The Role of Organization and Stance Markers in the Persuasive Writing of Middle School ELs and non-ELs: A Sequential Explanatory Mixed-Methods Study

By

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ABSTRACT

This study examines the relationship between discourse markers and writing quality in persuasive essays written by middle school students institutionally designated as English Learners (ELs) (*n* = 173) and non-English Learners (non-ELs) (*n* = 173). Utilizing a mixed-methods design, I analyzed the frequency and impact of organization and stance markers on essay scores, identifying key differences in usage patterns and their predictive value for writing quality. Quantitative findings revealed that non-ELs consistently outperformed ELs in total writing scores, with significant gaps in conventions and topic development. Non-ELs also demonstrated a greater use of discourse markers, particularly conclusion, goal, and frame markers, which were strong predictors of essay quality. In contrast, ELs employed hedges and engagement markers more frequently, reflecting cautious argumentation and a focus on reader interaction. Qualitative analysis further highlighted that while both groups adhered to academic writing conventions, non-ELs exhibited more nuanced and diverse marker usage, contributing to higher-quality writing. These findings underscore the importance of explicit instruction in discourse marker application for ELs, emphasizing strategic use of organization and stance markers to enhance argument clarity and coherence. Implications for writing instruction and academic language development are discussed, with recommendations for targeted pedagogical interventions to support EL writing proficiency.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

This research explores the intricate relationship between overall writing quality and the structural components that constitute effective persuasive writing. Among these components, organization and stance markers emerge as crucial elements that not only structure the written piece but also convey the writer's positionality and engagement with the subject matter and audience (Aull, 2019; Dobbs, 2014; Hyland, 2005). Thus, the current study compares the frequency and usage of these markers in the persuasive writing of students institutionally labeled as English learners (ELs) and non-English learners (non-ELs).

As students enter higher grades, their ability to effectively communicate ideas and learning through writing becomes crucial. The process of writing requires students to demonstrate their abilities in reading, researching, evaluating, and integrating diverse pieces of information (Graham & Perin, 2007). Success in both higher education and professional careers is closely tied to writing proficiency (ACT, 2005, 2008; National Commission on Writing, 2004, 2005), with an expectation for students to possess advanced writing skills upon entry into postsecondary education.

A significant number of U.S. students face challenges in writing (Persky, Daane, & Jin, 2003; Salahu-Din, Persky, & Miller, 2008), which carries substantial implications for their progression from K-12 to higher education and beyond (ACT, 2005, 2008; National Commission on Writing, 2004, 2005). Only about 24% of students in 8th and 12th grades reached proficient level and 3% advanced level in writing performance on the National Assessment of Educational Progress (NCES, 2011). Although statistical reports are not fully available, writing scores for 8th

graders decreased in 2017 (National Center for Education Statistics, n.d.-a), and the disparity in writing performance between historically advantaged White students and historically marginalized groups has not changed (ACT, 2023; National Center for Education Statistics, n.d-b; Salahu-Din, Persky, & Miller, 2008).

Further, about 32% of U.S. high school graduates lack the necessary preparation for the writing requirements of introductory college courses (ACT, 2008). This not only has obvious repercussions for students who enter college, but it can potentially serve as a gatekeeping mechanism to higher education access. In other words, because writing is part of many college entry exams, admission essays, and scholarship letters, underdeveloped writing skills can make it more difficult for students to seize academic opportunities (Kellogg & Raulerson, 2007; Mo et al., 2014; Perin, 2013). Thus, in-depth research into writing development is essential for identifying strategies to better equip students for future writing challenges.

Academic Language and Writing Quality

Because writing is an intrinsic aspect of academic and professional success (Kellog & Raulerson, 2007; Perin, 2013), it is crucial that students develop effective writing skills during their K-12 career. Academic language serves as the cornerstone of effective communication within scholarly communities, embodying the specialized vocabulary, syntax, and discourse structures that characterize disciplinary discourse (Scarcella, 2003; Snow & Uccelli, 2009). This form of language is not merely a tool for communication but a critical medium in which complex ideas, arguments, and research findings are produced and accessed with precision and clarity (Schleppegrell, 2001). The quality of academic writing, therefore, is paramount, as it directly impacts the comprehensibility and engagement of scholarly works. High-quality

academic writing is marked by several key attributes, including coherence, clarity, persuasiveness, and adherence to disciplinary conventions (Hyland, 2003). Among these, the organization of ideas and the use of stance markers represent two pivotal elements that can influence the perceived quality of academic texts.

Organization in academic writing refers to the logical structuring and sequencing of ideas, which facilitates the flow of information and enhances the reader's ability to follow and engage with the arguments presented (Flower & Hayes, 1981). Effective organization is not simply about the arrangement of ideas but also about the strategic use of transitions, headings, and thematic progression to guide the reader through the text (Hawes, 2015). These structural features support the writer's objective of communicating complex information in a manner that is accessible and persuasive to the intended audience.

Stance markers, on the other hand, are linguistic devices that authors use to express their attitudes, evaluations, and commitments towards the propositions and evidence they present (Hyland, 2005). These markers play a vital role in establishing the writer's voice and authority within the text, allowing them to balance objectivity and personal evaluation in their academic discourse. The use of stance markers plays an important role in signaling the writer's positionality, thereby influencing the reader's interpretation and reception of the arguments at hand. Through careful selection and placement of these markers, writers can effectively convey their level of certainty, tentativeness, or engagement with the subject matter, thus contributing to the persuasiveness of their message (Aull & Lancaster, 2014; Hyland, 2005; 2008d).

The interplay between organization and stance markers is central to writing quality in academic contexts. As scholars strive to contribute new knowledge and insights within their

disciplines, the ability to present ideas coherently and assert a well-defined stance becomes imperative. This study aims to compare the frequency and application of organization and stance markers in the persuasive writing of ELs and non-ELs, shedding light on how these elements contribute to the effectiveness and quality of academic writing across different linguistic backgrounds. By examining these features, the research seeks to provide valuable insights into the challenges and strategies associated with academic writing, offering implications for pedagogy and practice.

Metadiscourse

Theories of persuasive writing and rhetorical analysis further illuminate the elements that contribute to writing quality. For instance, Aristotle's rhetorical triangle—ethos (credibility), pathos (emotional appeal), and logos (logical argument)—provides a foundation for understanding how writers can effectively persuade their audience (Gagich & Zickel, 2018). Persuasive writing in an academic context often relies on logos, employing evidence-based arguments, but also subtly incorporates ethos and pathos through the strategic use of stance markers. These markers help writers establish their credibility, engage the reader's emotions, and/or emphasize the rationality of their arguments.

The integration of stance and organization markers within academic discourse is essential for writers to produce coherent and persuasive academic texts. Stance markers, such as hedges (e.g., "it may be the case that") and boosters (e.g., "clearly"), allow writers to express their viewpoint, confidence, and evaluation of the content. Organizational markers, including transition words and phrases (e.g., "furthermore," "on the other hand"), help to structure the argument logically and guide the reader through the text.

In academic language such discourse markers (DMs) are conceptualized within the realm of metadiscourse. DMs transcend the function of content delivery by working as a communicative strategy to structure discourse, engage readers, and articulate stance. This perspective of academic language as metadiscourse emphasizes the importance of DMs that signal organizational logic, writer-reader relationship, and the writer's attitude towards the subject matter and audience. Within this framework, Uccelli's (2019) work on Cognitive Academic Language Skills (CALS) stands out for its contribution to understanding the sophistication of academic discourse. Uccelli posits that CALS are critical for academic success, as they encompass the ability to use language in ways that are valued in school contexts, including the nuanced use of metadiscourse (Uccelli et al., 2015).

Theories of persuasive writing and rhetorical analysis further enrich our understanding of academic language as metadiscourse. Aristotle's framework of ethos, pathos, and logos provides a foundational lens through which the effectiveness of persuasive academic writing can be assessed. Ethos relates to the credibility of the writer, pathos to the emotional engagement of the reader, and logos to the logical structure and evidence supporting the argument (Gagich & Zickel, 2018). Effective academic writing skillfully intertwines these elements, often leveraging markers of stance (e.g., modal verbs, adverbs) and organization (e.g., discourse markers like "however," "therefore") to construct compelling, credible, and logically coherent narratives (Hyland, 2005).

Uccelli's CALS framework (Uccelli et al., 2015), along with theories of persuasive writing and rhetorical analysis, underscores the importance of teaching and mastering the sophisticated use of academic language. Developing an understanding of metadiscourse

enables learners to not only construct their academic texts with greater sophistication but also critically engage with texts as readers. This dual capacity is essential for academic success, as it involves both producing and interpreting complex texts that follow the conventions and expectations of academic discourse.

Research Objective and Questions

In recent years, research has highlighted the importance of academic language for positive academic outcomes (Durant 2016; Nagy & Townsend, 2012; Snow & Uccelli, 2009) and pointed to the correlation of DMs and writing quality (Dobbs, 2014; Sanford, 2012; Uccelli et al.; 2013). Nonetheless, it is unclear whether ELs who are in the process of developing their writing skills use DMs in the same way and with the same frequency as non-ELs. It is also unknown whether these patterns affect quality scores the same way for ELs and non-ELs.

It is worth noting that, in this study, the term EL refers to students whose native language is not English and who have been placed in an English Language Learning program through a placement test as determined by the school district. English Learners vary widely in their language proficiency, from beginners to advanced learners, who may speak, read, and write in English with a high degree of proficiency but still benefit from targeted support to fully access academic content (Bardack et al., 2010). Non-ELs, on the other hand, include both students whose primary language is English and multilingual students who have already achieved a level of proficiency in English that meets the designated fluency criteria, without the need for additional English language learning support (Bardack et al., 2010).

The primary objective of this study is to investigate the frequency of organization and stance markers in the persuasive writing of middle school students designated as ELs and non-

ELs, with the aim of understanding how these linguistic features predict the overall quality of academic writing. Using a sequential explanatory mixed-methods design, this research seeks to uncover the rhetorical strategies that distinguish effective academic discourse and identify potential areas for improving writing instruction for both ELs and non-ELs. The study will address the following questions:

1) (Quantitative) - Is there a difference in the frequency in which EL and non-EL students use markers of stance and organization in their persuasive writing?
2) (Quantitative) **–** Do DMs predict writing quality in the same way for ELs and non-ELs?
3) (Qualitative) - How do ELs use stance markers differently than non-ELs? What patterns in uptake of discourse markers are present in the data?
4) (Integration across methods) How do differences in how stance markers are used by ELs and non-ELs offer insight into the nature of the quantitative relationship?

Significance of the Study

This research holds implications for the fields of applied linguistics, second language writing, and education. By clarifying the role of organization and stance markers in academic writing, this study deepens the understanding of the competencies that underlie the differences between ELs and non-ELs' writing. Furthermore, the findings from this analysis can inform teaching practices and curriculum design, particularly in developing targeted interventions that support ELs in mastering the conventions of academic discourse. Ultimately,

this study aims to enhance the academic writing outcomes of both ELs and non-ELs, fostering greater proficiency and confidence in their writing abilities.

CHAPTER II

REVIEW OF LITERATURE

It is estimated that, in 2019, there were about 12.08 million children in the United States who spoke a language other than English at home (Statista, 2023a); and, out of those children, around 2.26 million had difficulties with the English language (Statista, 2023b). On average, when compared with native speakers, English Learners (ELs) have lower reading scores in English (August & Shanahan, 2006). This may be an attribute of EL designation, which can highlight language deficits for those in the process of learning English (Martínez, 2018), lead to stigma (Umansky, 2016), and obscure the success of bi-multilingual students who have achieved higher levels of proficiency, thus perpetuating deficit views of bi- and multilingualism (Kieffer & Thompson, 2018).

Nonetheless, EL designation is a reality in U.S. schools, where students are required to access academic content in English. For students who fall into the EL categorization, the inability to access academic content in English can be problematic because much of the vocabulary necessary for success with the academic register is acquired through reading (Anderson et al., 1988; Stanovich, 1986). Thus, low reading scores, which are an indication of difficulty in reading, can also prevent students from accessing new vocabulary and lead to a reciprocal phenomenon known as the Mathew effect (Stanovich, 1986; Walberg & Tsai, 1983).

Difficulties in reading and accessing vocabulary can also impose difficulties to accessing new content. Even though the direct relationship between vocabulary size and reading comprehension has not been established (National Institute of Child Health and Human Development, 2002), lacking knowledge of a large number of words can interfere with

comprehension (Carver, 1994; Wright & Cervetti, 2016). This becomes relevant to the writing task for a few different reasons. The most obvious is that writing requires the use of vocabulary. Further, when writing in academic settings, students are also expected to engage in complex tasks such as researching, reading, evaluating, and synthesizing information (Graham & Perin, 2007); all of which rely on strong comprehension skills.

This study takes the perspective that writing encompasses cognitive, sociocultural, and pragmatic aspects. Writing, as an activity, happens in the larger social context (Flood & Lapp, 2000; Halliday & Matthiesen, 2004; Prior, 2006). Successful academic writing depends on the ability to seamlessly integrate a wide array of knowledge related to the target audience and its expectations, norms within the discourse, the specific talk, chosen argumentative approach, language usage, and the subject matter in question (Ball & Ellis, 20008; Coker & Lewis, 2008). It involves skillfully employing these elements in a manner that highlights the writer's academic expertise in the subject matter.

Because this framework positions writing as a practice that is both cognitive and sociocultural (Blum-Kulka, 2008; Dobbs, 2015; Gee, 2008; Kellog, 2008; Pritchard & Honeycutt, 2007), this review of previous literature will be broad in scope and take a narrative format (Baker, 2016). The following topics will be addressed: academic language and its development, the relationship between academic language and writing, the relationship between academic language and multilingual students, and the writing of multilingual students who are designated as ELs.

Academic Language

The evolution of academic language

Although the term “academic language” (AL) is well known in the educational field, researchers and educators have not reached a consensus that allows for a singular definition. In fact, the concept of AL has been referred by different terminology: “elaborate code” (Bernstein, 2003), “the language of education (Halliday, 1994), “the language of school” or “the language of schooling” (Schleppegrell, 2001), “scientific language” (Halliday & Martin, 1993), or “academic English” (Bailey, 2007; Scarcella, 2003).

Historically, there has been a range of perspectives and discussions regarding the nature and significance of AL. Nonetheless, it is worth noting that both proponents and critics of this term agree that AL is more than just vocabulary (Jensen & Thompson, 2019; Uccelli, 2019). Several key studies and scholarly works have contributed to our contemporary understanding of this concept and highlighted how complex and important AL is in educational contexts. The next few paragraphs will synthesize the evolution of key conceptual frameworks that shape this research. Even though the following paragraphs will appear to be presented in a chronological order, it is important to note that this chronology is based on the seminal works mentioned. Many of these researchers’ work spanned across a few decades, thus overlapping the chronology presented.

Bernstein’s (1971) seminal work on elaborated and restricted language codes has been key in understanding the differences between everyday or informal language and academic language. His sociolinguistic theory of language codes posits that working class people use more restricted code while middle class people uses both elaborated and restricted code

(Bernstein, 1971). In his work, code is the set of principles that guide the language used and shared by members of a social group (Littlejohn, 2002) and, in its spoken form, generalizes and reinforces the individual's relationship with the environment creating a particular form of significance (Bernstein, 1971). Bernstein stated that one code was not better than the other, but that society might assign different values to each of them. He also emphasized that, while the restricted code was based on background knowledge shared by the social group, the elaborated code was key in shaping knowledge transmission in educational institutions.

About a decade later, Cummins proposed the Common Underlying Proficiency Model based on the premise that there is a common cognitive and linguistic proficiency that underlies all languages and that there is transfer of knowledge across languages (1979 and 1981). Thus, instead of focusing on the concept of socioeconomic class, he attended to issues related to multilingualism. Like Bernstein, Cummins also distinguished two types of language skills: basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). BICS refers to the cognitively undemanding basic communicative language fluency acquired by all native speakers of a language and used in mostly informal settings, while CALP is used in academic settings and requires the ability to manipulate language in a more elaborated manner (Cummins, 1980).

Halliday (1978) made significant contributions to the field of linguistics that have been influential in shaping contemporary understanding of language as a multifunctional, social semiotic system. He developed the notion of Systemic Functional Linguistics (SFL), a comprehensive theoretical framework that considers language as a social and functional system that serves various social functions and is shaped by context (Halliday, 1994). His work

contributed to the development of functional grammar, which analyzes the functions of language elements, such as how different grammatical structures are used to perform different communicative functions. Halliday identified systemic choices in language that allow speakers to achieve specific communicative goals. This metalinguistic approach to functional grammar differentiates Halliday's work from others in the field.

Another aspect that will be relevant to this study is the concept of academic discourse communities. Hyland posits that academic language is not monolithic but varies across disciplines and is influenced by the expectations and practices of specific academic communities (2008c). Hyland's studies of metadiscourse indicate that organization and stance markers are key to the overall quality of a text (Hyland 1998, 2002a, 2002b, 2006, 2007, 2008c, 2008d). This finding is at the core of the questions guiding this study.

Perhaps due to the introduction of the No Child Left Behind Act of 2001, which focused on academic standards as criteria for academic success, many researchers in the 2000s addressed language in academic settings. Scarcella (2003), for example, focused on the role of vocabulary in academic language development. As with some of her predecessors, she underscored the significance of domain-specific vocabulary and academic discourse in understanding and producing academic texts and tied the mastering of academic English as a way of attaining socioeconomic success in the United States (Scarcella, 2003).

Branching off from Halliday's Systemic Functional Linguistics (SFL) theory (Halliday & Matthiesen, 2004), Schleppegrell's (2004) research delves into the role of genre in academic language. She not only addresses language usage in educational contexts (Schleppegrell, 2004) but also responds to concerns related to research-to-practice gaps and the need to provide

teachers with explicit information regarding academic language. Her work encompasses the academic language used in various disciplines and emphasizes the importance of understanding and mastering various genres, such as reports or research papers, as an integral part of academic language proficiency (Schleppegrell et al., 2004; Schleppegrell, 2007).

Gee's (2004) sociocultural approach to AL explores how language is intimately linked to social and cultural practices. He argues that AL is shaped by the communities in which it is used and emphasized the importance of discourse communities. Gee (2007) also explored a broader concept of literacy beyond the traditional conceptualization and posed reading and writing as being a socially constructed concept because "we never just read or write; rather, we always read or write something in some way" (Gee, 2007, pg. 14). Thus, he conceptualizes identity as not something fixed or inherent but rather constructed through participation in various social practices and discourses.

Biber and Conrad's (2009) corpus-based studies have provided insights into the characteristics of academic language, including the use of passive voice, nominalization, and complex sentence structures as well as detailed analysis of linguistic features specific to academic writing. Their work also describes key data-driven language patterns and provides both quantitative and qualitative illustrations of how language manifests in natural settings.

Central to this research is Uccelli's (2018) work on language development and academic achievement among bilingual and multilingual students. Her work on Core Academic Language Skills (CALS) encompasses vocabulary knowledge, comprehension of complex texts, academic writing, speaking and listening skills, and understanding academic language structures such as syntax and discourse organization (Uccelli & Galloway, 2018; Uccelli et al., 2015). Uccelli's work

often focuses on how bi-multilingualism and language proficiency impact students' ability to acquire such skills. The sum of her work contributes to our contemporary understanding of effective instructional strategies for supporting language development and academic achievement among diverse student populations.

Further, it is important to acknowledge that the concept of academic language has also been examined through the lens of raciolinguistics. This line of scholarship is derived from decades of sociolinguistic research challenging racializing discourses that lead to deficit perspectives (Hidalgo & Urciuoli, 1997; Hill, 1998; Dick & Wirtz, 2011). Rosa (2019), for example, explores how language and race intersect to shape the educational experiences of Latinx students in the United States. Raciolinguistic scholars have critiqued academic language as a construct that perpetuates linguistic inequalities through the racialization of minority students by positioning their language as deficient and, thereby also perpetuating racial hierarchies (Baker-Bell, 2019; Flores, 2019; Rosa & Flores, 2015).

Although the body of research mentioned above is by no means exhaustive, it is representative of some of the major concepts and concerns surrounding AL and demonstrates the multifaceted nature of AL and its significance in education.

What Is Academic Language?

Due to the complexity of the concept, researchers and the education community in general have not come to a consensual definition of AL. A simple definition of AL can be the language students need to work in school (Herr, 2007). A more complex and accepted definition of AL (Dobbs, 2014; Scott & Dreher, 2021; Townsend et al., 2012) is "knowing and being able to use general and content-specific vocabulary, specialized or complex grammatical

structures, and multifarious language functions and discourse structures—all for the purpose of acquiring new knowledge and skills, interacting about a topic, or imparting information to others" (Bailey, 2007, pg. 10-11). Thus, a strong vocabulary is a crucial element in grasping disciplinary content. However, the proficiencies essential for students to access that knowledge and hone those skills encompass more than just vocabulary (Uccelli et al., 2015).

Academic Language and Writing

As it can be observed through the evolution of AL scholarship and characterized in Bailey's 2007 definition mentioned above, AL encompasses multiple features. Nonetheless, besides mastering these features, users of AL need flexibility to match the type of language with the purpose of the task (Ravid & Tolchinsky, 2002). In other words, writers must not only master AL features but also make rhetorical choices regarding discourse and grammatical expectations for the specific field (Dobbs, 2014; Nir & Berman, 2010).

This way, the combination of AL features such as vocabulary, sentence structure, organization, and stance towards the topic paired with content knowledge and audience expectations make writing a highly demanding cognitive task. It is the skillful combination of many elements that leads to effective academic writing and the writer's ability to demonstrate expertise (Dobbs, 2014; Scarcella, 2003; Scheppegrell, 2001; Snow & Uccelli, 2009). Thus, evaluations of written essays in persuasive or analytic genres often rely on criteria that implicitly relate to AL conventions (Snow & Uccelli, 2009) rather than just academic knowledge.

Academic Language and Multilingual Students

Although learning academic language is notoriously challenging for all students, much of the research on the concept has been conducted with multilingual students who have been

designated as English learners (ELs) in U.S. schools (Snow & Uccelli, 2009). Despite the fact that multilingualism is ever-growing in classrooms across the United States, standard English and AL are still the norm in U.S. schools (Achugar et al., 2007).

In 2002, the No Child Left Behind eliminated the Bilingual Education Act (BEA) of 1968 and replaced it with the English Language Acquisition, Language Enhancement, and Language Achievement Act. This metalinguistic change was not only conceptually aimed at prioritizing English, but it also made significant changes on how states could allocate funds to serve the bi-multilingual population. Since then, there has been a decline in the availability of bilingual programs (Menken, 2013; Crawford, 2007). Perhaps by coincidence, this phenomenon was followed by a new wave of states deciding to adopt English as their official language (e.g. Iowa, 2002, and Arizona, 2006). Further, while the English Language Acquisition, Language Enhancement, and Language Achievement Act highlights the importance of English language acquisition, it obscures the fact that the language necessary to succeed in school is AL. This adds an extra layer of difficulty for emerging bi-multilingual students who must simultaneously learn English and the language of school (Schleppegrell, 2001) in English.

Several studies and educational resources propose different methods in which ELs develop academic language skills in educational settings. As mentioned earlier, Cummins coined the concepts of BICS and CALP (1980) to distinguish the type of language used in daily, informal, communication (BICS) and the one used in academic settings (CALP). Further, some students might be socialized in AL prior to entering school, while others might not (Scott & Dreher, 2021). This is true for all students. However, once again, it offers extra complications for students who are expected to learn an additional language for communication and, at the same

time, the AL of that additional language in order to access content in subject areas and succeed in school (Ger & Bahar, 2018; Short & Fitzsmmons-Doolan, (2007).

Under the Common Underlying Proficiency Model, Cummins (1981) conceptualized a shared foundational proficiency to explain cross-language transfer. According to the model, proficiencies in the first language (L1) and second language (L2) are not isolated; and, as proficiency in one language develops, so does the foundational proficiency that aids advancement in both languages. Further, his model also sustains that students must reach a literacy threshold in L1, in order for transfer to occur. CALP research in L2 acquisition supports this model for children and adolescents (Collier, 1987). This way, the current educational context, which focus exclusively on English language acquisition without L1 support, might not be entirely beneficial to students trying to learn English. Cummins also mentioned the importance of providing comprehensible input and creating a language-rich environment to support language development for emerging bi-multilinguals (1981). Nonetheless, it is important to note that cross-language transfer evidence up to this date is mostly correlational (Lindsey et al., 2003) and empirical evidence is still needed.

Collier (1987) also supports a language-rich environment in which students are exposed to complex texts, engaging classroom discussions, and opportunities for meaningful interactions. In “Acquiring a second language for school: a conceptual model”, Collier describes four major components involved in the acquisition process: sociocultural, linguistic, academic, and cognitive (Collier, 1995, pg. 4).

Central to the process is the sociocultural context that surrounds the student’s “present, past, and future, in all contexts – home, school, community, and broader society” (Collier, 1995,

pg. 4). Thus, Collier's model acknowledges what other researchers later pointed out as the negative impact of racism on motivation and academic outcomes (Ahrens & Chu, 2021; Bosma et al., 2017; Randolph, 2017) and institutionalized racism that subordinates people as minority-groups (e.g. label used to designate students such as Limited English Proficient (LEP), English Learner (EL), English Language Learner (ELL)) and ties success to performance on standardized tests normed on White middle-class students (Flores & Garcia, 2017).

Even though all four components of the model are interconnected, it is in the sociocultural environment where language, academic, and cognitive development take place. Collier posits that in order to achieve cognitive and academic success in L2, it is crucial to have a highly developed oral and written cognition in L1; and, while L2 is still developing, students would benefit from learning academic content in L1 (1995).

Other researchers took a more tailored and pragmatic approach and emphasized the significance of explicit instruction in academic vocabulary and language structures (Snow & Uccelli, 2009). This line of AL development calls for educators to facilitate language learning by explicitly teaching vocabulary, language functions, and text structures in order to promote academic success (Gibbons, 2002). Moreover, supporting English learners through content-based instruction, where language and content are integrated, has also been found effective in developing academic language skills (Chamot & O'Malley, 1994; Short & Fitzsimmons, 2007).

In sum, combining these approaches with ample opportunities for practice, exposure to rich academic language models, and targeted instruction can significantly contribute to the development of English learners' AL skills (Collier, 1987; Gibbons, 2002). These strategies, supported by extensive research, play a crucial role in fostering English learners' acquisition of

AL, enabling them to effectively engage with and comprehend the language used in educational settings.

English Learners and Writing

As students advance into secondary grades, writing becomes increasingly demanding as the focus shifts from mostly narrative and becomes more informational or persuasive in nature. Writing is a complex process and, especially in secondary grades and higher education, students need to build their reading capacity in order to research, evaluate, and synthesize information (Graham & Perin, 2007). This process can be especially challenging for ELs who have to perform these high-level tasks in an unfamiliar language.

There are several ways in which ELs differ from native English writers (Nelson, 1991). Some writing models suggest that oral language knowledge stored in long-term memory is responsible to carry out the processes involved in writing (see WWC; Graham, 2018a, 2018b). Native English speakers acquire linguistic and grammatical patterns naturally while ELs language acquisition relies on a more deliberate learning process. Further, EL writers oftentimes transfer patterns used in their native language to their academic writing in English (Nelson, 1991).

It is natural to infer that the difficulties encountered by EL students while producing a writing task result from limited language proficiency because English proficiency limitations can impact students' ability to articulate complex ideas in English (Cummins, 1981b). Further, ELs also face challenges in expressing themselves in writing when grappling the nuances of grammar, syntax, and vocabulary (Ferris, 2003). Perhaps, at least partially as a consequence of

these difficulties, EL students consistently produce lower scores in writing than their English-speaking peers (Kubbal & Peck, 1997; Howard & Neugebauer, 2015; O'Conner et al., 2012).

Nonetheless, linguistic obstacles are not the only challenges faced by ELs while writing. Socioeconomic factors and academic outcomes have been common research topics (White, 1982; Campbell et al., 1986; White et al., 1993; Sirin, 2005). Research focused on the relationship between socioeconomic status and writing often demonstrates the positive correlation between SES and writing outcomes (Dölek & Hamzadayi, 2018; Espinoza et al., 2022; Zare-ee, 2010). Nonetheless, the association of SES and writing outcome is not straightforward. For instance, students from high SES backgrounds were shown to outperform their low SES peers in terms of form, content, organization, word choice, and grammar dimensions, but not in terms of their ability to conduct research, draft, and evaluate their writing (Dölek & Hamzadayi, 2018). Further, written language precursors such as phonological awareness, letter knowledge, vocabulary, and oral comprehension were also found to be positively related to SES (Espinoza et al., 2022); thus, pointing to early academic initial differences in writing development.

Despite having a similar academic background, students from high SES were shown to outperform their peers in proficiency tests and argumentative academic writing (Zare-ee, 2010). In the context of U.S. schools, this is an important finding because education does not happen in isolation from students' lives outside of school. Socioeconomic status is an important factor for immigrant students or those born to immigrant parents, particularly those hailing from Latin-American countries, which account for the largest immigrant group in the U.S. (Ragsdale, 2013). While Asian immigrants have a split low and high SES profile and education

background, Latino families predominantly fall within low SES brackets and have lower levels of parental education (Gándara & Rumberger, 2009).

The writing of ELs also diverges from monolingual English writing due to the influence of the writer's primary language and cultural background on their rhetorical styles, organizational approach, and expression of ideas (Lin, 2015). ELs often need to consciously shed their native language's writing patterns to conform to the expected academic American writing styles. This process of relearning proves to be intricate and challenging for many ELs (Swales, 1990).

Second language writers might present their ideas using diverse organizational patterns and rhetorical modes, which differ significantly from the predominant linear style found in most English writing (Connor, 1996). The distinctive form or style of written expression by EL students may not readily meet the anticipated format, explanation, and organization required in American English Language Learning (ELL) writing classes. Consequently, writing teachers unfamiliar with the varied styles of rhetorical expression among EL students may misinterpret, undervalue, or inadequately evaluate the writing samples of second language writers (Hamp-Lyons, 1991).

Finally, even concepts oftentimes thought of as being straightforward can be more complex than they appear. Fox (1994), for instance, pointed the importance of cultural components in ‘critical thinking’ and ‘analysis’ by saying that these terms are “more than just a set of writing and thinking techniques – it is a voice, a stance, a relationship with texts and family members, friends, teachers, the media, even the history of one’s country.” (pg. 125). With that in mind, Atkinson discussed how cultural differences can impact the way ELs approach academic writing tasks and the need for culturally responsive pedagogies (1997).

Along those lines, Lucas & Grinberg explored the culture and linguistic diversity among ELs and pointed to the necessity for tailored instructional approaches that address individual backgrounds (2008).

Discourse Markers, Persuasive Writing, and Metadiscourse

As it can be observed through the previous sections, this research argues that language development, in both its spoken and written formats, is part of a social phenomenon and it develops in a sociocultural context (Blum-Kulka, 2008; Dobbs, 2014; Flood & Lapp, 2000; Gee, 2008; Kellogg, 2008, Prior, 2006; Pritchard & Honeycutt, 2006). This way, the language used for daily communication in informal contexts might be considered inappropriate or lacking in academic contexts (Cummins, 1980). Under the premise that language is a sociocultural construct, some or most students might come to school without being previously socialized in the language of schooling. Further, cultural patterns of acceptable communication might differ among students from different backgrounds (Lee & Fradd, 1996; Hwa-Froelich & Vigil, 2004). This not only poses a challenge to ELs who are in the process of learning English, but also to students who already 'know' English but who have been socialized in the academic language of another culture.

Traditionally, writing instruction focuses on narrative up to when students transition to secondary grades and the focus shifts to persuasion and argumentation (Beaufort, 2006; Burkhalter, 1995; Pritchard & Honeycutt, 2006; Purves, 1992). A persuasive writing task involves many skills such as critical thinking, perspective taking, and a deep understanding of the subject matter (Toulmin, 2003).

Markers of stance and organization are academic language features, often called discourse markers (Fraser, 2002) and serve as the binding elements of a text. Markers have been shown to play an important role in the cohesion of texts (Aidinlou, 2012) and can aid in the creation of meaning by constraining the interpretation process (Jucker, 2002). Thus, markers can possibly help writers in establishing trustworthiness and demonstrate their expertise in the subject.

Studies of metadiscourse were originally developed to evaluate the manner in which effective writers communicated with readers (Beauvais, 1986; Hyland, 2005). According to Hyland (2005), the purpose of metadiscourse is to demonstrate the writer's intent towards the propositional matter at hand. Although the body of metadiscourse studies focuses on older adolescents and adults, they point to the fact that a mix of both organizational and stance markers add to the overall quality of the text (Hyland, 1998; 2002a; 2002b; 2006; 2007; 2008c). Further, the explicit instruction in metadiscourse has yielded better writing quality for college students enrolled in college composition classes (Steffensen & Cheng, 1996).

Few studies have investigated the use of metadiscoursive markers by younger students who are in the process of developing their academic language skills. To my knowledge, despite the growing number of ELs in U.S. classrooms, there has been no research addressing this phenomenon among students who are in the process of acquiring English as an additional language. A search of primary literature was conducted using PsycINFO and ERIC databases and the following key words: a) "markers or discourse markers or stance markers or organization markers" and b) "middle school or 6th or 7th or 8" and c) "English language learners or ELL or ESL or English as a second language or second language learning or emerging bilinguals or EB"

and d) “persuasive writing.” This search yielded zero results. A similar search was conducted by removing category “c.” This later search generated only two articles (Dobbs, 2014; Crowhust, 1987).

Next, in order to expand the search, the word “persuasive” was removed from criteria “d.” This expanded the search to the presence of discourse markers in other genres of writing. This last search yielded five results (Al-khazrajy, 2019; Bouton & Kachru (1993); Lam, 2010; Reynolds, 2002; Welie et al., 2017). After reading the abstracts, three of the papers were eliminated (Welie et al., 2017; Bouton & Kachru, 1993; Lam, 2010) for not providing any writing outcomes. Thus, despite previous research on DMs suggesting its impact on the writing quality of high school and college students, the number of studies focused on the development of this skill among middle schoolers is underwhelming.

Out of the four studies available, two were conducted in the U.S., one in Canada, and one in Dubai. Only one of these studies, however, compare the performance of native speakers of English and EL students (Reynolds, 2002). A brief review of these studies follows.

Dobbs (2014) looked at how academic writers marked their stance in persuasive essays. Writing samples were coded for organizational markers using a coding scheme drawn from prior work by Hyland (2005) and adapted to be more developmentally appropriate. Stance markers were coded using a similar procedure. This model was partially replicated in this work. Interrater reliability was high with Cohen’s kappa of .92. Quality scores were measured using the Massachusetts Comprehensive Assessment System rubric, which is divided into two analytic scores: topic/idea development (TISCORE) and conventions (CSCORE). A total quality score was created by combining the two.

Multilevel models were built to understand the relationships between individual types of markers and holistic quality scores. Individual organizational markers were added to the control model to determine their impact on quality. Only two markers, evidential and code glossers, were found to have a significant, but negative, relationship to quality scores. The frequency and diversity of markers were not significant. Stance markers were not predictors of quality scores in the sample. On the contrary, samples containing higher numbers of stance markers were associated with poor quality. However, the variety of stance markers within an essay was associated with higher quality.

Crowhurst (1987) examined the effect of three types of interventions on the persuasive writing of sixth graders. The main premises for this study were that students usually write less and have lower scores on persuasive writing than on narration or description. Some of the possible reasons outlined in the work are the high cognitive demand involved in persuasion and the possibility of students lacking a basic persuasion scheme. Thus, a sample of 100 students from two schools in Canada were divided into four groups: three treatments and a control group.

The treatment groups consisted of a) persuasion schema + writing practice; b) persuasion schema + guided persuasive reading; and c) one lesson on persuasion schema. Results demonstrated that groups “a” and “b” scored significantly higher than group “c” and the control group. Further, the author observed that students in groups “a” and “b” used significantly more conclusions and text markers in their essays. The author concluded that writing scores can be improved with intervention and, although persuasive schema was the

central aspect of this study, it also shed light to other aspects of writing that might be beneficial for students to receive intervention, such as DMs.

Al-Khazrajy (2019) investigated how DMs are were used in the writing of ESL students. Participants were ninth-graders, private school students in Dubai whose first language is Arabic. Students were taught about DMs, cohesion, and coherence and asked to write a 100-word essay. Six essays were chosen randomly and analyzed qualitatively based on Taboada and Mann's model (2006). The author found that the misuse and overuse of DMs had a negative impact on the overall quality writing, while the advanced uses of DMs allowed them to connect the topic with grammatical components, thus shedding light on the importance of the skillful usage of DMs.

Reynolds (2002) addressed the similarities between L1 and L2 writing development and the nature of the developmental path. Participants were 735 students, 189 ESL students and 546 regular ELA students, in grades 5 through 8, from a metropolitan school district in Texas. Students wrote a "how to" essay and another on food. The author then analyzed the usage of regularity and power markers among the two groups. He found that regularity markers were more frequent than power markers for both groups. Further, results suggested that ESL students were able to use power markers to illustrate the steps involved in a recipe, but regular ELA students were also able to use regularity markers to provide flow in their writing. The author concluded that ESL students have to discover the difference between oral and written patterns of language use and, thus, lack topic differentiation as a starting point.

In conclusion, the exploration of DMs, stance markers, and organizational markers within the context of academic writing among middle school students, particularly those

designated as ELs, highlights a nuanced area of language development that intersects with sociocultural learning processes. Despite the limited research focused specifically on this age group and demographic, the existing studies underscore the significance of these markers in enhancing writing quality. This insight is crucial for informing educational strategies and interventions that support the development of academic language skills, particularly among students navigating the challenges of learning English as an additional language.

CHAPTER III

METHODOLOGY

Research Design

A sequential explanatory mixed-method design (Clark & Creswell, 2003) was employed to analyze the use of stance and organization markers in the persuasive writing of middle school students institutionally designated as English learners (ELs) and non-English learners (non-ELs) to gain a deeper understanding of the competencies that underlie the writing skills of both groups of students.

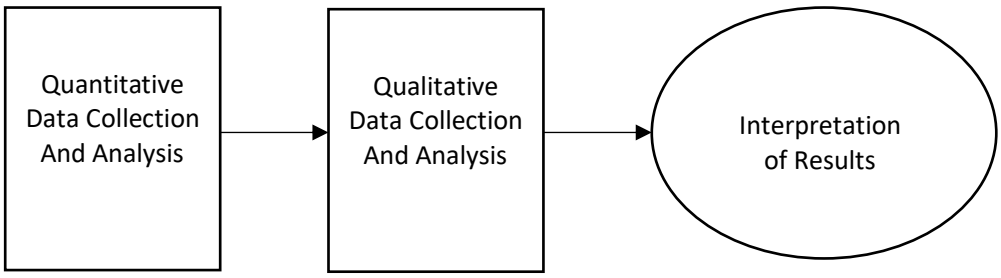
This mixed-methods design consists of two phases: quantitative analyses followed by qualitative analyses of the data (Figure 1). Thus, I first collected and analyzed the quantitative (numeric) data followed by the qualitative (textual) data to explain or elaborate on the quantitative results.

There is extensive literature discussing the merits and drawbacks of employing a mixed-methods design (Creswell et al., 1996; Green & Caracelli, 1997; Creswell 2003, 2005; Moghaddam et al., 2003). Some of the strengths of this design include its simplicity and ability to delve into the quantitative data with more precision. This approach has been deemed particularly beneficial when unforeseen results emerge from the quantitative phase (Morse, 1991). One of the challenges associated with this design is the time required to analyze both types of data.

The two research questions central to the quantitative phase that guides this study are 1) Is there a difference in the frequency in which ELs and non-ELs use markers of stance and organization in their persuasive writing? and 2) Do DMs predict writing quality in the same

Figure 1

Sequential explanatory design



(Clark & Creswell, 2017, p. 2014)

way for ELs and non-ELs? Despite these questions being quantitative, the very nature of vocabulary choice and usage among different linguistic groups requires a more in-depth analysis. Knowing how students use or do not use these features of language can help improve future educational interventions. Thus, the following question was added to guide the qualitative phase: 3) How do ELs use stance markers differently than non-ELs? What patterns in uptake of discourse markers are present in the data? Lastly, a final question was added in order to integrate both phases: 4) How do differences in how stance markers are used by ELs and non-ELs offer insight into the nature of the quantitative relationship?

Setting and Curriculum Context

The sample utilized in this study is derived from a randomized controlled trial (RCT) conducted to evaluate the effectiveness of the Word Generation (WG) extended program. Following is a description of the program to help situate the context in which the original data, which includes the samples used in this research, were collected.

Word Generation (WG) is a vocabulary program originally designed to teach academic language through the academic curriculum (Snow et al., 2009) and its extended version includes classroom debate and discussion. The 24-week program introduces students to words from the Academic Word List (Coxhead, 1998) through the context of a controversial topic that is deemed interesting to students. At the end of each unit, students draft a short persuasive essay defending their position on the topic.

The original WG study began with a total of 25 K-8 schools in year 1. Due to administrative changes, two schools dropped the program leaving a total of 23 schools in year 2. These schools represent four districts located in the northeastern region of the United States. Prior to randomization, primary WG investigators used a pairwise matching procedure to achieve demographic similarity between the treatment and control groups (Jones et al., 2019). Throughout the two years of intervention, students participating in the WG program produced multiple persuasive writing samples on various topics.

When analyzing the longitudinal effects of WG, a pilot study found the influence of topic on students' outcomes (Dobbs, 2014). The present study, however, is not attempting to investigate the effectiveness of the intervention, but whether students institutionally designated as ELs and non-ELs use stance and organization markers in a similar manner and whether the relationship to writing quality is the same for both groups. For this reason, I used a segment of the primary dataset that was collected post-intervention, but not directly related to the WG curriculum.

After the intervention was completed, WG researchers asked students to write one last essay on the following topic: Should iPads be allowed in the classroom? In order to

complete this post-intervention assignment, participating students did not receive any specific vocabulary instruction. This way, this segment of the WG dataset should reflect students' cumulative knowledge retained as result of the intervention in a more spontaneous setting.

A total of 3543 fourth to eighth grade students from 21 schools responded to the essay prompt about iPad use in schools. Consistent with the original WG study (Jones et al., 2019), 5.8% of the students in the dataset were classified as ELs (*n* = 192) and a large portion of students come from low-income households based on free/reduced lunch status (90.1% of ELs and 85.4% of non-ELs) as reported by school records. It is important to point out that the non-EL group likely consists of more than just monolingual English speakers. This group may encompass bilingual and multilingual students who have attained the required English proficiency to transition out of the EL category. It is not clear whether the students in the sample transitioned out of ELL classes during the period of the intervention. Further, state estimates on the number of transitioning students for 2014 to 2016 is not readily available (NCES, 2024). This is a topic that will also be addressed as part of the limitations of this study.

Sampling

The main focus of this research was to examine the stance markers used in the essays written by students designated as ELs. Out of the 3543 original essay responses, 192 essays were identified as written by EL students. To create a comparison group of non-ELs, a matched pairs procedure (Bai, 2022) was employed based on observed baseline covariates: school attended, grade level, gender, SES, and SPED status. Since EL responses represent only a small fraction of the data, multiple matching possibilities existed. Matching pairs were randomly generated through a computerized program that included all possible non-EL IDs that matched

a single EL ID by school attended, grade level, gender, SES, and qualifies to receive special education.

From the original 192 essays written by ELs, 3 responses were eliminated due to missing demographic information, which prevented a perfect match. For instance, an EL response attached to a student ID missing SPED or SES status could not be matched with a non-EL counterpart due to incomplete data. An additional 16 responses, or 8.33% of the EL sample, along with their matching non-EL counterparts, had to be eliminated due to missing data.

The final sample included in this study consists of 346 essays, evenly split between ELs (*n* = 173) and non-ELs (*n* = 173). This selection process is summarized in Figure 2. The final sample was composed of 80 samples from grade four, 56 samples from grade five, 102 from grade six, 84 from grade seven, and 24 from grade eight. Demographic information is summarized in Table 1.

Measures

Length, Syntactic Simplicity, and Deep Cohesion

To measure length, Dobbs (2019), who also examined DMs as predictors of essay quality, utilized clause demarcation. However, because this study focuses on EL writing, length was measured by the number of words written. Word count is widely recognized as an objective and easily quantifiable measure of text length (Wolfe-Quintero et al., 1998). Moreover, it is a less biased way of accounting for length, as it eliminates subjectivity, particularly when analyzing non-standard constructions that are common in EL writing (Norris & Ortega, 2009).

Figure 2

PRISMA Flow Chart of EL Essay Selection Process

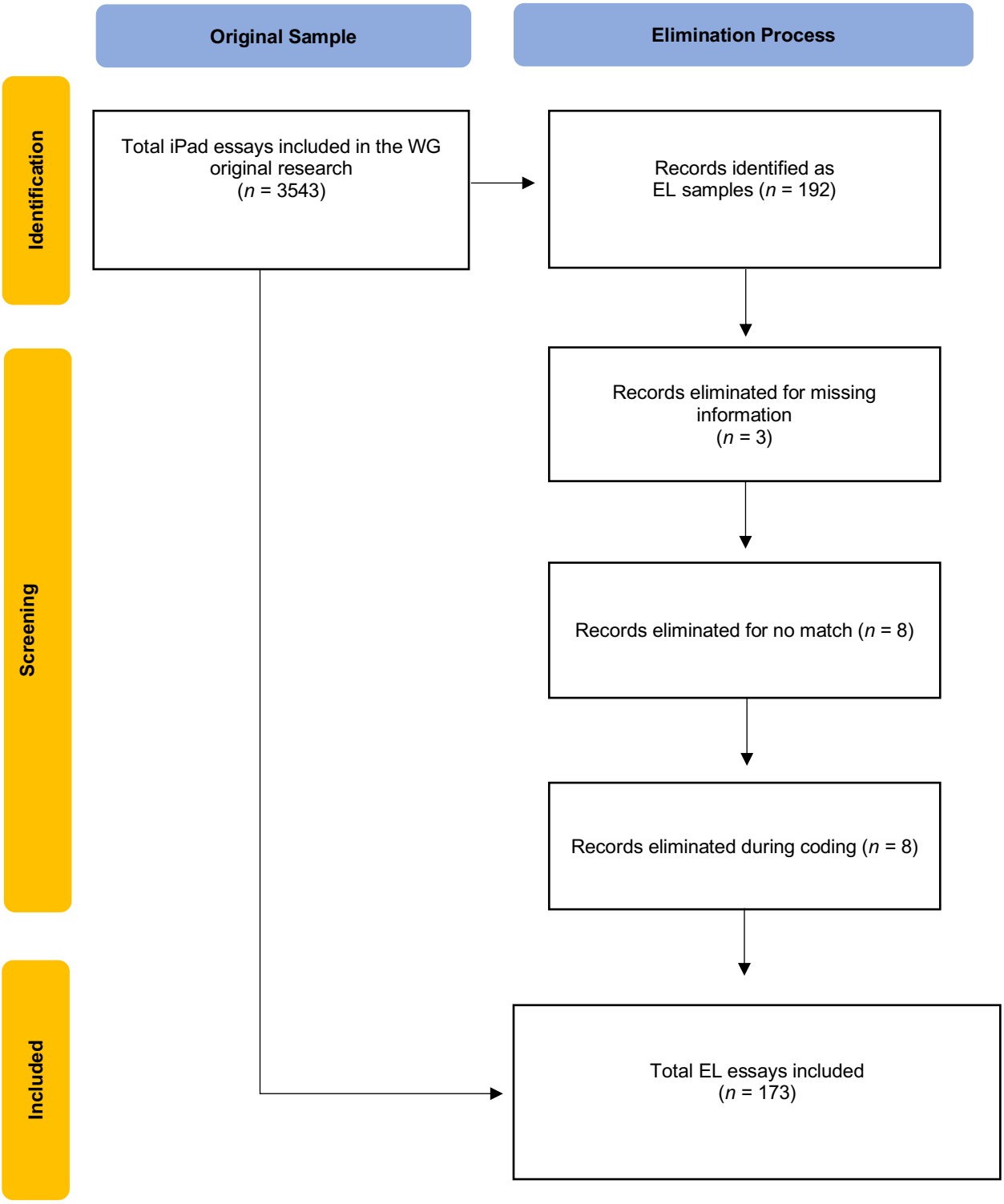


Table 1

Demographic Information for Sample Students (n = 346)

	Number of Students (%)
Grade	
4th grade	80 (23%)
5th grade	56 (16%)
6th grade	102 (29%)
7th grade	84 (24%)
8th grade	24 (7%)
English Proficiency Status	
EL	173 (50%)
Non-EL	173 (50%)
Gender	
Female	174 (50.3%)
Male	172 (49.7%)
Socioeconomic Status	
Receives free or reduced lunch	318 (92%)
Doesn't receive free or reduced lunch	28 (8%)
Special Education Status	
Needs support	42 (12%)
Does not need support	302 (88%)

Word count also encompasses all components within an essay, including descriptive passages, cohesive devices, and connective details that might not be captured by clause counts alone. This provides a more comprehensive view of the writer's ability to produce extended discourse, which is valuable for assessing the depth and quality of writing (Crossley & McNamara, 2010).

Finally, word count can be accurately and quickly determined using software tools, ensuring efficient and reliable data collection (McNamara et al., 2014). In contrast, clause counting often requires manual review or complex parsing algorithms, which can introduce inconsistencies, especially when analyzing texts written by EL students who may exhibit unconventional sentence structures (Biber et al., 2011).

For the purposes of this study, word count, syntactic simplicity, and deep cohesion were measured using the Text Ease and Readability Assessor (T.E.R.A.) which uses the Coh-Metrix program as a tool to analyze text and provide measures of text easability and readability. To measure syntactic simplicity, T.E.R.A. analyses sentence structure complexity. This includes mean length of sentences, mean number of words before the main verb, use of embedded clauses and passive voice construction. Advanced syntax is often linked to longer sentences, longer phrases before the main verb, and higher usage of embedded clauses and passive constructions. Simpler syntax, on the other hand, is often associated with early stages of writing development or informal writing.

Further, deep cohesion refers to how well ideas are connected at a conceptual level beyond surface textual links. T.E.R.A. measures deep cohesion through causal and intentional connectives (e.g., “because,” “so,” “therefore”), which signal logical relationship; semantical overlap between sentences to determine how concepts are integrated; argument overlap and conferential cohesion, which track whether key ideas are consistently referenced. Low deep cohesion is associated with fragmented or disorganized writing, a common challenge among novice and EL writers (Graesser et al., 2014).

Organizational markers

Essays were coded for organizational markers according to a coding scheme developed by Hyland (2005) and adapted by Dobbs (2014) (see Appendix B). Codes included are goal markers, used to clarify the purpose of a discussion, insuring readers understand the intent of the argument (e.g., The aim of this paper is to…); frame markers, used to help organize discourse by signaling sequencing, topic shifts, or structural elements (e.g. first, second, next, etc.); conclusion markers, used to reinforce takeaways and provide closure to an argument (e.g., In summary, these findings suggest that…); code glosses, used to improve clarity by offering explanations or elaborations (e.g., for example, in other words, etc.); evidentials, used to enhance credibility by attributing information to authoritative sources (e.g., According to the text, Smith (2000), etc.); and transition markers, used to stablish logical connections between ideas, ensuring coherence throughout the text (e.g., however, as a result).

Stance markers

Similarly, following Dobbs (2014) procedures, markers of stance were coded according to Hyland (2005) and Reilly et al. (2002) (see Appendix B). Codes included are deontic modality markers, used to express necessity, obligation, or advisability, guiding the reader toward a particular interpretation or action (e.g., must, should, have to); epistemic modality markers, used to indicate the writer's degree of certainty about a claim helping distinguish between speculation and assertion (e.g., might, possibly, likely); boosters, used to emphasize confidence in a statement giving it strength (e.g., clearly, undoubtedly); hedges, used to signal caution or diminish the strength of a claim (e.g., perhaps, just); and engagement markers, used to engage the reader (e.g., as you can see, note that, we).

Writing Quality

Writing quality was assessed using an adapted version of the Massachusetts Comprehensive Assessment System (MCAS) rubric (Dobbs, 2013) (Appendix A). This rubric was chosen for a couple of different reasons. First, the WG intervention that generated the samples used in this study took place mainly in the state of Massachusetts. Therefore, it is fair that holistic measures of quality be assessed with a rubric that is familiar with the education environment and demands in that state. Second, Dobbs (2013) used this adapted version in her investigation of a WG pilot study. Because this study builds on Dobbs' work, using the same rubric allows for better comparison of the results.

The MCAS rubric is designed to provide a holistic measure of quality based on topic idea development (TISCORE) and conventions (CSCORE). The main changes in the adapted version are in regard to point value. The original rubric assigns points on a scale of 0-5 points for TISCORE and 0-3 points for CSCORE. In Dobbs (2013) adaptation, possible points range from 1-6 and 1-4 for TSCORE and CSCORE respectively. The adapted version of the rubric also simplifies some concepts. For instance, at the higher range of the TISCORE, the MCAS has the following two criteria: "Central idea is insightful and fully developed" and "Skillful selection and explanation of evidence and/or details" (Massachusetts Department of Elementary and Secondary Education, n.d.-a). Dobbs (2013) adaptation combines these criteria into "Rich topic/idea development" (pg. 123).

Training

A coding manual was created to provide guidance and training to quality scorers and discourse marker (DM) coders. For quality scores, the manual provides guidance extracted from

MCAS scoring guides (Massachusetts Department of Elementary and Secondary Education, n.d.-b). Scorers were trained and practiced on essays not included in the analysis sample. Because all EL essays contained in the post-intervention sample were included in the data analysis, essays from another datapoint were randomly selected in order to include EL samples in the training. All essays were double scored by two graduate assistants with middle-school teaching experience. In order to avoid quality biases, essays were scored for quality prior to having knowledge or receiving any training related to other components of the study. Training reliability was determined using adjacent score agreement (Dobbs, 2013), where scorers needed the exact score or up to a 2-point score differential on ten consecutive essays.

After the quality scoring phase, essays were coded for DMs. Because I was more familiar with the concept and theoretical framework surrounding DMs, I planned on scoring all essays and to train a graduate assistant to score 20 percent of the sample to ensure reliability. The graduate assistant practiced on the same essay samples used for quality scoring practice and followed the DM coding manual. Training was deemed complete when we achieved a 90% interrater agreement on 5 essays.

Quantitative Analysis Plan

Correlational analysis results informed the structure of a series of two-level Hierarchal Linear Model (HLM) to investigate the predictive power of variables. Variables at level-1, the student level, was nested within level-2, school attended. Essay samples form level-1 unit and within-student variables are gender, SES status, SPED status, EL status, and essay length. The outcome variables, holistic essay scores and frequency of discourse markers (DM), are also measured at level-1. As it is the case with HLM, the outcome variables in question are always

situated at the lowest level of the hierarchy (Castro, 2002). Level-1 equation takes the form of a simple regression for each individual student *i* and it is represented as follow:

$$Yij = \beta 0j + \beta 1jXij + rij$$

Where:

$Yij =$ frequency of markers for student *i* in school *j*

Xij = value on level-1 predictor (e.g. EL status for student *i* in school *j*)

$\beta 0j$ = frequency of markers for student *i* in school *j who is not in EL*

$\beta 1j$ = regression coefficient associated with EL status

rij = random error associated with student *i* in school j.

Level-2 variables consider the effect between-student variation by accounting the effects of aggregated student-level data at the school-level. Thus, in level-2 model, level-1 coefficients $\beta 0j$ and $\beta 1j$ were used as outcome variables as represented in the following simple regression equations:

$$\beta 0j = \gamma 00 + \gamma 01Gj + U0j$$

and

$$\beta 1j = \gamma 10 + \gamma 11Gj + U1j$$

Where:

$\beta 0j$ = intercept for the j*th* school

$\beta 1j$ = slope for the j*th* school

Gj = school influence of school j

$\gamma 00$ = overall mean intercept adjusted for EL status

$\gamma 10$ = regression coefficient associated with EL status relative to level-2 scope

$U0j$ = random effects of the j*th* level-2 unit adjusted for EL status on the intercept

$U0j$ = random effects of the j*th* level-2 unit adjusted for EL status on the slope

In order to analyze the hierarchical effect, a combined model is created by combining the level-2 equations into the equation for level-1:

$$Yij = \gamma 00 + \gamma 10Xij + \gamma 01Gj + \gamma 11GjXij + U1jXij + U0j + rij$$

Further, the main concern of this work is whether essay scores can be predicted using stance markers, a student-level predictor, and teaching style/quality at a given school, school-level predictor. By substituting the variables of interest, the combined model look as follows:

$$\text{Essay Score } ij = \gamma 00 + \gamma 10(\text{DM } ij) + \gamma 01(School\ j) + \gamma 11(School\ j)(DM\ ij)$$

$$+U1j(DM\ ij) + U0j + rij$$

Nonetheless, in order to show whether DMs can predict essay score based on EL status, an interaction term was added to final model:

$$\text{Essay Score } ij = \gamma 00 + \gamma 10(\text{DM } ij) + \gamma 01(School\ j) + \gamma 11(DM\ ij)(EL\ Status\ ij)$$

$$+ y12(School\ ij)(DM\ ij) + +U1j(DM\ ij) + U0j + rij$$

To address question 1, a descriptive analysis on frequency of markers was used to compare usage among ELs and non-ELs. For question 2, the equation described above was used with the following control predictors for 1) grade level; 2) SPED, SES, and gender; and 3) text length. Further, individual organization and stance markers were added to the model as predictors of quality. Lastly, the total organization markers, stance markers, and combined discourse markers were added as predictors to observe their combined impact.

Qualitative Analysis Plan

A systematic approach was employed to identify, analyze, and compare the use of DMs in student writings. This process led to a rigorous content analysis of writing samples to understand the application of the linguistic features used to organize or assert stance of statements. Content analysis is a systematic method used to analyze the content of documents, texts, and other materials (Krippendorff et al. 2018).

The first step in a content analysis is to describe the process for selecting material (Hoffman et al., 2011). In this case, essays were uploaded into Dedoose software and independently coded. A random subset of essays was coded by a second researcher who is experienced in grading middle school essays and had previously been trained to use the coding scheme to identify and classify frame markers. This subset was computer generated and contained twenty percent of the total sample (72 essays). The overall interrater agreement score based on a weighted matching criterion (Li et al., 2023) was 92.83%.

Next, a systematic marking approach was employed to record the contexts of these markers. The first step was to read each essay containing the specific DM to be analyzed in order to identify the sentences containing signal words. (Hyland, 2005). Once identified, the sentence containing the linguistic feature was copied and pasted into a document under the categories EL or non-EL.

Following, a contextual analysis was conducted. Samples were analyzed within and across groups. For each instance where a specific DM was used, surrounding text was examined to interpret its role. Each text was once again read thoroughly, and instances of markers were annotated according to overall theme, category, and function. As themes begun to emerge,

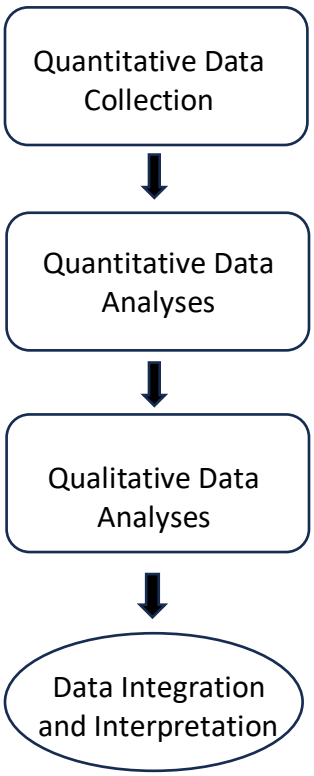
they were noted along with student ID and exemplary quote for later comparison. This process was lengthy and required multiple readings of the writing samples at hand. Nonetheless, this step was essential for understanding the functional use of language and assert the importance of contextual nuance in evaluating pragmatic features.

The identified and coded passages were then structured into a comparative framework to distinguish between the usage patterns of ELs and non-ELs. This structuring allowed for a systematic analytical overview. From this point on, the overall qualitative analysis focused on the role these markers played in the rhetorical structure of the arguments, examining how they supported the coherence and persuasiveness of the text. The final phase involved interpreting the data in light of the research questions and discussing the findings in relation to existing literature. This stage was critical for situating the study within the broader discourse on language learning and academic writing skills development.

Finally, the integration of qualitative and quantitative findings was conducted to enhance the understanding of the findings (Bryman, 2006; Creswell & Clark, 2017) leading to in-depth discussion, implications for practice, and future research. A full analysis plan is described below according to DeCuir-Gunby and Schutz, (2017).

Figure 3

Analyses Plan: Mixed Methods Sequential Explanatory Design Procedures



	Procedure	Product
Quantitative Data Collection	• EL essay selection from original database (*n* = 173) • Matching comparison group of non-ELs (*n* = 173)	• Database of 346 student essays.
Quantitative Data Analyses	• Essay scoring and DM coding • Frequencies, mean scores, correlation analyses • T.E.R.A	• Descriptive statistics • Correlation comparisons
Qualitative Data Analyses	• Essay transcription • Open coding • Axial coding • Dedoose qualitative software	• Exemplary usages of DMs • Effective strategies v. ineffective usage
Data Integration and Interpretation	• Interpretation and explanations of results derived from each phase	• Implications • Limitations • Future Research

CHAPTER IV

RESULTS

Correlational and Descriptive Analyses

Prior to addressing the research questions, a series of descriptive measures were evaluated. Total quality scores were significantly correlated across variables of interest (see Table 2). Total quality scores were strongly correlated with both TISCORE and CSCORE, which were the two main components of the rubric used for evaluation; moderately correlated with word count, organization markers, and stance markers; and weakly correlated with syntactic simplicity. These results indicate that quality was most influenced by topic/idea development and convention scores.

Beyond its relationship with total quality scores, length (word count) was also significantly correlated with both topic/idea and convention scores, suggesting that longer responses may facilitate the development of more elaborated ideas and greater linguistic accuracy. Additionally, stance markers and organization markers showed a moderate correlation with multiple variables, suggesting that these features play an important role in overall writing quality. Specifically, stance markers were correlated with topic/idea, convention scores, and word count, indicating that the use of evaluative or positioning language may be associated with more developed ideas, greater linguistic accuracy, and longer responses. Similarly, organization markers correlated with topic/idea, convention scores, and word count, indicating their potential contribution to both conceptual clarity and linguistic precision. These findings suggest that both stance and

organization markers, beyond their relationship with the total score, may play a meaningful role in shaping key dimensions of writing quality.

Table 2

Pairwise Correlations between Writing Quality, Length, Organization Markers, and Stance Markers

	Total Score	Topic/Idea Score	Convention Scores	Word Count	Syntactic Simplicity	Deep Cohesion	Organization Markers	Stance Markers
Total Score	1.000							
Topic/Idea (TISCORE)	0.945**	1.000						
Convention (CSCORE)	0.913**	0.739	1.000					
Word Count	0.668**	0.711	0.520	1.000				
Syntactic Simplicity	0.202**	0.187**	0.181**	0.189**	1.000			
Deep Cohesion	0.066	0.075	0.045	0.145*	0.188**	1.000		
Organization Markers	0.442**	0.456**	0.364**	0.514**	0.137*	0.205**	1.000	
Stance Markers	0.483**	0.505**	0.393**	0.682**	0.114*	0.093	0.355**	1.000

*p<0.05, **<0.001

The holistic total average score of all essays were 4.62 points out of ten possible points. Non-English Learners had a mean score of 4.98 (*SD* = 1.59), which was significantly higher than ELs' total mean score of 4.28 (*SD* = 1.46), $t(344) = 4.26$, $p < .001$, $d = 0.46$ (see Table 3 for descriptive measures). The total score was a combination of topic/idea (TISCORE) on a scale of 1-6 points and conventions (CSCORE) on a scale of 1-4 points. Essays had an average TISCORE of 2.4 points (EL = 2.27, non-ELs = 2.52) and an average CSCORE of 2.3 points (EL = 2, non-EL = 2.46)

The group with lowest and highest average scores were grades 4 (*M* = 4.28 points) and 8 (*M* = 5.66 points) respectively. Despite the progressive improvement from grades 4 to 8, which indicates that natural skill development, instructions, and practice have a cumulative impact on writing development, grade 5 outperformed grade 6 on all measures.

As presented in Table 3, TISCORE, which ranges from 1 to 6 points, increased in both EL and non-EL groups across grade levels. In grade 4, non-EL students scored a mean of 2.30 (*SD* = 0.95) which was not significantly different than ELs' score of 2.12 (*SD* = 0.85), $t(78) = 0.89$, $p = .37$, $d = 0.2$). By grade 8, non-ELs reached a mean of 3.08 (*SD* = 1.12), which was also not significantly different from their ELs peers' mean score of 2.79 (SD = 1.03), $t(22) = 0.66$, $p = .52$, $d = 0.27$). CSCORE, ranging from 1 to 4 points, also improved across grade levels for both groups, but non-ELs achieved higher scores at each grade level. In grade 4, non-ELs scored a mean of 2.28 (*SD* = 0.67), while ELs scored 1.88 (SD = 0.61), $t(78) = 2.79$, $p < .001$, $d = 0.62$). By grade 8, non-ELs had non-significant higher score of 2.96 (*SD* = .69) compared to ELs score of 2.50 (*SD* = .56), $t(22) = 1.79$, $p < .001$, $d = 0.73$. This pattern suggests a steady gap in writing conventions between both groups of students.

Table 3

Descriptive Statistics for Measures of Quality by Grade Level and Language Status

	M (*SD*)		Possible Range	4th Grade *M* (*SD*)		5th Grade *M* (*SD*)		6th Grade *M* (*SD*)		7th Grade *M* (*SD*)		8th Grade *M* (*SD*)	
	EL	Non-EL		EL	Non-EL	EL	Non-EL	EL	Non-EL	EL	Non-EL	EL	Non-EL
Topic and Idea (TISCORE)	2.27 (.89)	2.52 (.98)	1-6	2.12 (.85)	2.3 (.95)	2.46 (.84)	2.55 (.94)	2.1 (.88)	2.53 (.9)	2.32 (.88)	2.54 (1.06)	2.79 (1.03)	3.08 (1.12)
Conventions (CSCORE)	2 (.69)	2.46 (.69)	1-4	1.88 (.61)	2.28 (.67)	2.04 (.77)	2.36 (.66)	1.98 (.72)	2.42 (.67)	1.98 (.68)	2.61 (.69)	2.5 (.56)	2.96 (.69)
Total Score (TSCORE)	4.28 (1.46)	4.98 (1.59)	2-10	4.01 (1.33)	4.55 (1.53)	4.5 (1.48)	4.84 (1.52)	4.08 (1.47)	4.96 (1.53)	4.3 (1.46)	5.14 (1.65)	5.29 (1.45)	6.04 (1.71)

The Total Score (TSCORE), which ranges from 2 to 10 points, reflects the combined performance of topic and idea (TISCORE) and Conventions (CSCORE). Once again, non-EL consistently achieved significantly higher scores than EL students. In grade 4, the mean TSCORE

for non-ELs was 4.55 (*SD* = 1.53) compared to ELs (*M* = 4.01, *SD* = 1.33), *t*(172) = 3.50, *p* < .001, *d* = 0.38. By grade 8, non-ELs reached a mean score of 6.04 (*SD* = 1.71), whereas EL students achieved a mean score of 5.29 (*SD* = 1.45), *t*(172) = 4.40, *p* < .001, *d* = 0.47. The data indicates an increasing trend in performance for both groups along with a persisting gap between EL and Non-EL students.

The word count data showed variability across grade levels for both EL and Non-EL students (see Figure 4). In grade 4, both groups had a similar mean word count of 136 words. However, by grade 8, non-EL students produce significantly longer essays, with a mean word count of 163 (*SD* = 72), compared to EL students with a mean of 127 (*SD* = 50.7), *t*(172) = 5.38, *p* < .001, *d* = 0.58. This suggests that non-EL students consistently produce more text as they advance in grades, whereas EL students show more fluctuation in their word count.

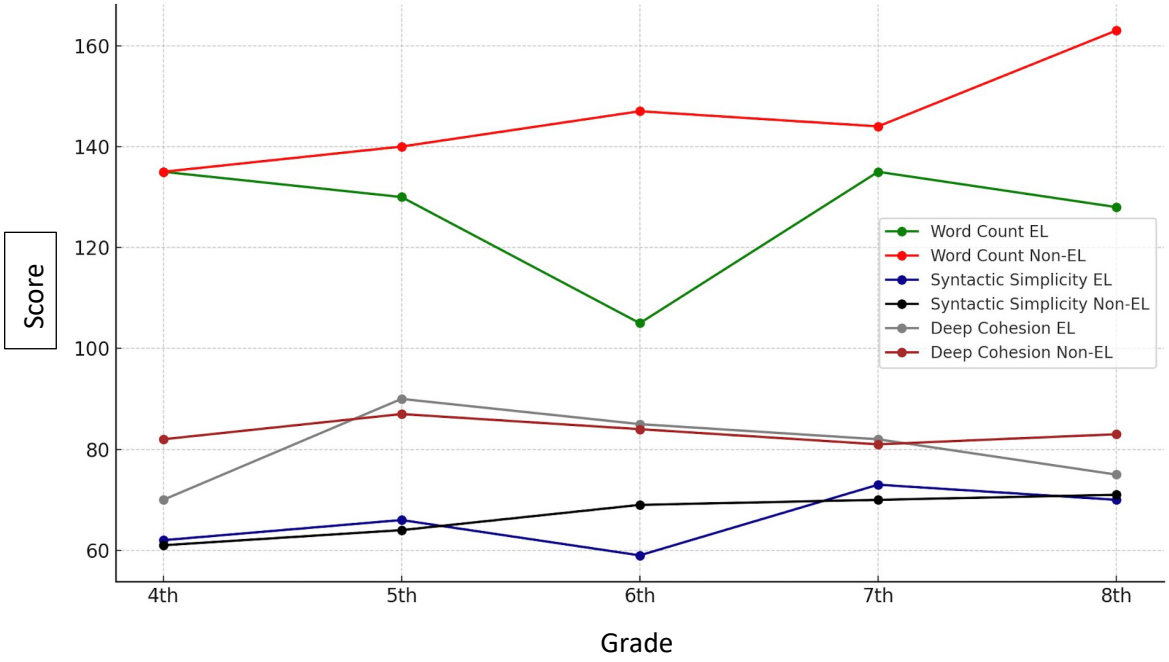
Syntactic Simplicity, which measures the complexity of sentence structures, generally increased for both groups across grades. In grade 4, non-ELs had a mean score of 60.8 (*SD* = 27) compared to ELs 62.3 (*SD* = 24.8). Although there was some fluctuation in middle grades, by grade 8, non-ELs reached a mean score of 70.6 (*SD* = 19.4), which was similar to their EL counterparts' mean score of 70.9 (*SD* = 18), *t*(172) = 0.14, *p* = .880, *d* = 0.01, suggesting that both groups improved their syntactic simplicity over time (see table 4).

Deep cohesion, which measures how well ideas are conceptually connected, showed some variance across grades. In grade 4, non-ELs had a mean score of 82.1 (*SD* = 25.1), which was significantly higher than ELs' mean score of 69.6 (*SD* = 34.2), *t*(172) = 3.87, *p* < .001, *d* = 0.42. In grades 5, 6, and 7, both groups had a deep cohesion score ranging from 81.5 to 89.7, with ELs scoring a few points higher than non-ELs at each grade-level. Nonetheless, in grade 8,

non-ELs once again scored significantly higher with a mean of 83 (*SD* = 25.4) while ELs had a score of 75.7 (*SD* = 28.5), *t*(172) = 2.51, *p* = .012, *d* = 0.27.

Figure 4

Lexical Measures Across Grade-Levels



RQ1: Organization and Stance Marker Frequency

To answer research question one, analysis was conducted to determine the frequency of organization and stance markers (see Table 4). Both categories combined yielded a total of 4299 instances (2025 in EL essays and 2277 in non-EL essays) with a range of marker usage per essay extending up to 43.

Overall, organizational markers accounted for 1,002 instances (426 in EL essays and 576 in non-EL essays), appearing in 296 essays. Although non-ELs used every type of organization

Table 4

Frequency of Organization and Stance Markers (n = 346)

Type of Marker	Total Instances			# of Essays Containing at least 1 Instance			Min and Maximum Instances in a Single Essay		
Organizational Markers	EL	Non-EL	Total	EL	Non-EL	Total	EL	Non-EL	Total
Code Glosses	15	32	47	14	25	39	0,2	0,3	0,3
Evidentials	0	12	12	0	9	9	0,0	0,3	0,3
Conclusion Markers	5	17	22	5	17	22	0,1	0,1	0,1
Goal Markers	1	4	5	1	3	4	0,1	1,2	0,2
Transition Markers	290	334	624	140	143	283	0,9	0,7	0,9
Frame Markers	112	180	292	52	84	136	0,5	0,6	0,6
Total Organization Markers	423	579	1002	150	146	296	0,11	0,12	0,12
Stance Markers									
Hedges	258	219	477	104	102	206	0,9	0,7	0,9
Boosters	42	56	98	31	44	75	0,7	0,5	0,7
Engagement Markers	477	442	919	113	111	224	0,17	0,17	0,17
Deontic Modality	572	662	1234	151	161	312	0,13	0,15	0,15
Epistemic Modality	247	322	569	131	151	282	0,8	0,12	0,12
Total Stance Markers	1596	1701	3297	167	170	337	0,29	0,35	0,35
Total Markers	2025	2277	4299						0,43

markers more than ELs, $t(344) = 5.59$, $p < .001$, $d = 0.60$, it is important to note that evidentials were used exclusively by non-ELs with 12 instances across 9 essays, $t(344) = 3.59$, $p < .001$, $d = 0.39$. Transition markers were the most frequent type of marker used by both groups, with 290 instances in EL essays and 334 in non-EL essays, for a total of 624 instances, but the difference is usage was not significant, $t(344) = 1.69$, $p < .092$, $d= 0.18$. Non-ELs also used more goal markers. Although this difference was not significant, there were 4 instances goal markers in non-EL essays compared to 1 instance in EL essays, $t(344) = 1.36$, $p = .176$, $d = 0.15$. Code glosses also appeared significantly more in non-EL essays with 32 instances compared to 15 in EL essays, $t(344) = 2.70$, $p = .003$, $d = 0.29$. Conclusion markers were also used significantly more by non-ELs with 17 instances compered to 5 instances in EL essays, $t(344) = 2.67$, $p < .001$, $d = 0.29$. Finally, non-ELs also used more frame markers than their EL counterparts with 180 instances compared to 112, $t(344) = 1.63$, $p = .002$, $d = 0.18$.

Stance Markers accounted for 3,297 instances (1,596 in EL essays and 1,701 in non-EL essays), appearing in 337 essays. Once again, non-ELs used these types of markers significantly more than ELs, $t(344) = 1.34$, $p = .002$, $d = 0.14$; with the exception of hedges and engagement markers. There were 258 instances of hedges in EL essays compared with 219 in non-ELs, $t(344) = 2.65$, $p < .001$, $d = 0.29$. Similarly, there were 477 instances of engagement markers in EL essays compared to 442 instances in non-EL essays, $t(344) = 1.95$, $p = .003$, $d = 0.19$, that were used significantly more than by EL students. Non-ELs used significantly more boosters with 56 instances compared to 42 in EL essays, $t(344) = 1.68$, $p = .003$, $d = 0.18$. Although deontic markers appeared in 662 instances in non-EL essays compared to 572 instances in EL essays, the difference was marginally significant, $t(344) = 1.51$, $p = .042$, $d = 0.16$. Epistemic markers were

also more common in non-EL essays with 322 instances compared to 247 instances in EL essays, but this difference was not significant, $t(344) = 1.61$, $p = 108$, $d = 0.17$.

RQ2: Relationship Between Discourse Markers and Essay Quality

Prior to building the multilevel models, diagnostic checks were conducted to evaluate the assumptions of linearity and normality. The scatterplot shown in Figure 5 evaluates whether residuals have a random pattern. As it can be seen, residuals are randomly scattered around zero on the y-axis, with no obvious patterns or trends, which supports the linearity assumption. Figure 6 uses a Q-Q plot to evaluate whether residuals are normally distributed. Most points lie close to the diagonal line, indicating that residuals are approximately normally distributed. Although a few deviations are shown in the extreme, this is not uncommon for real-world data (Pleil, 2016).

Several multilevel models were built to understand the relationships between individual markers and essay scores. These two-level models had essays nested within schools. Nonetheless, prior to introducing organization and stance markers and group interaction, a Basic model with control predictors was built. Predictors included student level variables: grade level, SPED status, EL status, and SES; and text level variables: length, syntactic simplicity, and deep cohesion. As expected, SES was not significant probably due to the large majority of students in the sample coming from low SES and the matching pair system used to group students. Deep cohesion, a text level variable, was also not significant, indicating that students in both groups performed similarly relating events and ideas relevant to the topic at hand. These 2 variables, SES and deep cohesion, were excluded from the basic model (Table 5).

Figure 5

Residual Plot Examining the Relationship Between Residuals and Score

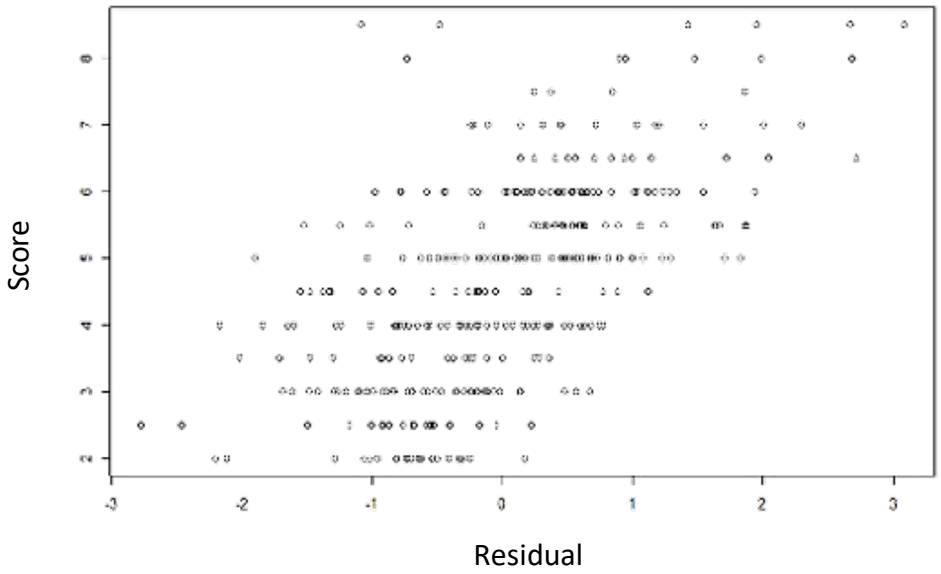


Figure 6

Q-Q Plot for Checking the Normality Assumption of Standardized Residuals

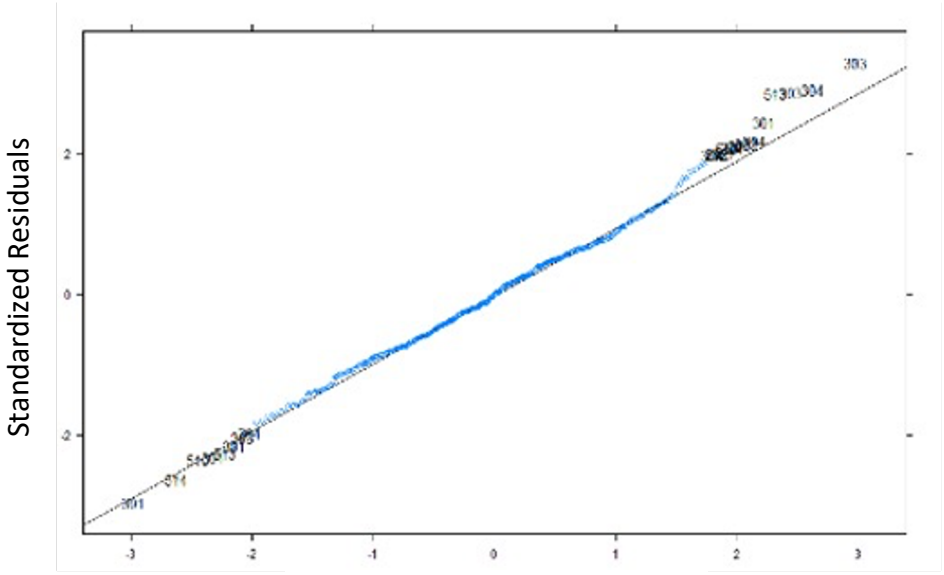


Table 5 shows the taxonomy for all models with the significant predictors of quality. Model 1 is the intercept and model 2 represents the basic model after the two non-significant predictors, SES and deep cohesion, were excluded. Next, in model 3, total organization and stance markers were added. Organization markers yielded a small but significant effect (β = 0.06, $p < .05$), whereas stance markers did not (β = 0.01, $p > 0.05$).

Next, in model 4, individual organization and stance markers were added with only four of them being significant predictors of quality. Out of those, three were organization markers: conclusion markers (β = 0.70, $p < .01$), frame markers (β = 0.15, $p < .001$), and goal markers (β = 1.04, $p < .01$). The other organization markers, code glosses (β = 0.08, p = .499), evidentials (β = 0.156, p = .478), and transition markers (β = 0.021, p = .536) were excluded were not predictors of quality. Following, individual stance markers were added. Boosters was the only stance marker that had a marginally significant effect (β = 0.172, p = .030), while hedges (β = 0.048, p = .143), engagement (β = 0.026, p = .116), deontic (β = 0.047, p = .146), and epistemic modality markers (β = 0.060, p = .107) were not significant. Finally, in model 5, the interaction terms were added between group (EL or non-EL) and organization marker ((β = 0.038, p = .440)) and group and stance marker (β = 0.004, p = .809). The non-significant interaction effects suggest that there is no differential effect of these markers based on EL status.

Using Likelihood Ration Tests (LRT), models were compared to determine whether the added predictors significantly improved the model fit, it was determined that model 5 produced the best model fit. Model 4 had lower Akaike Information Criterion (AIC) (987.6), Bayesian Information Criterion (BIC) (1034), and deviance 963.6 along with a higher Log-Likelihood value (-481.8). This indicates that, when controlled for grade level, length, SPED

status, EL status, and syntactic simplicity, conclusion markers, goal markers, frame markers, and boosters are significant predictors of essay scores. In others, the use of those type of markers likely resulted in higher essay scores.

Table 5

Taxonomy of Fitted Multilevel Models Describing the Relationship Between Overall Essay Quality, Organization Markers and Stance Markers

	Multilevel Models				
	M1	M2	M3	M4	M6
Fixed Effects:					
Intercept	4.59***	3.68***	3.01***	3.16***	3.05***
Grade Level		0.18**	0.20***	0.19***	0.19***
Length		0.96***	0.80***	0.81***	0.78***
SPED		-0.53**	-0.50**	-0.39*	-0.40*
Syntactic Simplicity		0.13*	0.12*	0.11*	0.12*
Non-EL			0.44***	0.39***	0.47*
Organization			0.06*	----	0.00
Stance			0.01	----	0.00
Conclusion				0.70**	0.72**
Goals				1.07**	1.04**
Frame				0.15***	0.19***
Boosters				.17*	0.16
Group:Organization					-0.04
Group:Stance					0.00
Random Effects:					
	0.41	0.28	0.26	0.25	0.26
	2.12	1.03	0.96	0.88	0.96
Goodness of fit:					
	1264.2	1019.5	994.7	963.6	994.2

*p <0.05; **p<0.01; ***p<0.001

RQ3: How Do ELs Use Stance Markers Differently Than Non-ELs? What Patterns in Uptake of Discourse Markers Are Present in the Data?

In order to compare usage of DMs between the two groups, each essay was examined according to group membership. For instance, writing samples from ELs were examined for specific usage of DMs (e.g., conclusion or epistemic modality marker). During this process, each highlighted instance of specific markers was analyzed. As themes began to emerge, they were noted along with student ID and example quote for later comparison. This process was lengthy and required multiple readings of the writing samples at hand. Finally, the comparative analyses took place by juxtaposing themes and examples found in each group.

General results indicate that ELs and non-ELs share some similar efforts related to their usage of discourse markers while composing their argumentative essays. Both EL and non-EL groups showed a shared understanding of argumentative academic writing conventions. Common discourse markers, such as epistemic modality markers (“I think”) and frame markers (“First reason why”) are employed by both groups. Further, the consistent use of boosters and epistemic modality markers reflects an effort by both groups to assert their claims and present their opinions with confidence. Both groups also use engagement markers like “we” and “you” to stablish a connection with the audience and make their arguments interactive and accessible.

Despite some shared similarities, ELs and non-ELs differed on how they use DMs in their writing. Non-EL students used more diverse and complex structures in their discourse markers. For instance, their use of frame markers was nuanced (“another reason why…”) and their epistemic modality markers often expressed collective beliefs ("Learning with Ipads *shows* that

technology is a necessary skill in today's world."), suggesting higher proficiency and comfort with language, while EL students tended to use simpler and more formulaic constructions. Another aspect that both groups differed is related to the tone and function of DMs. ELs frequently employed hedges ("just," "maybe") to soften their claims, reflecting caution. In contrast, non-ELs used hedges for conditional statements, indicating more advanced argumentation skills. Skilled writers employ hedging to acknowledge potential exceptions and alternative interpretations, making their arguments more precise and rhetorically effective (Hyland, 1996). Non-ELs also employed more assertive engagement markers ("You should"), indicating a directive tone compared to the inclusivity of ELs. Finally, both groups also differed on their content focus. Although the topic assigned to both groups is the same, non-ELs tended to explore broader implications and provided more elaborated arguments, while ELs focused on immediate and concrete benefits. A synthesis of these findings is shown in Table 6.

Besides general similarities and differences, the quantitative analysis pointed to trends between the two groups. For instance, we found that the following discourse markers significantly predict scores: conclusion markers, goals, frame markers, and boosters. We also found that non-ELs use all types of markers more in their writing than EL students, except for hedges and engagement markers, in which ELs have a significantly edge. Thus, while non-EL writers are likely to employ DMs that predict their final writing scores, DMs that are common to EL student's repertoire are not likely to have a positive impact on their writing grade. Following is a detailed overview of how ELs and non-ELs use these four markers that predict essay scores:

***Conclusion Markers*.** ELs and non-ELs writing revealed shared strategies in summarizing arguments and both groups employed markers such as "In conclusion," "Finally," and "To

Table 6

Comparison of Discourse Marker Usage by English Learners (ELs) and Non-English Learners (Non-ELs)

Feature	ELs	Non-ELs	Similarities	Differences
Conclusion Markers	"In conclusion," "Finally," "To conclude"	"So in conclusion," "Finally," "In conclusion"	Both groups use common conclusion markers for summarizing arguments.	Non-ELs use informal tone ("so in conclusion") and demonstrate greater variability in complexity.
Goal Markers	"I'm trying to make a point" three reasons," "I think..."	"I believe...," "We should be allowed to use ipads for three reasons..."	Both explicitly state goals to support their arguments.	Non-ELs use more elaborative and precise structures, reflecting advanced language skills.
Frame Markers	"First reason why," "Second reason why"	"The reason I say this," "My third reason why"	Both structure arguments clearly using sequential markers.	ELs use explicit markers, whereas non-ELs use nuanced and varied markers like "another reason is."
Boosters	"All," "Good," "Literally"	"Everybody," "Better," "Going to make it easy"	Both emphasize benefits of technology in education using intensifiers.	Non-ELs focus more on practical applications, while ELs balance positives and potential drawbacks.

conclude." These markers helped students signal the end of their arguments to reinforce key points. However, ELs tended to rely on formulaic and straightforward phrases, while non-ELs demonstrated greater variability, occasionally adopting an informal tone, such as "So in conclusion." The simplicity of EL responses may reflect instructional emphasis on formal academic structures, whereas non-ELs exhibited a more natural and nuanced use of language.

Goal Markers. Only 5 instances of goal markers were found in the sample. Non-EL students used goal markers in 4 different instances, while ELs used only once. This suggests that both groups find it difficult or unnecessary to articulate the purpose of their writing. Non-ELs use of goal markers were nuanced. They stated their stance and aimed to persuade their audience by offering rationale: “I am going to give three reasons” and “I believe we should be allowed to use ipads for three reasons.” In other words, their persuasive goals were embedded between their positionality and the rationale that framed their writing. The other non-EL example followed up goal markers with more elaborative language and addressed broader implications of technology usage indicating a higher level of linguistic proficiency (“I think the school should have Ipads because they help students with basic learning and making or researching projects”). The only instance found in the EL sample used more direct language, “I’m trying to make a point,” followed by simpler grammatical construction accompanied by minor errors and focus on immediate benefits (“You should let students use Ipads because there is book in the Ipad and they can have more fun”).

Frame Markers. Frame markers, used to structure arguments, were also evident in both EL and Non-EL writing, with common markers including "First reason why" (ELs) and "My second reason why" (non-ELs). Both groups employed these markers to organize their ideas logically, reflecting shared instructional practices. However, ELs relied more heavily on explicit sequencing (e.g., "First," "Second"), while non-ELs used more variety (e.g., "Another reason is" and “Secondly”).

Boosters. Boosters, or words used to intensify claims, were used by both EL and Non-EL students to emphasize the benefits of technology in education. ELs often used boosters like

"All" and "Good" to underline the universal benefits of iPads, while non-ELs employed phrases such as "Better" and "Gonna make it easy" to highlight practical advantages. Both groups recognized the transformative potential of technology, but non-ELs placed greater emphasis on operational convenience, reflecting a utilitarian perspective. ELs, on the other hand, occasionally used boosters to address potential criticisms, demonstrating a balanced approach to presenting their arguments. This suggests that ELs might benefit from further instruction on diversifying their use of boosters to strengthen claims effectively.

RQ4: How Do Differences in How Stance Markers Are Used by ELs and Non-ELs Offer Insight into the Nature of the Quantitative Relationship?

The quantitative and qualitative findings collectively illustrate how EL and Non-EL students use markers of stance differently, with implications for writing quality and overall essay scores. As a subset DMs, stance markers shape the writer's authority, level of commitment, and interactions with audience in a way that balances assertiveness with academic humility (Deng & He, 2023). Non-EL students use DMs that significantly predict higher writing scores more frequently than EL students**,** suggesting that their rhetorical strategies align more closely with academic writing conventions that contribute to stronger performance. Notably, EL students predominantly use hedges and engagement markers, which do not significantly predict essay scores. This suggests that while ELs employ discourse markers, they do so in ways that reflect caution and uncertainty rather than assertiveness or organization—key components of strong academic writing.

Qualitative analyses reinforce this pattern, revealing that EL students frequently express their stance in a tentative manner, softening their claims with hedges or epistemic markers

(e.g., “I think we should use iPads because they help us look up words faster”). In contrast, non-EL students assert their ideas with confidence, using strong boosters and epistemic markers that demonstrate certainty (e.g., “Using iPads teaches us to work better with technology”). These differences extend across multiple discourse marker categories, as shown in Table 8, where ELs’ cautious language contrasts with non-ELs’ more direct and authoritative tone. The fact that ELs' most frequently used discourse markers—hedges and engagement markers—do not correlate with higher essay scores suggests that EL students may need targeted instructional support to integrate higher-scoring markers, such as boosters and epistemic markers, into their writing.

Table 8

Exemplary Passages Displaying Caution and Confidence Across Discourse Markers

	Discourse Markers			Total Instances
	Hedges	Boosters	Epistemic	
EL: Caution	"Students need to focus on their work when using Ipads. They *should not* use them for games, *only* for school work."	"Ipads are *important*, but they should only be used for assignments.”	"I use Ipads to find out what words mean, and *sometimes* it helps me understand better.”	205
Observations	Cautious or conditional statements	Booster tempered with conditions	Cautious statement, focusing on immediate benefits	
Non-EL: Confidence	"Ipads are not just for learning but also for sharing ideas with classmates. These tools *might even help* with creativity."	"Ipads make learning *exciting*. They *definitely* help us work more efficiently.”	"Learning with Ipads *shows* that technology is a necessary skill in today’s world.”	212
Observations	Hedge combined confident with confident claim	Strong boosters emphasize claims assertively	Assertive reasoning and confidence	

CHAPTER V

DISCUSSION

This study explored the role of discourse markers in the persuasive writing of middle school English Learners (ELs) and non-English Learners (non-ELs), highlighting their impact on writing quality. One of the purposes of the current study was to compare its results to previous findings from Dobbs (2014) with the benefit of disaggregating data based on languages status of EL and non-EL designations. Thus, this discussion will also include a comparison section.

Our findings revealed key differences in discourse marker usage, essay scores, and rhetorical strategies, providing insights into the academic writing development of EL students. These results are discussed in relation to previous research and implications for writing instruction.

Writing Quality and Developmental Trends

The data demonstrated a persistent gap in writing quality between ELs and non-ELs, with non-ELs consistently outperforming ELs across all assessed dimensions. These findings align with previous studies indicating that ELs often struggle with writing proficiency due to linguistic challenges and limited exposure to academic English (Graham & Perin, 2007; Snow & Uccelli, 2009). The observed steady improvement in writing scores across grade levels suggests that writing proficiency develops cumulatively over time, influenced by instruction, practice, and linguistic exposure. However, the dip in sixth-grade performance raises questions about potential instructional gaps or shifts in writing expectations at this transitional stage. The move from elementary to middle school can also be challenging for many students and 6th graders might be adjusting to the new environment. In middle school, students have to balance

multiple classes and teachers and are likely to spend less time in each class. These increased cognitive demands could temporarily affect their writing performance.

Differences in Discourse Marker Usage

Analysis of discourse marker frequency revealed that non-ELs used significantly more organization and stance markers than ELs. Organizational markers, including transition words, conclusion markers, and frame markers, were employed more frequently by non-ELs, facilitating clearer argument structuring and logical progression. These findings corroborate prior research suggesting that non-ELs demonstrate greater familiarity with academic writing conventions and rhetorical organization (Hyland, 2005; Dobbs, 2014).

ELs relied more on hedges and engagement markers, indicating a cautious approach to argumentation and emphasis on audience engagement. While hedging is a critical rhetorical strategy in academic writing (Aull & Lancaster, 2014), its prevalent use among ELs may reflect linguistic uncertainty rather than a deliberate rhetorical choice. These differences suggest that ELs may benefit from targeted instruction on using organizational markers to enhance clarity and coherence in their writing.

Predictors of Writing Quality

Multilevel modeling identified conclusion markers, goal markers, frame markers, and boosters as significant predictors of writing quality. Non-ELs' greater use of these markers likely contributed to their higher writing scores. The predictive role of conclusion and goal markers points to their importance in persuasive writing, as they help establish argument closure and purpose. However, the lack of a significant interaction between EL status and marker impact suggests that these features are universally beneficial, regardless of linguistic background.

Although stance markers were generally less predictive of writing quality than organization markers, boosters showed a marginally significant effect, highlighting the role of assertive language in persuasion. Given that ELs used boosters less frequently, instructional interventions focusing on confident argumentation strategies could improve their persuasive writing effectiveness.

Qualitative Insights: EL and Non-EL Writing Strategies

Qualitative analysis further revealed differences in how ELs and non-ELs employed discourse markers. While both groups demonstrated an understanding of argumentative structures, non-ELs exhibited greater syntactic variety and rhetorical sophistication. ELs tended to rely on formulaic phrases, particularly in conclusion and frame markers, which may reflect an overreliance on memorized structures rather than adaptive usage (Scarcella, 2003).

Moreover, non-ELs integrated goal markers within broader rhetorical frameworks, embedding persuasive goals within well-developed arguments. In contrast, ELs employed simpler, more directive statements, suggesting that instruction on articulating argumentative goals explicitly could be beneficial. The nuanced use of epistemic modality by non-ELs, compared to ELs' cautious hedging, further indicates a disparity in argumentative confidence and linguistic proficiency.

Comparative Findings

Essay Quality and Descriptive Measures. This study builds off of Dobbs' (2014) framework for examining organization and stance markers. The average total score in Dobbs' sample was 5.69 points, with sixth-grade students scoring highest across all measures. In contrast, the current study found an average score of 4.62 with eighth-grade students scoring

the highest and an unexpected dip in sixth-grade scores. Further, while Dobbs observed longer essays among higher-scoring students, the current study found that non-ELs produced longer essays, particularly in eighth grade. This suggests that length remains an important predictor of writing quality, consistent with Dobbs' findings.

Frequency of Organization and Stance Markers. Although both Dobbs' and the current study had different number of essay samples and found different total numbers of organization and stance marker instances, both studies indicate that stance markers appeared slightly more frequent than organization markers in essay samples. Nonetheless, transitional markers, which signals organization, were most common in both studies. However, Dobbs found that organizational marker variety did not significantly predict essay quality, whereas the current study found that conclusion markers, frame markers, and goal markers significantly predicted higher quality scores**.**

Relationship Between Discourse Markers and Essay Quality. Dobbs' study found that stance marker variety (but not frequency) significantly predicted writing quality when controlling for essay length. The current study, however, found that only boosters significantly predicted essay quality among stance markers, while organizational markers such as conclusion, goal, and frame markers were the strongest predictors**.** This suggests that organizational clarity and coherence may have played a more significant role in writing quality in the current study compared to Dobbs' dataset**.** Additionally, Dobbs reported that evidentials and code glosses negatively impacted writing quality, while the current study found no significant relationship between these markers**.** Instead, hedges and engagement markers were the most frequently used by ELs but did not contribute positively to essay quality.

EL vs. Non-EL Differences in Stance Expression. A major distinction between the two studies is that Dobbs did not explicitly compare EL and Non-EL groups *nor provided a formal qualitative analysis or marker usage*, whereas the current study specifically examined *quantitative and qualitative* discourse marker differences between these groups**.** The current study found that non-EL students used all discourse markers that significantly predicted writing scores more frequently than ELs. The only two markers used more frequently by ELs—hedges and engagement markers—did not contribute to higher essay scores**.** This suggests a different discourse approach between the groups, with ELs exhibiting a more cautious rhetorical stance, often tempering their claims, while non-ELs demonstrated greater confidence in their assertions. Dobbs' findings also identified engagement markers as the most frequently used stance markers, but the current study further revealed that non-ELs used engagement markers to direct the audience assertively, whereas ELs used them inclusively and tentatively**.**

While this study builds on Dobb's 2014 framework in examining organization and stance markers, some key differences exist in the sampling and analysis. Dobbs study examined 664 persuasive essays from 176 students in grades six, seven, and eight. This study examined 346 persuasive essays from 346 students, 173 ELs and 173 non-ELs, in grades four, five, six, seven, and eight. Dobbs investigated writing samples from the Word Generation (WG) pilot interventions study, while this study investigated writing samples from the WG extended program, which included classroom discussion as part of the intervention. Further, Dobbs examined longitudinal aspects of the data and topic influence, while we focused on one set of post-intervention samples in which students did not receive vocabulary instruction prior to writing their essays. Thus, while Dobb's intention was to analyze DM usage in general, our focus

was to compare the uptake of vocabulary intervention by students designated ELs and non-ELs. These differences in sampling and methodology may shape the differences between findings across studies.

Pedagogical Implications

The findings of the current study emphasize the need for targeted writing instruction to support ELs in developing more effective persuasive writing skills. This study converges with Dobbs' in its support for explicit Instruction on discourse markers. Educators should provide direct instruction on the rhetorical functions of discourse markers, helping ELs integrate organizational and stance markers strategically (Hyland, 2005). While Dobbs emphasized the importance of variety in stance markers, this study points to the need to help ELs integrate higher-scoring markers such as boosters and organizational markers into their writing. Educators should also foster structured writing practice. Writing curricula should incorporate scaffolded exercises that guide students in structuring arguments, using goal and conclusion markers to enhance coherence.

Furthermore, the current study's findings of ELs' cautious tone versus non-ELs' confident stance, points to the need of supporting ELs to use a balanced approach to hedging and boosting. While hedging is a valuable rhetorical tool, ELs need instruction on when to assert claims confidently using boosters and developing a more confident academic voice.

Longitudinal Writing Support. Lastly, given the gradual nature of writing development, it is important to offer longitudinal writing support. Sustained writing interventions should be implemented across grade levels to ensure continuous improvement in EL writing proficiency (Graham & Perin, 2007).

This study contributes to the understanding of discourse markers in academic writing, demonstrating their impact on persuasive writing quality and highlighting differences between ELs and non-ELs. The findings indicate that while both groups follow general academic writing conventions, non-ELs exhibit greater sophistication in marker use, correlating with higher writing scores. Targeted instructional strategies focusing on discourse marker integration, argument structuring, and rhetorical confidence can help bridge the gap between EL and non-EL writers. Future research should explore the longitudinal impact of such interventions to determine their effectiveness in enhancing EL writing proficiency.

Limitations

Despite the valuable insights gained from this study, several limitations must be acknowledged. First, the dataset used for this study categorizes students into binary groups, EL and non-ELs, without accounting for former ELs, multilingual learners, or students with varied language backgrounds (e.g., ever-ELs). Prior research (Hopkins et al., 2013; Saunders & Marcelletti, 2013) has highlighted how EL classification is inherently fluid, as students exit the subgroup upon achieving proficiency. This can lead to misinterpretations of performance gaps, as current ELs are, by definition, still developing English proficiency, while former ELs—who may have received the same instructional interventions—are grouped with non-ELs once they meet exit criteria. However, former ELs are not equivalent to monolingual English speakers and their academic language trajectories may still be distinct. This limitation raises the possibility that discourse marker usage patterns attributed to ELs may reflect differences between current and former ELs, rather than between ELs and non-ELs as a whole. A more nuanced classification would allow for a clearer understanding of how discourse marker use and writing quality evolve

across language proficiency trajectories.

This study also examines student essays written on a single argumentative prompt, limiting the generalizability of findings to other genres and topics. Prior research (Dobbs, 2014) suggests that discourse marker usage can vary significantly across narrative, expository, and persuasive writing. For instance, students might rely more heavily on sequential type of markers in narrative writing, while argumentative essays may encourage the use of stance markers. A broader dataset encompassing multiple prompts or discourse genres would provide a more comprehensive picture of marker usage and their impact on writing quality.

Given that the essay topic involves technology - a subject that may be mediated by socioeconomic status and be more familiar to some students than others (Njeri & Taym, 2024; Yardi & Bruckman, 2012) - students with more personal experience using tablets or discussing technology in English may have had an advantage in expressing their ideas fluently. This could have particularly influenced stance marker usage, as students confident in their knowledge of the topic may have been more assertive in their claims, while those less familiar with the topic may have relied more on hedging or cautious phrasing. This raises the possibility that differences in DM usage may partly reflect topic familiarity rather than linguistic ability alone. A more diverse set of prompts, including topics that are accessible to all students, would help disentangle topic knowledge from language use.

Lastly, the absence of longitudinal data only a snapshot of student performance at one point in time. A longitudinal approach could shed light on how discourse marker usage develops as different group of students progress through language learning stages. Without this temporal dimension, it is unclear whether certain discourse marker patterns are stable over

time or whether they fluctuate as students gain proficiency and receive additional writing instruction. For example, if ELs initially rely on a narrow range of discourse markers but diversify their usage over time, a cross-sectional analysis might underestimate their potential for linguistic growth. Future research tracking the same students across multiple years could shed light on these developmental trajectories and provide a clearer picture of how DMs function as an indicator of writing proficiency.

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APPENDICES

APPENDIX A

Writing Quality Rubric

Rubric Part #1: Topic/Idea Development (TISCORE)

Score	Description
6	Rich topic/idea development Careful and/or subtle organization Effective/rich use of language
5	Full topic/idea development Logical organization Strong details Appropriate use of language
4	Moderate topic/idea development and organization Adequate, relevant details Some variety in language
3	Rudimentary topic/idea development and/or organization Basic supporting details Simplistic language
2	Limited or weak topic/idea development, organization, and/or details Limited awareness of audience and/or task
1	Little topic/idea development, organization, and/or details Little or no awareness of audience and/or task

Rubric Part #2: Standard English Conventions (CSCORE)

Score	Description
4	Control of sentence structure, grammar and usage, and mechanics (length and complexity of essay provide opportunity for student to show control of standard English conventions)
3	Errors do not interfere with communication and/or Few errors relative to length of essay or complexity of sentence structure, grammar and usage, and mechanics.
2	Errors interfere somewhat with communication and/or Too many errors relative to the length of the essay or complexity of sentence structure, grammar and usage, and mechanics
1	Errors seriously interfere with communication AND Little control of sentence structure, grammar and usage, and mechanics

Rubric Part #3: Total Quality Score (TOTSCORE)

TOTSCORE = TISCORE + CSCORE = _____

Quality Score

The quality rubric used for scoring student writing (see next page) is adapted from the Massachusetts Comprehensive Assessment System Rubrics.

Next to each score point, there is a brief description of the criteria requirement. Nonetheless, scorers must be familiar with the full description requirements for each given score point.

Example:

- Rubric

Score	Description
6	Rich topic/idea development Careful and/or subtle organization Effective/rich use of language o Full description requirement to score 6 points **Score Point 6** The essay provides full and insightful development of ideas. Information is skillfully organized across sentences and paragraphs. Perceptive analyses demonstrate full awareness of the task. Overall, the writing makes connections between ideas and provides meaningful evidence to explore and develop central idea. Uses evidence to support central idea and presents a conclusion.

Full Descriptor Criteria for Each Score Point

Topic / Idea Development (TISCORE)

Score Point 6
The essay provides full and insightful development of ideas. Information is skillfully organized across sentences and paragraphs. Perceptive analyses demonstrate full awareness of the task. Overall, the writing makes connections between ideas and provides meaningful evidence to explore and develop central idea. Uses evidence to support central idea and presents a conclusion.

Score Point 5
Explanations are clear and effectively addresses the main idea.

Score Point 4
The main idea is moderately developed in the essay. Appropriate evidence is used to support the central idea, but the expression of ideas is only adequately expressed and offers general explanations.

Score Point 3
The central idea is somewhat developed. The essays demonstrate a basic understanding of the main idea. Organization is limited and it offers limited explanations.

Score Point 2
The central idea is minimally developed. The essay demonstrates a poor expression of ideas. Details are insufficient to explain the main idea. The response has minimal organization and transition between ideas.

Score Point 1
The response provides no development of the central idea. Response does not address the task.

Standard English Conventions (CSCORE)

Score Point 4
The essay demonstrates consistent control of a variety of sentence structures and standard English conventions relative to the length and complexity of the writing. If student uses quotations, these are correctly integrated into the essay. Grammar, usage, and mechanics are consistent. Spelling errors might be present but do not detract from the essay's ideas. Overall, the writing shows grade-level control of mechanics and standard English conventions.

Score Point 3
Mostly consistent control of standard English conventions is apparent, relative to the length and complexity of the essay. A few spelling errors are present and sentence variety is limited.

Score Point 2
There are few noticeable errors in standard English conventions in this response, but the simplicity and repetition of sentence structures prevents the response from demonstration grade-level control. The response is comprehensible but too brief to demonstrate more than minimal control of standard English conventions.

Score Point 1
There is no evidence of control of standard English conventions. Capitalization and punctuation are missing, and there is no demonstration of grade-level sentence complexity.

APPENDIX B

CODING MANUAL

Coding Organization Markers

We will code six categories of organization markers: code glosses, evidentials, conclusion markers, goals, transition markers, and frame markers. Following, is the definition for each type of organization marker along with an example.

Code glosses**:** expression that express an example, definition, or paraphrase.

- Namely / such as / in other words / for instance
  Example: ***In other words***, we need to justify our rights to debate in schools.

Evidentials**:** markers that acknowledge the source of a claim.

- According to … / XX states
  Example: ***In the text*** *about renting a pet*, people should make it legal to own a pet because some animals are very expensive.

Conclusion markers**:** markers that express summary or conclusion.

- Therefore / This shows / As a result / We can conclude
  Example: ***In conclusion*****,** the family is not important and the school is.

Goals**:** markers that express the goal or aim of a section of text.

- I argue that / my goal is / my purpose is
  Example: In this open response, ***I explained my position on the question****.*

Transition markers**:** connectives including sentence-level connections and markers of macrostructural discourse (excluding temporal connectives)

- In addition / besides / moreover / furthermore
  Example: A debate in one class a week would be helpful ***because*** the students would be more informed in the work…

Frame markers**:** markers that indicate overall scheme, text structure and text boundaries.

- First, second, etc. / then / now / some believe / some say
  Example: ***To some people*** renting a pet can be a good thing…

Coding Stance Markers

We will code five categories of stance markers: hedges, boosters, engagement markers, deontic modality markers, and epistemic modality markers. Following, is the definition for each type of stance marker along with an example.

Hedges**:** markers that delimit or soften a claim or statement.

- Might / perhaps / it is possible / about
  Example: …but that is ***just*** my perspective.

Boosters**:** markers that intensify or strengthen a claim or statement.

Example: If they saw how debates helped students they would ***definitely*** change their minds.

Engagement markers**:** markers which address a reader directly or otherwise make a relationship with a reader.

- We / as you know / as far as we know
  Example: Whereas ***you*** will get to keep it for a few days *you* want it to have fun.

Deontic modality markers**:** expressions of attitude toward propositions that demonstrate degrees of prohibition or obligation.

- Must / have to / ought to / shouldn't / may / can
  Example: Schools ***should*** only be concerned with student learning.

Epistemic modality markers**:** expressions of attitude toward propositions that demonstrate degree or certainty or degree of knowledge as well as hedges that convey an epistemic function.

- I believe / It is important that / For all I know
  Example: ***I think*** you should be able to rent it out...