions in Science Lectures. *Applied Linguistics*, 13, 202-221.
- Flowerdew, J. (2015). Revisiting metadiscourse: Conceptual and methodological issues concerning signalling nouns. Iberica, 29, 15-34. https://api.semanticscholar.org/CorpusID:55556094
- Fortanet, I. (2004). The use of 'we' in university lectures: References and function. English for Specific Purposes, 23(1), 45–66. Frisella, E. (2017, May 5). Colloquialism. LitCharts LLC. https://www.litcharts.com/literary-devices-and-terms/colloquialism. retype please
- Fu, X., & Hyland, K. (2014). Interaction in two journalistic genres: A study of interactional metadiscourse. *English Text Construction*, 7(1), 122-144.
- Fusch, P. I., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19–32. https://doi.org/10.5590/JOSC.2018.10.1.02
- Gai, F.-H., & Wang, Y. (2022). Correlated metadiscourse and metacognition in writing research articles: A cross-linguistic and cross-cultural study. Frontiers in Psychology, 13, 1026554. https://doi.org/10.3389/fpsyg.2022.1026554
- Gee, J. P. (2008). Social Linguistics and Literacies: Ideology in Discourses. Routledge.
- Gee, J. P. (2014). An introduction to discourse analysis: Theory and method. Routledge.
- Gholami, J., & Ilghami, R. (2016). *Metadiscourse markers in biological research articles and journal impact factor: Non-native writers vs. native writers. Biochemistry and Molecular Biology Education*, 44, 349-360. doi:10.1002/bmb.20961
- Gholami, R., Shams, M., & Taghizadeh, M. (2020). The use of metadiscourse markers in academic lectures of Iranian EFL teachers. Applied Research on English Language, 9(1), 31-49.
- Gibson, W. (2018). *Semi-structured interviews*: Guide, format, and 20 questions to ask. Usability Geek.
- Gibson, W., & Brown, A. (2009). Working with qualitative data. SAGE Publications.

- González, A. M., & Melis, M. J. (2018). Code-switching in a bilingual community of Spanish-speaking women in Chicago. *International Journal of Bilingual Education and Bilingualism*, 21(7), 851–866. [https://doi.org/10.1080/13670050.2016.1201765]
- Graesser, A. C., & Person, N. K. (1994). Question asking during tutoring. *American Educational Research Journal*, 31(1), 104–137. https://doi.org/10.2307/1163269
- Graesser, A. C., & Person, N. K. (1994). Question asking during tutoring. *American Educational Research Journal*, 31(1), 104–137. https://doi.org/10.2307/1163269.
- Grant, L., & Luckert, Y. (2018). *Observing teachers in their natural habitat*: Lessons learned in the Classroom Observation and Research Program. Journal of STEM Education, 19(2), 36-4
- Gregory, A., & Weinstein, R. S. (2008). *The achievement of African American students: A contextual perspective*. Urban Education, 43(5), 619-632.
- Grifenhagen, J. F., & Barnes, E. M. (2022). Reimagining discourse in the classroom. *The Reading Teacher*, 75(6), 739-748.
- Ha, A., & Hyland, K. (2017). What is technicality? A Technicality Analysis Model for EAP vocabulary. *Journal of English for Academic Purposes*, 28, 35-49.
- Haikal, H. (2018). Psychology, Metadiscourse. *Indonesian Journal of English Education* (IJEE), 8, 11. LP2M Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta.
- Hamilton, C. (2018). Communicating for Results: A Guide for Business and the Professions. Cengage Learning.
- Hancock, D. R., & Algozzine, B. (2017). *Doing case study research: A practical guide for beginning researchers*. Teachers College Press.
- Hanum, L. (2017). Improving English Speaking Skill through Introductory English Videos (Doctoral dissertation). UIN Ar-Raniry Banda Aceh.
- Hanum, N. S. (2017). *The importance of classroom interaction in the teaching of reading in junior high school*. In Prosiding Seminar Nasional Mahasiswa Kerjasama Direktorat Jenderal Guru dan Tenaga Kependidikan Kemendikbud 2016.
- Harris, Zellig. (1959). The Transformational Model of Language Structure. *Anthropological Linguistics*, 1(1), 27-29.
- Hatipoglu, C., & Vatan, S. (2014). *Metadiscourse and reader engagement in research articles*. System, 42, 412-425.

- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Hattie, J., & Timperley, H. (2007). *The power of feedback. Review of educational research*, 77(1), 81-112.
- He, M., & Rahim, H. A. (2017). Exploring Implicit Metadiscourse in Legal Discourse. An Analysis of the Chinese and American Constitutions. *Indonesian Journal of Applied Linguistics*, 7(2), 391-406.
- Hertenstein, M. (2002, March 1). Touch: Its Communicative Functions in Infancy. *Human Development*, 45, 70–94. https://doi.org/10.1159/000048154
- Huang, Y., Wang, H., & Tang, J. (2020). A Study of Interactional Metadiscourse in English Travel Blogs. *Open Journal of Modern Linguistics*, 10, 785-793. doi: 10.4236/ojml.2020.106048.
- Hurt, H. T., Scott, M. D., & McCroskey, J. C. (1978). *Communication in the classroom*. Communication Education, 27(1), 3-13.
- Hyland, K. (1998). *Hedging in scientific research articles*. Amsterdam: John Benjamins.
- Hyland, K. (1998). Persuasion and context: The pragmatics of academic metadiscourse. *Journal of Pragmatics*, 30(4), 437–455.
- Hyland, K. (2005). Metadiscourse: Exploring interaction in writing. Continuum.
- Hyland, K. (2023). EAP and discourse analysis. In J. P. Gee & M. Handford (Eds.), *Routledge Handbook of Discourse Analysis* (2nd ed.). London: Routledge.
- Hyland, K., & Jiang, F. (2022). Metadiscourse: the evolution of an approach to texts. *Text & Talk.* Advance online publication. https://doi.org/10.1515/text-2022-2024
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156-177.
- Intaraprawat, P., & Steffensen, M. S. (1995). The use of metadiscourse in good and poor ESL essays. *Journal of Second Language Writing*, 4(3), 253-272.
- Javadi, M., & Zarea, K. (2016). *Understanding thematic analysis and its pitfall*. Demo, 1(1), 33-39.
- Jiang, F. K., & Hyland, K. (2021). 'The goal of this analysis...': Changing patterns of metadiscursive nouns in disciplinary writing. *Lingua*, 252, 103017.
- Jiang, J. (2006). Examining metadiscourse in English and Chinese academic writing. Language Awareness, 15(3), 161-179.

- John M. Swales (2016). "Reflections on the Concept of Discourse Community", ASP 69|2016. Retrieved from: http://doi.org/10.4000/asp.4774 on 12 September, 2023 at 7: 2pm
- Johnson, S. A. J., Jaworski, A., Coupland, N., & Galasiński, D. (Eds.). (2006). Metalanguage: Social and ideological perspectives. Language in Society, 35(3), 437-440. https://doi.org/10.1017/S0047404506230203
- Jorgensen, D. L. (2015). *Participant observation*. Emerging trends in the social and behavioral sciences: An interdisciplinary, searchable, and linkable resource, 1-15.
- Kakavas, P. (2022). Teacher talk and feedback in ELT: Fostering student-centered interaction. *TESOL Journal*, 13(1), 1-14.
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. Journal of Advanced Nursing, 72(12), 2954-2965.
- Kashiha, H. (2022). Academic lectures versus political speeches: Metadiscourse functions affected by the role of the audience. *Journal of Pragmatics*, 190, 60-72. https://doi.org/10.1016/j.pragma.2022.01.003
- Kasuya, M. (2008). Classroom Interaction Affected by Power Distance.
- Kawulich, B. B. (2005, May). Participant observation as a data collection method [81 paragraphs]. Forum Qualitative Social forschung / Forum: Qualitative Social Research, 6(2), Art. 43, http://dx.doi.org/10.17169/fqs-6.2.466.
- Khan, Z. R., & Dunkin, R. (2012). The impact of teacher talk on students' conceptual understanding of mathematics: A case from Pakistan. *International Journal of Social Science and Education*, 2(4), 868-883.
- King, N., & Brooks, J. (2017). Template analysis for business and management students. Sage.
- Klenke, K. (2016). *Qualitative research in the study of leadership* (2nd ed.). Emerald Group Publishing Limited.
- Knapp, M. L., Hall, J. A., & Horgan, T. G. (2013). *Nonverbal Communication in Human Interaction*. Cengage Learning. Retrieved from https://books.google.com.gh/books?id=rWoWAAAAQBAJ
- Kopple, W. J. V. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 82-93.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. European Journal of General Practice, 24(1), 120-124.

- Krippendorff, K. (2018). *Content Analysis*: An Introduction to Its Methodology. Sage Publications.
- Krueger, R. A., & Casey, M. A. (2009). Focus groups: A practical guide for applied research. Sage publications.
- Kuckartz, U. (2019). Qualitative Text Analysis: A Systematic Approach. In G. Kaiser, & N. Presmeg (Eds.), Compendium for Early Career Researchers in Mathematics Education (pp. 181-197). ICME-13 Monographs, Springer. https://doi.org/10.1007/978-3-030-15636-7_8
- Kumar, A. (2022). An Examination of the Observation Method. *International Journal of Scientific Research*, 13, 1-14.
- Kumaravadivelu, B. (2012). *Language teacher education for a global society*: A modular model for knowing, analyzing, recognizing, doing, and seeing. Routledge.
- Kupatadze, K. (2016). *Classroom observation in teaching practice*: A guidebook for teachers.
- Kvale, S. (2007). Doing interviews. Sage.
- Kvale, S., & Brinkmann, S. (2015). *Interviews: Learning the craft of qualitative research interviewing*. Sage.
- Leavy, P. (2017). Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches. Guilford Publications.
- Lee, J. J. (2009). Size matters: An exploratory comparison of small- and large-class university lecture introductions. English for Specific Purposes, 28(1), 42-57.
- Lee, J., & Alptekin, C. (2019). *The use of hedges in L2 academic writing*: A corpusbased study of Korean learners' essays. System, 85, 102105.
- Lee, J., & Subtirelu, N. (2015). Metadiscourse in the classroom: A comparative analysis of EAP lessons and university lectures. English for Specific Purposes, 37, 52–62. [Google Scholar.
- Leedy, P. D., Ormrod, J. E., and Johnson, L. R. (2019). Planning and designing practical research: The twelfth edition. Pearson.
- Legard, R., Keegan, J., & Ward, K. (2003). In-depth interviews. Qualitative research practice: A guide for social science students and researchers, 6(1), 138-169.
- Leila, A. (2022). Interactional Metadiscourse Markers in Scientific Texts (Based on Research Articles Written by Native and Non-Native Speakers), 21(4), 99-110.

- Li, C., Cui, G., & He, Y. (2020). The role of explanations and metadiscourse in management responses to anger-reviews versus anxiety-reviews: The mediation of sense-making. International Journal of Hospitality Management, 89, 102560. https://doi.org/10.1016/j.ijhm.2020.102560
- Li, X., Bergin, C., & Olsen, A. A. (2022). Positive teacher-student relationships may lead to better teaching." Learning and Instruction, 80, 101581. https://doi.org/10.1016/j.learninstruc.2022.101581
- Lin, C.-Y. (2012). Modifiers in BASE and MICASE: A matter of academic cultures or lecturing styles? English for Specific Purposes, 31(2), 117-126.
- Lin, L. & Reinders, H. (2018). *Students' and teachers' readiness for autonomy*: beliefs and practices in developing autonomy in the Chinese context. Asia Pacific Education Review. 20. 10.1007/s12564-018-9564-3.
- Liu, C., & Zhang, L. J. (2021). *Teacher talk and language learning in second language classrooms:* A systematic review. Language Teaching Research, 25(2), 145-169.
- Livingston, K. A. (2019). Examining the Use of Metadiscourse Markers in Academic Writing. International Journal of Literature, Language and Linguistics, 5(3), 244-254.
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. All Ireland Journal of Teaching and Learning in Higher Education, 9(3).ma
- Malmström, H. (2016). Engaging the Congregation: The Place of Metadiscourse in Contemporary Preaching. *Applied Linguistics*, *37*(4), 561–582. https://doi.org/10.1093/applin/amu052
- Mansour, E., & Alghazo, S. M. (2021). Hedging in political discourse: The case of Trump's speeches. *Jordan Journal of Modern Languages and Literatures*, 13(3), 375-399.
- Mardani, M., & Gorjizadeh, F. (2020). Discourse Patterns of Teacher/Students and Students/Students in EFL Classroom Interactions. *Journal of Language and Discourse Practice*, 1 (2), 11-2
- Martin, J. R., & White, P. R. R. (2005). The language of evaluation. Houndmills, Hampshire: Palgrave Macmillan.
- Mauranen, A. (2018). Metadiscourse: Towards cross-cultural comparability. *Journal of English for Academic Purposes*, 34, 32-43.
- McKeown, J., & Ladegaard, H. J. (2020). Exploring the metadiscursive realisation of incivility in TV news discourse. *Discourse, Context & Media*, *33*, 100367.

- Mehrabian, A. (1972). *Nonverbal Communication (Psychology)*. Chicago: Aldine-Atherton.
- Mensah, E. N. A. (2021). Metadiscourse resources in television talkshows: An analysis of Newsfile. (MPhil thesis, University of Education, Winneba)
- Mercer, N. (2000). Words and minds: How we use language to think together. London: Routledge.
- Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking: A sociocultural approach*. London: Routledge.
- Merriam, S. B., & Tisdell, E. J. (2016). Qualitative Research: A guide to design and implementation (4th ed.). San Francisco, CA: Jossey-Bass.
- Ministry of Education, Ghana. (n.d.). Teacher education curriculum framework: A comprehensive guide to the training of professional teachers in Ghana. Author.
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. International Journal of Qualitative Methods, 1(2), 13-22.
- Musa, A. (2014a). Hedging strategies in English and Chemistry masters' theses in the University of Cape Coast, Ghana. *Journal of ELT and Applied Linguistics* (JELTAL), 2(3), 53-71.
- Myers-Scotton, C. (2016). Multiple voices: An introduction to bilingualism. Wiley-Blackwell.
- Na, L., & Hyland, K. (2016). Chinese academics writing for publication: English teachers as text mediators. *Journal of Second Language Writing*, 33, 43-55.
- Neuendorf, K. A. (2017). The content analysis guidebook (2nd ed.). SAGE Publications.
- Ngware, M. W., Oketch, M., & Ezeh, A. (2014). Quality of education in public primary schools in Kenya: A constitutional requirement or a pedagogical goal? *International Journal of Educational Development*, 37, 68-83.
- Nordquist, R. (2020, August 27). What is Metadiscourse? ThoughtCo. thoughtco.com/metadiscourse-writing-and-speech-1691381.
- Norton, B. (2009). Language and identity. In A. Davies & C. Elder (Eds.), *The handbook of applied linguistics* (pp. 578-597). Oxford: Blackwell.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847.

- Nugrahani, V., & Bram, B. (2020). Metadiscourse markers in scientific journal articles. Langkawi: *Journal of The Association for Arabic and English*, 6(1), 1-10. doi:10.31332/lkw.v6i1.1528
- Nystrand, M. (2006). Research on the role of classroom discourse as it affects reading comprehension. Research in the Teaching of English, 40(4), 392-412
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*, 19, 1-13.
- O'Leary, Z. (2017). The essential guide to doing your research project (3rd ed.). Sage.
- Ozturk, I., & Goksu, D. (2016). A contrastive analysis of metadiscourse in research articles written by native English and Turkish writers. Procedia Social and Behavioral Sciences, 232, 413-423.
- Pan, Q. (2014). Nonverbal Teacher-Student Communication In The Foreign Language Classroom. *Theory And Practice In Language Studies*, 4(12), 2627. Google Scholar
- Patton, M. Q. (2015). Qualitative research and methods: Integrating theory and practice. Sage.
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*, 101(1), 115-135.
- Perez-Llantada, C., & Ferguson, G. (2019). *Metadiscourse across Genres: Mapping Interactivity in Academic Genres*. John Benjamins Publishing Company.
- Polikoff, M. S. (2015). How well aligned are textbooks to the common core standards in mathematics? American Educational Research Journal, 52(6), 1185-1211.
- Poplack, S. (2018). Code-switching (linguistic). In K. A. King (Ed.), The International Encyclopedia of Anthropology. Wiley-Blackwell. https://doi.org/10.1002/9781118924396.wbiea2113
- Punch, K. F. (2014). *Introduction to social research: Quantitative and qualitative approaches* (3rd ed.). SAGE Publications Ltd.
- Purwati, D. (2020). The Effects of Lecturers' Formal and Informal Talks on Students' Understanding of the Material in the Language Learning Process. Journal of English Language Teaching and Learning. https://doi.org/10.24256/IDEAS.V8I1.1315
- Putnam, L. L., & Nicotera, A. M. (2020). *Building theories of organization: The constitutive role of communication*. Routledge.

- Querol-Julian, M., & Fortanet-Gomez, I. (2012). *Multimodal Evaluation in Academic discussion sessions*. How do presenters act and react? English for Specific Purposes.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). *Enhancing students'* engagement by increasing teachers' autonomy support. Motivation and Emotion, 28(2), 147-169.
- Rheisa, N. S. (2021). Metadiscourse as rhetorical strategy in YouTube review videos. In English Language and Literature International Conference (ELLiC) Proceedings (Vol. 3, pp. 315-323).
- Richards, J. C., & Rodgers, T. S. (2014). Approaches and Methods in Language Teaching. Cambridge University Press.
- Rickles, J., Zeiser, K. L., Yang, R., O'Day, J., & Garet, M. S. (2019). Promoting deeper learning in high school: Evidence of opportunities and outcomes. Educational Evaluation and Policy Analysis, 41(2), 214-234.
- Ridder, H. (2017). *The theory contribution of case study research designs*. Business Research, 10(2), 281-305. https://doi.org/10.1007/s40685-017-0045-z
- Riley, B., Galea, J., & Usher, W. (2016). Ethical considerations in participatory visual research with children and youth: Exploring the digital storytelling process. *Journal of Geography in Higher Education*, 40(3), 432-450.
- Roka, S. (2020). Selected Metadiscourse Markers in Academic Writing: Exploring the Distribution in the BAWE Corpus (Master's thesis). University of Stavanger, Norway.
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Sage.
- Salager-Meyer, F. (1994). *Hedges and textual communicative function in medical English written discourse*. English for Specific Purposes, 13(2), 149-170.
- Schiffrin, D. (1987). Discourse Markers. Cambridge, England: Cambridge University Press.
- Seedhouse, P. (2004). The interactional architecture of the language classroom: A conversation analysis perspective. Blackwell
- Seedhouse, P. (2004). The Interactional Architecture of the Language Classroom: A Conversation Analysis Perspective. Blackwell Publishing.
- Setiawan, B., Setiawan, R., Chia-Ling, C., & Prahani, B. K. (2021, December). Classroom Discourse Interaction in Science Classroom: Analysing the Use of Meta-Discourse for Pre-Service Science Teachers. In International Joint Conference on Science and Engineering 2021 (IJCSE 2021) (pp. 532-537). Atlantis Press.

- Shenton, A. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects. Education for Information, 22, 63-75. https://doi.org/10.3233/EFI-2004-22201
- Siddig, B. E., & AlKhoudary, Y. A. (2018). Investigating Classroom Interaction: Teacher and Learner Participation. English Department, Al Buraimi University College, Sultanate of Oman. https://doi.org/10.5539/elt.v11n12p86
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571-581.
- Stake, R. E. (1995). The art of case study research. SAGE.
- Tajer, P., Jowkar, A., Fakhrahmad, S., Sotudeh, H., & Khormaee, A. (2019). *Analysis of the Application of Hyland Metadiscourse Model for Citation-based Automatic Text Summarization: A Proposed Annotation Scheme for Citation Contexts*. Language and Information Studies, 22, 91-111. https://doi.org/10.30481/lis.2019.81993.
- Tang, K. S. (2021). The interconnections among metadiscourse, metalanguage, and metacognition: Manifestation and application in classroom discourse. Linguistics and Education, 65, 100977.
- Tavladoraki, E., & Tsantila, N. (2019). Metadiscourse in L2 Academic Writing: A Comparative Study of Research Articles and Master's Theses. *Journal of English for Academic Purposes*, 42, 1-13.
- Thomas, G. (2016). How to do your case study: A guide for students & researchers. Sage.
- Thompson, S. (2003). Text-Structuring Metadiscourse, Intonation and the Signalling of Organisation in Academic Lectures. *Journal of English for Academic Purposes*, 2, 5-20.
- Tiwari, T. D. (2021). Classroom interaction in communicative language teaching of public secondary schools in Nepal. Indonesian *Journal of English Language Teaching and Applied Linguistics*, 5(2), 373-386.
- Turner, D. P. (2020). Sampling Methods in Research Design. Headache: The Journal of Head and Face Pain, 60(1), 8-12. https://doi.org/10.1111/head.13707
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. Nursing & Health Sciences, 15(3), 398-405.
- Vasheghani F. M. (2020). *Metadiscourse in Academic Written and Spoken English: A Comparative Corpus-Based Inquiry*. Research in Language, 18(3), Article 6. https://doi.org/10.18778/1731-7533.18.3.05

- Viberg, O., & Grönlund, Å. (2020). Exploring teacher talk in multilingual classrooms: A systematic literature review. *International Journal of Multilingualism*, 17(1), 1-18.
- Vivas Peraza, Ana. (2020). English in the Linguistic Landscape of Thailand: A Case Study of Public Signs in Hat Yai. Language Value. 23-57. 10.6035/LanguageV.2020.13.2.
- Walsh, J. A. (2010). Classroom discourse and teacher development. *International Journal of Educational Research*, 49(1), 21-31.
- Wegerif, R., & Mercer, N. (2007). A dialogic understanding of the relationship between CSCL and teaching thinking skills. *International Journal of Computer-Supported Collaborative Learning*, 2(1), 87-100.
- Wei, J., Li, Y., Zhou, T., & Gong, Z. (2016). Studies on Metadiscourse Since the 3rd Millennium. Journal of Education and Practice, 7(9), 194-204.
- Wells, G. (2007). *Semiotic mediation, dialogue and the construction of knowledge*. Human Development, 50(5), 244–274.
- Wu, X., & Yang, H. (2022). Unpacking the Functions of Personal Metadiscourse in Teachers' Classroom Discourse. Sustainability, 14(20), 13502. https://doi.org/10.3390/su142013502
- Xu, J. (2006). On metadiscourse. Contemporary Linguistics, (vol. 4)Yang, P. (2017). Intercultural nonverbal communication competence as intercultural responsiveness in the second language learning classroom. In J. Kathryn & R. M. Jason (Eds.), *Intercultural Responsiveness in the Second Language Learning Classroom* (pp. 127-147). Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-5225-2069-6.ch008
- Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Sage.
- Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications, Inc.
- Yin, R. K. (2021). Qualitative research from start to finish. Guilford Press.
- Zacharias, N., & Hagemann, K. (2020). Analyzing metadiscourse in scientific writing: A cross-disciplinary study. Journal of Academic Writing, 10(2), 45-60.
- Zakaria, M. K., Malik, F. A., Rashid, R. A., Pilus, Z., & Zakaria, N. S. (2018). Metadiscourse in the Academic Writing of Local and International Students at a University in Malaysia. *International Journal of Education and Practice*, 6(4), 227-238.
- Zare-ee, A., Bagheri, M. S., & Behroozizad, M. (2019). The relationship between Iranian EFL teachers' experience and gender and their use of metadiscourse markers in teacher talk. Issues in Language Teaching, 8(2), 31-51.