International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Analysis of Lexical Richness in Prepared Speeches

Felizardo Abayon Aribatado Jr[1], Susan F. Astillero[2]

[1]Bulan National High School
[2]Sorsogon State University

ABSTRACT

This study examined the lexical richness of prepared speeches delivered by fifteen Grade 11 Humanities and Social Sciences (HUMSS) students from Bulan National High School during the school year 2024-2025. Specifically, it assessed the students' speech outputs in terms of lexical sophistication, lexical variation, and lexical density using the online tool VocabProfiler. The research employed a descriptive qualitative design and purposive sampling, targeting the top five students from each of the three HUMSS sections based on their Grade 10 General Weighted Averages. The results revealed that the overall lexical variation at 50.05%, and lexical denticity at 55.20%. These figures suggest limited use of advanced vocabulary, moderate diversity in word choice, and only fair information density in speech delivery. Verbatim excerpts from students demonstrated overreliance on common vocabulary and redundancy, supporting the quantitative findings. In response, a Strategic Intervention Material (SIM) titled "Beyond the Words: The Art of Prepared Speech" was developed to address these gaps. The study underscores the importance of integrating lexical-focused instruction in oral and written communication courses to a localized understanding of oral and written language proficiency and offers practical pedagogical interventions to improve the quality of students' speech outputs.

Keywords: lexical richness, prepared speech, vocabulary development, strategic intervention, material oral communication

INTRODUCTION

The Role of Language in Education

Language plays a central role in shaping the educational experiences of learners. It serves not only as a medium of instruction but also as a key to developing critical thinking, collaboration, and self-expression. In today's perplexing world, effective communication skills are considered essential for learners to thrive in academic, social, and professional settings (Trilling & Fadel, 2009). The ability to convey ideas clearly in spoken and written forms has been identified as a foundational competency for students to become globally competitive and lifelong learners (Czerkawski & Berti, 2020).

In the Philippines, the Department of Education's K to 12 Basic Education Curriculum underscores the importance of oral communication as part of the core learning areas in Senior High School. The curriculum aims to equip learners with the ability to communicate fluently and effectively in a variety of contexts. This includes academic discourse, public speaking, and interpersonal communication (Department of Education, 2016). Specifically, the subject "Oral Communication in Context" focuses on the development of speech delivery, listening comprehension, and the appropriate use of language in various social

interactions. The DepEd believes that this approach ensures that students are equipped with the ability to express themselves confidently, engage in discussions, and participate in collaborative learning experiences. As Mahato (2023) states, oral communication fosters interpersonal connections and enhances comprehension as a crucial component of modern education.

One of the most significant aspects of oral communication is vocabulary use, which directly affects the clarity, depth, and persuasiveness of spoken messages. A well-developed vocabulary allows speakers to express ideas more precisely and creatively, reducing ambiguity and enhancing comprehension among listeners (Nation, 2001). In speech performance tasks such as prepared speeches, the richness of vocabulary used, often referred to as lexical richness, serves as a marker of a student's linguistic competence and confidence in using the language for formal communication. May (2024) argues that there were studies that showed that a rich vocabulary contributes to improved cognitive abilities, critical thinking, and overall academic performance. Hence, by integrating vocabulary-building strategies into educational programs, educators can empower students to become articulate and persuasive communicators.

This emphasis on language proficiency directly supports Sustainable Development Goal 4 (SDG 40, which advocates for inclusive, equitable, and quality education for all and the promotion of lifelong learning opportunities (United Nations, 20150. Equipping learners with strong oral communication and vocabulary skills not only improves their academic performance but also enables them to engage more meaningfully in civic life and the global knowledge economy, as the key aspirations of SDG 4.

Lexical Richness as a Measure of Linguistic Competence

Lexical richness refers to the degree of diversity, complexity, and density of vocabulary used in a given discourse, whether spoken or written. It serves as an important indicator of linguistic competence, reflecting not only the size of a speaker's vocabulary but also their ability to use language precisely and effectively in context (Laufer & Nation, 1995). Lexical richness is generally evaluated using three main components: lexical sophistication, lexical variation, and lexical density. Lexical sophistication pertains to the use of low-frequency or advanced words that demonstrate a higher level of vocabulary knowledge. On the other hand, lexical variation refers to the range or diversity of different words used in a text or speech. This is often measured by type-token ratios. Then, lexical density is the proportion of content words (such as nouns, verbs, adjectives, and adverbs) to the total number of words. These elements show the amount of information conveyed in a speech (Malvern & Richards, 2002). These components of lexical richness contribute significantly to the clarity, coherence, and overall effectiveness of spoken communication.

According to Crossley et al. (2011), a speaker who uses sophisticated and varied vocabulary is more likely to convey nuanced meanings, sustain audience engagement, and enhance the persuasive power of their message. However, they argue that repetitive or simplistic vocabulary can result in vague, monotonous, or ambiguous speech. They said, these reduce the communicative impact and the listener's comprehension. Therefore, Zhang and Wu (2021) emphasized in their study that effective communication relies on a balance of sophistication, variation, and density. These are very important to convey ideas persuasively and meaningfully, both in oral and written communication.

Consequently, the researcher believes that analyzing lexical richness in written prepared speeches of students is important for understanding their written proficiency and informing instruction. While most vocabulary studies focus on written texts, spoken language based on the prepared speech presents unique challenges and opportunities, especially in performance-based tasks such as prepared speeches. These

tasks require students not only to recall vocabulary but to apply it effectively under structured conditions. Thus, assessing lexical richness in speech provides teachers with valuable insights into students' readiness for higher-order communication demands and highlights areas that may require targeted support or intervention (Biber et al., 2011). Also, Ha's (2019) study suggested that students with higher lexical richness tend to perform better in academic writing and oral presentations, reinforcing the importance of vocabulary acquisition in education. Also, Erandio and Fortes (2024), who focused on lexical richness and features of journal entries among L2 learners, revealed that the journal entries of the students were low in lexical richness and L2 learners had limited acquired descriptive words among junior high school students at Gabao National High School in Irosin, Sorsogon. The result provided insights that there is a need to address lexical richness among students.

Kyle (2019) explores several key ways to assess lexical richness. Kyle emphasizes three main aspects such as lexical diversity, the range of unique words used; lexical sophistication, the presence of advanced or uncommon vocabulary; and lexical density, the proportion of meaningful content words in a text. Based on the result of the study, it offers a deeper understanding of how complex and varied vocabulary is in written communication. Also, in a corpus-based study, Chen and Liu (2022) analyzed the English writing of Chinese senior high school students and found an interesting pattern. They found that while lexical diversity steadily improved as students progressed through grade levels, both lexical sophistication and density showed a less predictable, non-linear development. The findings highlight the importance of more focused vocabulary instruction. This laid the groundwork for further research on lexical richness, particularly among senior high school students in specialized strands like Humanities and Social Sciences at Bulan National High School.

Research on the effects of instructional interventions on lexical richness has shed light on important trends in language learning. For instance, Mayorga (2021) examined the vocabulary use and readability of academic writings by English major students in Ecuador. It revealed the strong reliance on high-frequency words. This finding underscores the need to expand students' vocabulary range. Also, Anandi and Mukarto (2023) analyzed essays by Indonesian junior high school students. They found moderate lexical variation but limited sophistication and density. It was suggested that the areas where curriculum improvements were needed. These reviewed studies highlight the importance of integrating explicit vocabulary instruction into language programs.

The Importance of Speech Tasks in Senior High School

Prepared speech tasks give students a valuable opportunity to use language with purpose and meaning. In schools, these tasks serve as essential performance-based assessments, challenging learners to organize their ideas, choose the right words, and deliver their message with clarity and confidence. Beyond the classroom, these speeches mirror real-life situations where strong communication skills are crucial, whether in interviews, public addresses, debates, or professional presentations (O'Hair, Stewart, & Rubenstein, 2018). By practicing these, students not only build confidence but also develop the ability to engage in formal discourse, an important skill for success in higher education and the world of work.

In the context of the Philippine senior high school curriculum, Grade 11 students are expected to achieve a level of oral proficiency that reflects both mastery of language structures and the strategic use of vocabulary. The subject *Oral Communication in Context* is designed to prepare learners for these expectations by cultivating their skills in speech organization, audience awareness, and effective language use (Department of Education, 2016). As part of formative and summative assessments, students are often

tasked with delivering prepared speeches on relevant topics, integrating not only content knowledge but also communicative competence.

However, teachers and language assessors have observed recurring challenges in students' oral performance. While students may exhibit confidence in delivery, their speeches are often marked by limited vocabulary, repetitive expressions, and minimal use of precise or sophisticated terms, including issues on grammatical competence (Gruta & Astillero, 2024). This highlights a disconnect between what the curriculum aims for and what students can achieve linguistically. Santos (2022) points out that limited lexical diversity in student speeches can weaken clarity and persuasiveness. This impacts their academic success and readiness for more advanced communication tasks. Therefore, analyzing the richness of the students' speech, teachers can pinpoint common challenges and adjust instruction to bridge these gaps.

The result of this study may be beneficial to the teachers, students, administrators, and curriculum planners. In particular, this study may offer data-driven evidence to teachers to inform their vocabulary instruction and improve the design of oral performance tasks. Also, for curriculum developers and school administrators, the study highlights the need for integrating lexical development into instructional materials and classroom practices. Finally, this research may contribute to the existing body of knowledge on language education in the Philippines. This may provide localized, empirical data on spoken lexical richness. This may also serve as a foundation for future linguistic and pedagogical studies.

The Frameworks of the Study

The theoretical and conceptual frameworks lay the foundation for understanding the principles and models that inform the design, analysis, and interpretation of this research. This study is guided by the Lexical Richness Theory, Communicative Competence Theory (Hymes), Cognitive Load Theory (Sweller), and Schema Theory (Anderson). These are used to examine how students' vocabulary use influences their performance in prepared speeches

Theoretical Framework. The first theory is Carter and McCarthy's (2006) Lexical Richness. This theory emphasizes that lexical richness reflects a speaker's linguistic competence and ability to express complex ideas effectively. It is said that the more diverse and sophisticated the vocabulary, the more precise, coherent, and engaged the speaker is in communicating. This is an important concept in assessing the prepared speech corpus of the students.

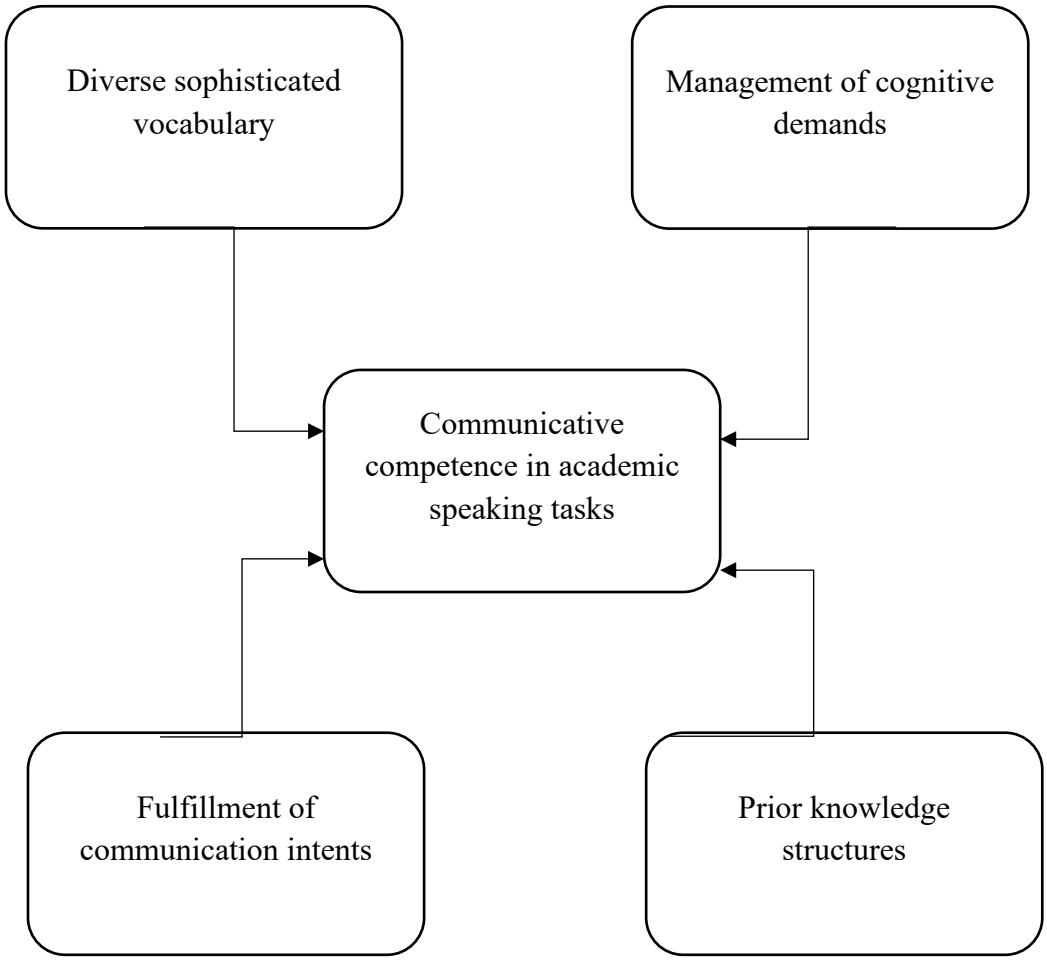
The next related theory is the Theory of Communicative Competence by Hymes (1972). He introduced the concept of communicative competence to extend language learning beyond grammatical accuracy toward pragmatic language use. In the context of prepared speech, this theory underscores the importance of selecting contextually appropriate vocabulary to achieve academic linguistic competence. Lexical richness in prepared speeches contributes to this communicative competence. The students become equipped with the verbal tools to construct meaningful, audience-aware, and purposeful messages.

The next is the Cognitive Load Theory by Sweller (1988). This theory explains that learners have limited cognitive resources during complex tasks such as oral speech delivery. A student with a rich vocabulary integrated into his/her long-term memory can reduce extraneous load and facilitate fluent speech. However, unfamiliar or overly complex vocabulary may increase intrinsic load (Paas et al., 2003).

Then, another relevant theory is the Schema Theory by Anderson (1984). This theory posits that learning is more effective when new information connects to existing knowledge structures or schemata. In the classroom, vocabulary acquisition is deepened when learners relate new lexical items to familiar contexts, using their schemata.

These four theories offer a foundation for analyzing lexical richness and guiding pedagogical interventions, as shown in Figure 1. By integrating these concepts, the study aims to assess the current state of students' lexical usage and propose evidence-based strategies to enhance their communicative competence in academic speaking tasks.

Figure 1
Theoretical Framework



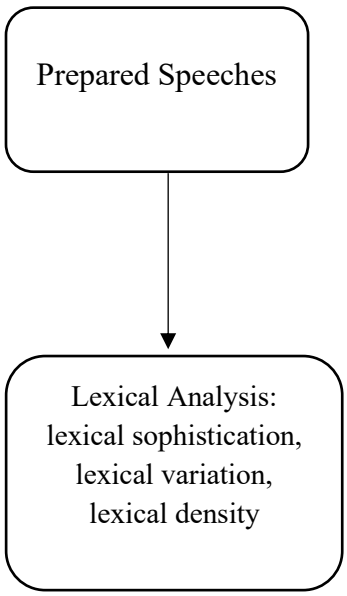
These four constructs indicated inside the boxes synthesized that the use of sophisticated, varied, and information-dense vocabulary is not only a product of linguistic proficiency but also a key mechanism through which students manage cognitive demands and fulfill communicative intents in prepared speech contexts. At the center is the researcher's theory that emphasizes that the surrounding concepts of the theories inform the researcher's theory. If these concepts are within the pedagogical approach of the teachers, communicative competence in academic writing or the speaker task is achieved.

It recognizes that students' ability to access and apply a rich lexicon depends on prior knowledge structures (schema), effective vocabulary instruction, and cognitive efficiency during speech performance. Thus, this study is guided by the theoretical assumption that strengthening students' lexical resources through structured and context-based intervention, such as a Strategic Intervention Material (SIM), can lead to improved speech performance, greater communicative clarity, and enhanced academic engagement.

Conceptual Framework. This study utilized a systematic process to examine how lexical richness (lexical sophistication, lexical variation, and lexical density) contributed to the overall quality of the students' prepared speeches. The illustration demonstrated the step-by-step process done by the researcher to analyze the data. The output of this study was strategic intervention material crafted to develop students' preparedness in the preparation and delivery of speeches.

The conceptual paradigm in Figure 2 shows the process and framework of this study aimed at enhancing the lexical richness in prepared speech among Grade 11 students. The central part of the study is the preparation and delivery of prepared speeches, serving as the foundation for data collection. Next, the researchers conducted a comprehensive lexical analysis to assess various linguistic dimensions of the students' speeches.

Figure 2
Conceptual Paradigm



The paradigm branches into three interconnected analyses: determining lexical sophistication, lexical variation, and lexical density using VocabProfiler; analyzing, per case, the lexical richness of each prepared speech; and identifying challenges in speech preparation and delivery. These analytical approaches provide insights into the students' linguistic performance and the obstacles they face during the speech process.

The Present Study

The current study is grounded in a wealth of educational and linguistic research that collectively underscores the centrality of effective communication in student development. Trilling and Fadel, along with Czerkawski and Berti, emphasize that communication, particularly oral fluency, has become a vital 21st-century skill, essential for academic and professional success. Nation and May further argue that vocabulary proficiency is crucial to achieving clarity, critical thinking, and depth in spoken discourse. In alignment with these global perspectives, the Philippine Department of Education has embedded oral communication in the senior high school curriculum, with an emphasis on fluency, context-based language use, and audience engagement. Several scholars, including Laufer and Nation, Malvern and Richards, and

Crossley et al., have laid the theoretical foundation for assessing language proficiency through lexical richness, specifically in terms of lexical sophistication, variation, and density.

Kyle reinforces this framework by introducing precise metrics for evaluating these lexical dimensions, offering deeper insight into learners' vocabulary use. However, empirical studies, such as those by Santos and Zhang, and Wu, reveal that many students continue to struggle with lexical diversity and sophistication in oral performance, indicating a gap between instructional goals and learners' actual linguistic output. Supporting this, Chen and Liu observed in their corpus-based analysis of Chinese students' writings that while lexical variation improved across grade levels, both sophistication and density showed inconsistent development, highlighting the need for targeted instruction. Similarly, studies by Mayorga and Anandi, and Mukarto emphasize that student writing is often dominated by high-frequency vocabulary and moderate lexical variation, suggesting a lack of exposure to and mastery of more advanced lexical structures.

In the Philippine context, scholars such as Biber et al., Ha, Erandio, and Fortes point to the value of analyzing spoken corpora to generate instructional insights, particularly in under-researched areas such as performance-based speech tasks. Despite the growing interest in vocabulary development, there remains a noticeable gap in localized, data-driven research on spoken lexical richness at the senior high school level, especially in regions like Bulan District. This study addresses that gap by synthesizing global and local literature and translating linguistic theory into pedagogical practice through the development of a Strategic Intervention Material (SIM) designed to enhance students' lexical sophistication, variation, and density in prepared speeches.

Despite the growing interest in speech performance, there are a notable lack of localized studies that examine prepared speech lexical richness in the Philippine senior high school context. Most existing research on vocabulary use in the Philippines has focused on written outputs or general proficiency tests. This is a gap in the understanding of how students perform in formal oral tasks after they write their speech. This is especially important in the Bulan District, where linguistic diversity, access to resources, and instructional strategies may influence students' lexical development in different ways. This kind of context-specific finding is necessary to inform curriculum decisions and enhance instructional support tailored to the local student population (Dela Cruz & Domingo, 2021). This offers a basis for designing effective instructional interventions. By identifying common lexical limitations, such as overuse of high-frequency words, low variation, or insufficient density, the teachers can respond with targeted strategies to build students' vocabulary and oral fluency.

Therefore, this study focused on the lexical richness in prepared speeches of grade 11 senior high school students of Bulan District on their Oral Communication subject. Grade 12 students and Junior high school students at the secondary level were not included in this study. The vocabulary of the students was utilized during the delivery of speeches. The volume of the voice, gestures, and facial expressions were not part of the assessment and observation. Other related subjects in senior high school that utilized speech delivery, such as reading and writing, and practical research, were also not included in the study.

This study examined the lexical richness in prepared speech of Grade 11 senior high school students at Bulan District, School Year 2024-2025. Specifically, it aimed to: 1) determine the lexical richness of grade 11 senior high school students in prepared speech in terms of (a) lexical sophistication, (b) lexical variation, and (c) lexical density; and 2) analyze the lexical richness in prepared speech corpus in terms of (a) lexical sophistication, (b) lexical variation, and (c) lexical density

METHODOLOGY

Research Design

This study employed a descriptive-qualitative research design to analyze the lexical richness of senior high school students' prepared speeches of the students. The qualitative nature of the study allowed for an in-depth exploration of the vocabulary features used in students' prepared speeches, such as lexical sophistication, variation, and density. The descriptive approach also supported the interpretation of linguistic patterns in authentic classroom settings. This offered insights that go beyond numerical analysis. According to Creswell (2023), descriptive research is used to systematically describe a population, situation, or phenomenon and is particularly useful for gaining insights into the current state of affairs within a defined group.

Sources of Data

The primary data for this study were from fifteen (15) Grade 11 Humanities and Social Sciences students of Bulan National High School for the academic year 2024–2025. There were 7 males and 8 females with different socio-economic, psychological, and behavioral factors. Participants were selected through purposive sampling in consideration of the following selection criteria. Specifically, the top five students from each of the three sections, based on their Grade 10 General Weighted Averages (GWA) ranging from 90 to 95, were considered. Their performance in Oral Communication subjects was also above 90%. Another consideration was their academic performance, speaking ability, and willingness to participate. They were identified by number following the ethical guidelines outlined by Creswell and Poth (2018) to maintain confidentiality. Their profile made them suitable subjects for analyzing advanced and diverse vocabulary use in their prepared speech contexts.

Research Ethics

The study utilized the ethical principles by Creswell (2023). This study adhered to standards of informed consent, voluntary participation, and confidentiality. Participants were provided with clear and comprehensive information regarding the study's objectives, procedures, potential risks, and benefits for their voluntary participation. They were also assured of their right to withdraw at any point without consequence. To ensure confidentiality, no personal identification was collected; instead, anonymized codes were assigned to each participant's data. The research was designed to prioritize participant well-being and mitigate any potential risks.

Research Instrument

This study used a specially designed speech task to gather and analyze data. The researcher created a structured activity, where fifteen (15) carefully selected Grade 11 students participated. Each student prepared and delivered a three-to-five-minute speech on a familiar and relevant topic, aligned with the Oral Communication in Context curriculum.

The task was designed to mirror a typical classroom speaking exercise, allowing students to showcase their language skills in an academic setting. This activity served as the primary tool for collecting authentic speech samples, providing valuable insights into their oral language proficiency.

Data Collection

Before collecting data, the researcher asked permission from the principal to utilize the students for the purpose of the study only. After approval, the researcher gave consent letters to the students and their parents or legal guardians, then requested that to sign the document to ensure voluntary participation.

Prior to the oral speech activity, the researcher gave instructions to the selected students to write a three-to-five-minute speech on a topic related to the Oral Communication in Context subject. After 1 hour, the

outputs of the students were collected. Then, they were given the chance to practice their speech for at least 5 minutes. Afterward, the students were asked to present in a separate room so they would not be disturbed by other presenters. As the student stood in front of the researcher, the student read his/her prepared speech. While the student is presenting, the researcher's phone recorder captures the audio. After the 15 students presented, the researcher returned the papers and relied on the recorded audio. The recorded voices of the students were encoded word-for-word to maintain the authenticity of language use. These transcripts were compiled into a digital database for analysis. Throughout the process, the researcher took a non-intrusive approach, allowing students to speak naturally and with confidence. All recordings and transcripts were securely stored and used strictly for research.

Data Analysis

The data collected from the students' prepared speeches was transcribed and organized for analysis using appropriate digital tools. To determine the lexical richness of each speech, the transcripts was uploaded into VocabProfiler, an online lexical analysis software developed by Cobb (2000). Before the analysis, minor spelling corrections were made to ensure accuracy. VocabProfiler categorized the vocabulary into frequency levels, including the most frequent 1,000 words (K1), the second most frequent 1,000 words (K2), the Academic Word List (AWL), and words not found in any of these lists. This allowed for a structured breakdown of vocabulary use in each speech and provided numerical data for analysis.

Lexical richness was measured in terms of lexical sophistication, lexical variation, and lexical density. Lexical sophistication was calculated by determining the percentage of words from the AWL relative to the total number of lexical tokens. The formula used was: Lexical Sophistication = (Number of AWL Words ÷ Total Lexical Tokens) × 100. Lexical tokens included content words such as nouns, main verbs, adjectives, and adverbs, excluding auxiliary verbs (Johansson, 2009; Erandio, 2024).

Then. lexical variation was assessed using the Type-Token Ratio (TTR), a common measure of vocabulary diversity. The formula was: Lexical Variation = (Number of Types ÷ Number of Tokens) × 100, where types refer to unique words and tokens refer to the total number of words, including repetitions (Read, 2000; Malvern & Richards, 2002). This measure helped evaluate the range of vocabulary used by each student across their entire speech.

On the other hand, lexical density was calculated to assess the proportion of content words relative to the total number of words. The formula applied was: Lexical Density = (Number of Content Words ÷ Total Number of Words) × 100, with content words comprising nouns, main verbs, adjectives, and adverbs. A higher percentage indicated a more information-rich and formal speech (Laufer & Nation, 1995).

The results were tabulated and interpreted using established scales. For overall lexical richness, a composite scale adapted from Van Lier (1988) was used: 80–100% was considered high, 60–79.9% moderately high, 40–59.9% moderate, 20–39.9% moderately low, and 1–19.9% low. The overall lexical richness score was weighted as follows: lexical sophistication (10%), lexical variation (10%), and lexical density (80%), highlighting the importance of content in academic speech.

Interpretation scales were applied for each component. For lexical sophistication, the scale adapted from Laufer and Nation (1995) and Coxhead (2000) classified scores as follows: 0–3% (very low), 3.1–5% (low), 5.1–7% (moderate), 7.1–9% (high), and above 9.1% (very high). For lexical variation, based on Read (2000) and Malvern and Richards (2002), scores were interpreted as below 35% (low), 36–45% (moderate), 46–55% (high), and above 55% (very high). For lexical density, the scale indicated below 45% as very low (conversational), 45–54% as moderate (basic expository), 55–64% as high (academic/informative), and above 65% as very high (complex/abstract).

These analytical procedures allowed for a comprehensive and systematic evaluation of the students' lexical usage in their speeches. The integration of automated lexical analysis and qualitative interpretation provided both empirical and pedagogical insights into students' oral language proficiency.

RESULTS

Lexical Richness of Students' Prepared Speeches

This section presents the findings of the lexical richness analysis of the 15 HUMSS students based on the three key components such as lexical sophistication, lexical variation, and lexical density. As shown in Table 1 is the summary of the lexical richness of Grade 11 students in their prepared speeches.

Table 1
Lexical Richness on the Prepared Speech of Grade 11 Students

Lexical Richness	Number of Participants	Average of Advanced Words	Total Number of Content Words	Total Number of Types	Total Number of Tokens	%	Weight (%)	Interpretation
Lexica Sophistication (10%)	15	225	n/a	n/a	4184	5.37	0.54	Moderate sophistication
Lexical Variation (10%)	15	n/a	n/a	2094	4184	50.05	5.0	Moderate Variation
Lexical Density (80%)	15	n/a	2310	n/a	4184	55.20	44.16	Moderate Density
							49.7	MODE-RATE

The data illustrate that the 15 participants collectively produced a total of 4,184 lexical tokens, with 225 words identified as advanced vocabulary. This resulted in an average lexical sophistication percentage of 5.37%. The result indicates there is a presence of advanced academic vocabulary, but it was limited. The weighted contribution of lexical sophistication to the overall lexical richness was 0.54%, which suggests that students tended to rely more on high-frequency or familiar vocabulary in their speeches.

Also, looking closely at the lexical variation, which was measured using the Type-Token Ratio (TTR), which reflects the diversity of vocabulary within a given text. The students collectively produced 2,094-word types from a total of 4,184-word tokens, resulting in a lexical variation of 50.05%. The weighted score for lexical variation was 5.00%, showing a fair range of vocabulary among the students, though there is room for improvement in introducing more varied word choices in their oral outputs.

The lexical density, or the proportion of content words in the speeches, was found to be 55.20%. Out of the 4,184 total words, 2,310 were content words such as nouns, verbs, adjectives, and adverbs. This reflects

a reasonable level of information density in the speeches. Lexical density contributed the highest to the overall lexical richness score with a weighted value of 44.16%. emphasizing the students' tendency to deliver content-oriented and idea-rich speeches.

Combining the weighted scores from all three components, lexical sophistication (0.54%). Lexical variation (5.00%) and lexical density (44.16%), the students achieved an average lexical richness score of 49.7%. This places their overall lexical richness at the moderate level. While the content and structure of the speeches indicate a fair command of language, the results suggest that students would benefit from further development in using more sophisticated and diverse vocabulary to enhance the quality and depth of their oral communication.

Lexical Analysis of the Prepared Speech Corpus

Lexical Sophistication. The speech corpus contained a total of 4,184 lexical tokens, of which 225 were categorized as advanced or academic words. This yielded a lexical sophistication rate of 5.37% for the entire corpus, as shown in Table 2.

Table 2
Lexical Sophistication of the Prepared Speech Corpus

Total number of lexical tokens	Number of Advanced Words	Lexical Sophistication (%)	Interpretation
4,184	225	5.378	Moderate Sophistication

The result reflects a modest use of advanced vocabulary across the speeches. While there was some integration of academic words, the majority of vocabulary used consisted of high-frequency terms, suggesting a reliance on more commonly used language. The use of words from the Academic Word List was evident but not consistent across the corpus.

Lexical Variation. The corpus analysis revealed a total of 2,094-word types, with 4,184 tokens overall. This resulted in a Type-Token Ratio (TTR) of 50.05%, which indicates a moderate level of lexical variation as indicated in Table 3. The ratio suggests that while students employed a fair number of different words, there was also noticeable repetition of certain terms. This balance reflects an average level of vocabulary diversity, where the range of expression was sufficient to convey meaning but not particularly extensive or dynamic.

Table 3
Lexical Variation of the Prepared Speech Corpus

Total number of word types	Total number of word tokens	Type-Token Ratio (TTR) (%)	Interpretation
2,094	4,184	50.05%	Moderate Variation

Lexical Density. The analysis, as illustrated in Table 4, shows that out of the 4,184 words in the corpus, 2,310 were content words, primarily nouns, verbs, adjectives, and adverbs. This resulted in a lexical density score of 55.20%, signifying a moderate level of information content in the speeches. The speeches were generally structured to communicate clearly and directly, with a focus on conveying ideas effectively

rather than using overly elaborate or abstract vocabulary. The lexical density figure suggests that the corpus leans toward expository and academic expression, appropriate for classroom-based oral communication

Table 4
Lexical Density of the Prepared Speech Corpus

Total Number of Words	Number of content words	Lexical Density (%)	Interpretation
4,184	2,310	55.20%	Moderate Density

Overall, the corpus-level analysis reveals that the prepared speeches collectively demonstrate moderate lexical richness, with a clear focus on content delivery and functional language use. While the lexical density was relatively strong, the results indicate that information-rich content suggests a need for further enhancement in vocabulary depth. The corpus reflects the ability to structure their speeches and communicate effectively using accessible vocabulary, but it also highlights opportunities to expand their lexical repertoire for more refined and academically expressive speech.

DISCUSSION

Prepared Speeches: Their Lexical Diversity

The lexical richness of the Grade 11 students' prepared speeches was analyzed using three main dimensions: lexical sophistication, lexical variation, and lexical density, based on actual word categories and frequency levels derived from the VocabProfiler output.

For the lexical sophistication, the students' use of advanced or academic vocabulary was measured by the number of words from the Academic Word List (AWL). A total of 23 AWL words (e.g., academic, beneficial, expertise, unified, significance) were identified out of 4184 total tokens, which results in an average lexical sophistication of .054% and labeled this as 'moderate sophistication', suggesting that while some advanced vocabulary was present, the depth, consistency, and contextual application were limited. This implies that students primarily use general-purpose words, and their exposure to academic language remains shallow.

This lack of academic vocabulary suggests that students may not be fully prepared for high-level academic discourse. Their limited lexical sophistication may inhibit their ability to articulate complex ideas or arguments persuasively, which is an essential skill in both oral and written communication. Laufer and Nation (1995) note that a strong presence of AWL words is a key marker of academic language proficiency. Without targeted instruction, students may continue to struggle with vocabulary breadth in formal contexts.

This finding aligns with Mayorga's (2021) study on Ecuadorian University students, which revealed that a significant portion of students' vocabulary relied on high-frequency words, reflecting underdeveloped lexical sophistication. Similarly, Kyle (2019) emphasized that the use of low-frequency words, particularly from academic word lists, is a reliable marker of communicative competence. The students' performance in this study confirms the same trend: functional but limited lexical depth. The lack of sophisticated vocabulary use may hinder students' readiness for more formal, academic discourse. Written and oral

communication instruction must explicitly include the teaching and modeling of academic and low-frequency words in authentic contexts, such as debates, panel discussions, or speech writing.

As to the lexical variation, it was assessed through the identification of off-list words, those not found in the top 2,000 most frequent English words. The analysis revealed 160 unique off-list types, which suggests an effort by students to express ideas beyond standard classroom language. With a total of 4184 tokens, the third yielded a type-token ratio (TTR) of 5.0, interpreted as moderate variation. This suggests that while students used some diversity in their vocabulary, many words such as "people," "help," "success," and "community" were repeated frequently. While these words may reflect students' comfort zones and message intentions, they do not showcase lexical flexibility. As Crossley et al. (2011) mention that vocabulary variation contributes to lexical engagement and clarity of message delivery. Without varied vocabulary, speeches may sound repetitive or overly simplistic, reducing their communicative impact.

This result is consistent with Anandi and Mukarto's (2023) findings on Indonesian junior high school students' essays, where moderate variation was observed, but lexical sophistication and density lagged. Chen and Liu's (2022) longitudinal study of Chinese senior high school students also showed similar non-linear growth in lexical variation, with marked improvement only when curriculum enhancements were applied. These studies reinforce the finding that exposure and vocabulary reinforcement are needed to diversify word use meaningfully. Thus, to increase variation, students need opportunities to explore synonyms, collocations, and idiomatic expressions. Lexical notebooks, corpus-based activities, and guided peer editing could help students expand their expressive range in both written and spoken modes.

Focusing on lexical density, it was calculated based on the number of content words (nouns, verbs, adjectives, and adverbs). The students produced 2,310 content words out of 4,184 total tokens, resulting in a lexical density of 44.16%. This result indicates moderate density, which is acceptable for expository or descriptive discourse, but still below what is expected in persuasive or analytical speech tasks.

Words such as "education," "challenge," "community," and "success," appeared frequently and reflect the thematic focus of many speeches. However, much of the discourse also relied on function words (e.g. "and,", "but,", "as," "because"), which do not contribute meaning-rich content. According to Ha (2019), students with higher density tend to perform better in oral presentations and academic writing. The moderate density observed here suggests that while students convey general meaning effectively, their speeches may lack informational complexity or abstraction. Similarly, Biber et al. (2011) stressed that a denser lexical profile is characteristic of more academic and cognitively demanding tasks; this is something these students are still developing. Increasing lexical density requires structured input and practice in producing content-heavy sentences.

In summary, the findings show that the lexical richness for students' prepared speeches falls within a moderate range across all three dimensions. This mirrors the patterns found in related studies by Mayorga 92021), Chen and Liu (2022), Anandi and Mukarto (2023), and Ha (2019). They all highlight the persistent challenges in achieving higher-level competence among secondary and tertiary learners in varied international contexts. These studies support the argument that even high-performing students require scaffolded instruction and contextual application of advanced vocabulary to elevate their oral communication skills.

Speech Corpus: An Analysis

The corpus analysis examined all 15 speech transcripts as a single dataset to provide a macro-level view of students' linguistic performance. Looking into the lexical sophistication in the corpus, it consisted of 4,184 total tokens, of which 225 words were identified as academic or low-frequency from the Academic

Word List (AWL). The result indicates a modest presence of advanced vocabulary. While some academic terms, such as "beneficial," "principles," "expertise," and "unified," were present, their frequency and contextual use were limited.

This confirms findings from Mayorga (2021) and Kyle (2019), both of whom noted that learners tend to overuse high-frequency vocabulary and struggle to apply advanced lexical items in meaningful contexts. In the present corpus, students rarely used tier 2 and 3 vocabulary that could have enhanced the rhetorical strength and precision of their speeches. This limitation suggests that students either lacked familiarity with more sophisticated vocabulary or were not confident in deploying it in formal speech. To enhance lexical sophistication at the corpus level, educators should integrate academic word list training, contextual vocabulary exercises, and modeled academic speeches into instruction. Embedding vocabulary tasks within speech writing processes may lead to improved retention and application.

Then, moving on to the lexical variation in the corpus, the speech corpus showed 2,094 unique word types out of 4,184 tokens, yielding a Type-Token Ratio (TTR) of 50.05%. This places the corpus within the moderate variation category. Students demonstrated a fair level of lexical density; however, repetition of common terms such as "community," "people," "education," and "help" was still evident.

This outcome echoes the findings of Chen and Liu (2022) and Anandi and Mukarto 92023), who observed that while students might experiment with new vocabulary, they tend to revert to safe and familiar words. Moderate variation suggests that while students possess a base vocabulary set, they may lack strategies for paraphrasing, using synonyms, or expanding their lexicon during speech preparation. Therefore, improving lexical variation requires not only vocabulary input but also awareness and practice in using alternatives. Teachers can incorporate synonym replacement tasks, contextual word exercises, and corpus-driven language reflection activities to promote more expressive speech.

As to the lexical density in the corpus, the analysis of content words such as nouns, verbs, adjectives, and adverbs revealed that 2,310 out of 4,184 words were lexical (content) words, resulting in a lexical density of 55.20%. This score reflects idea-centered speeches, though often lacking depth or abstraction.

According to Biber et al. (2011), a lexical density of 50%-60% is typical for expository speech, which persuasive or analytical discourse tends to require higher density (above 60%). The current results indicate that most of the students' speeches leaned toward general description. They lacked cognitively demanding language, which is essential for persuasive and reflective speaking tasks. This is consistent with Ha's (2019) study, which found that students with lower lexical density produced weaker academic arguments. Hence, to improve lexical density, students should be encouraged to use more content-heavy structures and reduce dependency on function words.

The macro analysis of the prepared speech corpus confirms the trends observed in the works of the students. The speeches exhibit an overall moderate lexical richness, with acceptable levels of lexical density but limited variation and sophistication. This suggests that while students can organize and express ideas, they often fall short in delivering these ideas with rhetorical precision and academic tone. The findings align with multiple international studies and affirm the universality of the challenge: high school learners, even in academic tracks, often lack the vocabulary tools to elevate their spoken and written communication. The implications are clear that language instruction must not only teach vocabulary but also embed its use within real-world performance tasks, scaffolded speech activities, and reflective learning opportunities.

The results further validate the creation of the Strategy Intervention Material (SIM) titled "Beyond the Words: The Art of Prepared Speech". This SIM is designed to support students in three key areas:

enriching vocabulary depth (sophistication, broadening expressive range (variation), and increasing informational density in speech (density). By targeting the specific areas revealed in this corpus analysis, the SIM offers a localized, evidence-based solution to improving students' oral communication performance.

CONCLUSION AND RECOMMENDATION

The Study concluded that the overall lexical richness of Grade 11 students' prepared speeches at Bulan National High School was moderate, indicating a need for enhancement in vocabulary use, particularly in terms of lexical sophistication, variation, and density. The limited use of advanced words, repetitive word choices, and average information density suggest that while students can deliver speeches fluently, their ability to express nuances and content-rich ideas remains underdeveloped. These findings underscore the gap between curriculum expectations and actual student output, especially in performance-based oral communication tasks. As such, the development and implementation of targeted vocabulary instruction are essential for improving communicative competence and academic speaking proficiency.

Based on the findings of the study, the following recommendations were offered. First, the language teachers may integrate explicit vocabulary instruction within the oral communication curriculum. Emphasis may be placed on enhancing students' lexical sophistication, variation, and density through engaging speech-writing and delivery exercises that promote the use of advanced and varied vocabulary. Second, teachers and school administrators may conduct regular formative assessments using lexical analysis tools such as VocabProfiler to monitor students' vocabulary development. These assessments may inform instructional adjustments and individualized support for learners who demonstrate limited lexical competence. Third, it is also recommended that the output of this study may be evaluated, adopted, piloted, and evaluated in Grade 11 Oral Communication classes. The SIM may serve as a resource to enhance students' speech performance by targeting their lexical deficiencies through scaffolded activities and contextualized vocabulary practice. Lastly, future research may also replicate this study across other academic strands or regions to generate broader insights into spoken language proficiency and validate the impact of SIM-based interventions.

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