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Influence of Cohesive Devices on Quality of Academic Essays Written by Secondary School Students in Njoro Sub-County, Kenya

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Grammatical Cohesion,
Lexical Cohesion.*

This study investigated the influence of cohesive devices in compositions written by secondary school students in Njoro Sub-County, Kenya. The research examined the types and frequencies of cohesive devices used, assessed their appropriate application, and analysed their influence on writing quality. Using stratified random sampling, fifty compositions were selected from sixteen secondary schools, comprising fifteen public and one private institution. The study employed Halliday, & Hasan's (1976) taxonomy of cohesive devices for analysis. Data collection included textual analysis of student compositions and teacher questionnaires. Results revealed that lexical cohesive devices dominated student writing (70.15%), with repetition being the most frequent device (69.9%). Personal references constituted 14.31% of total usage, while other devices showed minimal representation. Statistical analysis demonstrated a strong positive correlation ($r = 0.787$, $p < 0.001$) between cohesive device usage and writing quality. Although students showed high accuracy in basic cohesive device usage (99.62%), they exhibited limited variety in device selection, particularly avoiding substitution (0.04%) and ellipsis (0.01%). Teachers identified inadequate teaching materials (62.9%) as the primary challenge in cohesive device instruction. The findings suggest a need for enhanced vocabulary instruction and more diverse teaching approaches to improve students' mastery of advanced cohesive devices. This study contributes to understanding cohesion in second language writing and provides practical implications for English language teaching in Kenyan secondary schools.

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INTRODUCTION

English serves as both a core academic subject and the official medium of instruction in Kenyan schools, maintaining its status as a compulsory and examinable subject throughout primary and secondary education. The English language syllabus for secondary education in Kenya (KLB, 2021) aims to develop learners' communicative competence in both spoken and written English by the end of Form Four. This comprehensive approach requires students to acquire proficiency in four fundamental language skills: speaking, listening, writing, and reading.

The Kenyan government places particular emphasis on developing students' writing ability, recognising its crucial role in academic success. This emphasis is reflected in the curriculum's focus on writing skill development and the requirement for students to master various text types. The secondary school English syllabus (KLB, 2021) specifically identifies writing as a core language skill, emphasising the importance of competent language structure usage, including sentence connectors, in student writing.

Despite nationwide efforts to create a curriculum aligned with Kenya's educational needs, performance in English has remained comparatively low. The Kenya National Examination Council (KNEC) reports from 2019-2023 consistently indicate that grammar-related questions, particularly those involving sentence construction and cohesive devices, present significant challenges for students. This pattern suggests a gap between

curriculum objectives and student achievement in written English proficiency.

The significance of English proficiency in Kenya extends beyond academic success. As Kachru (1986) notes, acquiring English in Kenya is akin to experiencing a linguistic rebirth, given its status as an official language. Muthwii (2004) further emphasises this importance, arguing that English proficiency significantly influences economic mobility opportunities in Kenya. This relationship between language competence and socioeconomic advancement underscores the critical nature of effective English instruction at the secondary school level.

Text cohesion plays a fundamental role in effective writing. Halliday, & Hasan (1976) define a text as any passage that forms a unified whole, with texture being the distinguishing feature between coherent text and unrelated sentences. Cohesion, as one of the primary text construction resources, involves linguistic features that connect sentences within a text (Alarcon & Morales, 2011), while coherence refers to the overall meaning the text conveys (Wahiba, 2017).

Understanding and effectively using cohesive devices offers two primary advantages for students. First, it enhances textual organisation by connecting ideas between sentences. Second, it facilitates reader comprehension by ensuring smooth idea progression. However, creating cohesion and coherence presents particular challenges for English language learners (Ahmed, 2010; Hammad, 2016; Rahmatunisa, 2014), often due to limited awareness

of meaning relationships between clauses and sentences, insufficient teacher explanation, and limited writing practice opportunities (KNEC Report, 2019).

In the Kenyan context, where examinations are predominantly written, mastery of cohesive writing becomes crucial. KNEC reports (2002-2019) indicate persistent weaknesses in both mechanical and stylistic aspects of writing, particularly in Paper 101/3, which assesses written communication skills. The reports highlight recurring issues with word choice, grammar, punctuation, and paragraph construction, often stemming from inadequate understanding of sentence construction and cohesion principles.

While research on cohesion and writing quality since Halliday, & Hasan's (1976) seminal work has been extensive, findings have been somewhat inconsistent. Zhang (2000) found no significant relationship between cohesive ties and writing quality in Chinese undergraduate writing, noting issues with reference clarity and conjunction usage. Conversely, Liu, & Braine (2005) identified positive correlations between cohesive device usage and writing quality, with lexical devices being most prevalent.

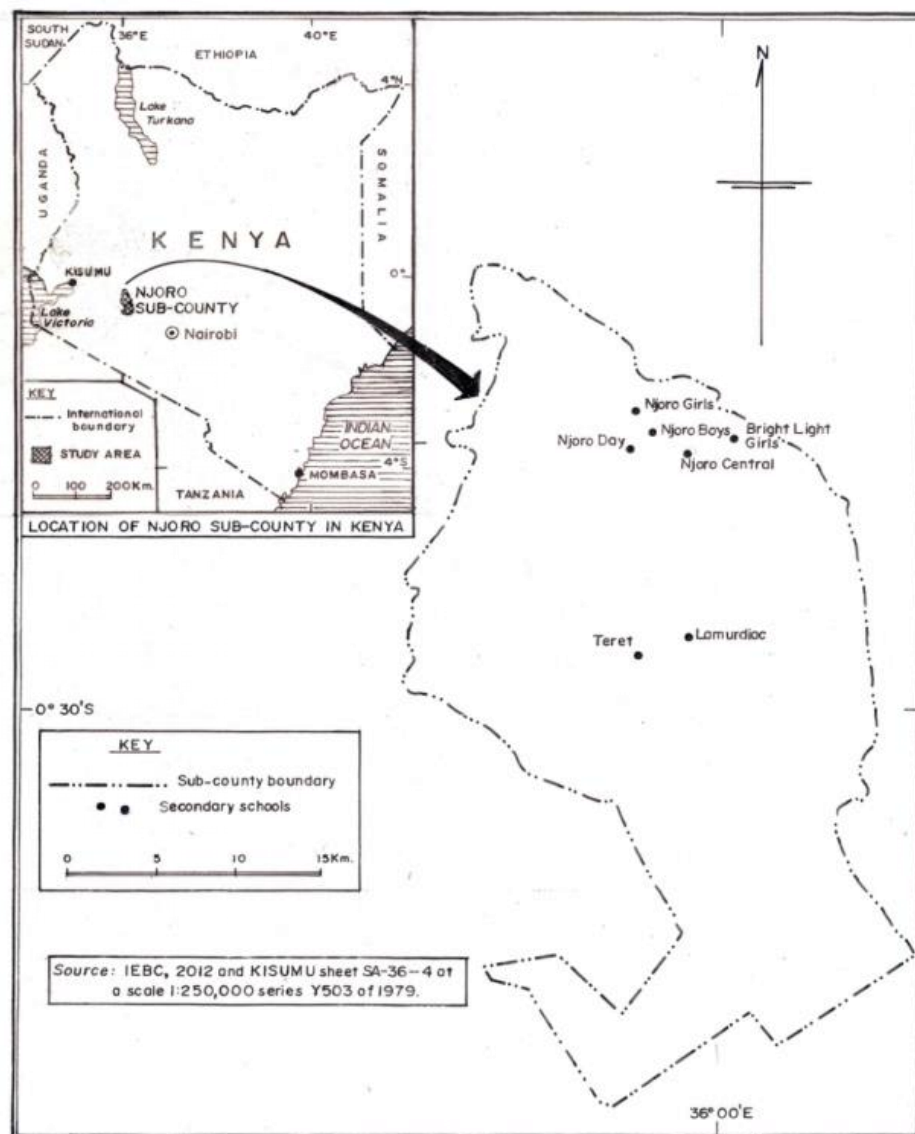
This study addresses these research gaps by examining how secondary school students in Njoro

Sub County use cohesive devices in their academic writing. It specifically investigates whether students meet the Kenya Institute of Curriculum Development's objective of using English fluently and appropriately in writing, focusing on their application of cohesive devices in composition writing.

MATERIALS AND METHODS

Study Location

This study was conducted in Njoro Sub-County, Nakuru County, Kenya. The research site encompassed sixteen secondary schools within a cosmopolitan region characterised by diverse ethnic representation. The population comprised students from various Kenyan communities whose families had settled in the area, primarily engaged in farming and business activities. According to the Sub-County Education Office records, Njoro Sub-County contained fifty-one secondary schools at the time of the study, consisting of forty-eight public and three private institutions. This area was selected as the research site due to its comprehensive representation of all school categories and its documented history of poor performance in English, as reported in the Njoro Sub-County Education Office KCSE Results Analysis Report (2022).

Figure 1: Map of the Study Area

Sampling Design

The determination of sample size for both schools and student compositions were accomplished using Yamane's Formula, which establishes sample size through the equation $n = N/(1+N(e)^2)$, where n represents the sample size, N represents the population size, and e denotes the precision level. For school selection, the calculation employed an 80% confidence interval with a 20% precision level. Given the total population of fifty-one schools ($N=51$) and a precision level of 0.2, the calculation yielded a sample size of sixteen schools. This

sample was then proportionally distributed between public and private schools according to their representation in the population, resulting in fifteen public schools and one private school.

The sampling of student compositions followed a similar mathematical approach but utilised an 86% confidence interval and 14% precision level. With a total population of 5,401 Form Three students ($N=5,401$) and a precision level of 0.14, the calculation determined a sample size of fifty compositions. Following the established ratio of public to private schools, forty-seven compositions

were selected from public schools and three from private institutions.

The study implemented a multi-stage sampling approach beginning with stratified random sampling. This method was selected based on Kothari's (2004) assertion that stratified sampling is appropriate when the population does not constitute a homogeneous group. The initial stratification divided schools into public and private categories, followed by a secondary stratification across five administrative wards. This approach created more homogeneous sub-populations, which, according to Mugenda & Mugenda (2003), results in more reliable and detailed information.

From each of the five wards, three public secondary schools were purposively selected, resulting in fifteen public schools, along with one private school, for a total of sixteen participating institutions. The selection process carefully considered institutional diversity, ensuring representation from Sub-County Schools, County Schools, and Extra-County Schools, as well as both day and boarding institutions across the public and private sectors. The relatively modest sample size of sixteen schools aligns with Milroy, & Gordon's (2003) observation that linguistic surveys do not require large samples due to the inherently homogeneous nature of linguistic behaviour.

The selection of individual compositions employed simple random sampling, a technique that Fink (2010) notes ensures every member of the target population has a known probability of inclusion in the sample. The practical implementation of this sampling utilised class registers as sampling frames. Each student was assigned a unique code derived from their school's name to maintain anonymity. These codes were transcribed onto separate pieces of paper, which were then folded and placed in a closed container. The random selection process involved drawing these coded papers from the

container, with each selected code corresponding to a composition for inclusion in the study.

Data Collection

The collection of written texts focused on capturing authentic English writing situations through two primary sources: regular class assignments and previously written compositions. This approach enabled the examination of natural language use in academic contexts. The selected compositions were subsequently analysed to identify and classify the types of cohesive devices employed by students. To complement this textual analysis, teachers provided additional insights regarding the importance of teaching cohesive devices in English instruction and the challenges associated with teaching sentence connectors.

This comprehensive methodological approach ensured systematic data collection while maintaining scientific rigour and representativeness across the study population. The careful attention to sampling procedures and data collection methods established a solid foundation for the subsequent analysis of cohesive device usage in student writing.

RESULTS

Students' Use of Grammatical and Lexical Cohesive Devices

The analysis of cohesive devices in students' compositions revealed distinct patterns in their usage of both grammatical and lexical devices. As shown in Table 1, out of a total of 19,775 cohesive devices identified, lexical devices dominated student writing, with repetition alone accounting for 69.9% (n=13,832) of all cohesive devices used. This overwhelming preference for repetition stands in stark contrast to other lexical devices such as synonyms (0.03%, n=7), antonyms (0.13%, n=26), and hyponyms (0.00%, n=1), indicating a limited range of vocabulary usage in student compositions.

Table 1: Analysis of Cohesive Devices Used in Students' Compositions

	Types of Cohesive Devices Used	Number	Percentage (%)
Grammatical Devices	Personal Reference (PR)	2830	14.31%
	Demonstrative Reference (DR)	1487	7.52%
	Comparative Reference (CR)	221	1.12%
	Additive Conjunction (AC)	673	3.40%
	Adversative Conjunction (Adv C)	131	0.66%
	Causal Conjunction (CC)	339	1.71%
	Temporal Conjunction (TC)	214	1.08%
	Nominal Substitution (NS)	7	0.03%
	Verbal Substitution (VS)	0	0.00%
	Clausal Substitution (CS)	0	0.00%
	Nominal Ellipsis (NE)	0	0.00%
	Verbal Ellipsis (VE)	1	0.00%
	Clausal Ellipsis (CE)	0	0.00%
Lexical Devices	Repetition (R)	13,832	69.9%
	Synonym (S)	7	0.03%
	Antonymy (A)	26	0.13%
	Hyponymy (H)	1	0.00%
	Meronymy (M)	6	0.03%
Total		19,775	100

Note. Field Survey, 2023

Among grammatical cohesive devices, personal references emerged as the most frequently used, constituting 14.31% (n=2,830) of total usage. Demonstrative references followed at 7.52% (n=1,487), while comparative references were used less frequently at 1.12% (n=221). The data reveals a clear hierarchy in students' use of reference devices, suggesting greater comfort with personal pronouns and possessive determiners compared to other reference types.

Conjunction usage showed moderate frequency, with additive conjunctions being the most common at 3.40% (n=673), followed by causal conjunctions

at 1.71% (n=339), temporal conjunctions at 1.08% (n=214), and adversative conjunctions at 0.66% (n=131). This pattern indicates students' preference for simple additive relationships over more complex logical connections in their writing.

Table 2 presents a consolidated view of the major categories of cohesive devices, highlighting the substantial imbalance between different types of cohesive devices in student writing. The overwhelming dominance of lexical devices (70.15%) and references (22.95%) contrasts sharply with the minimal use of substitutions (0.04%) and ellipsis (0.01%).

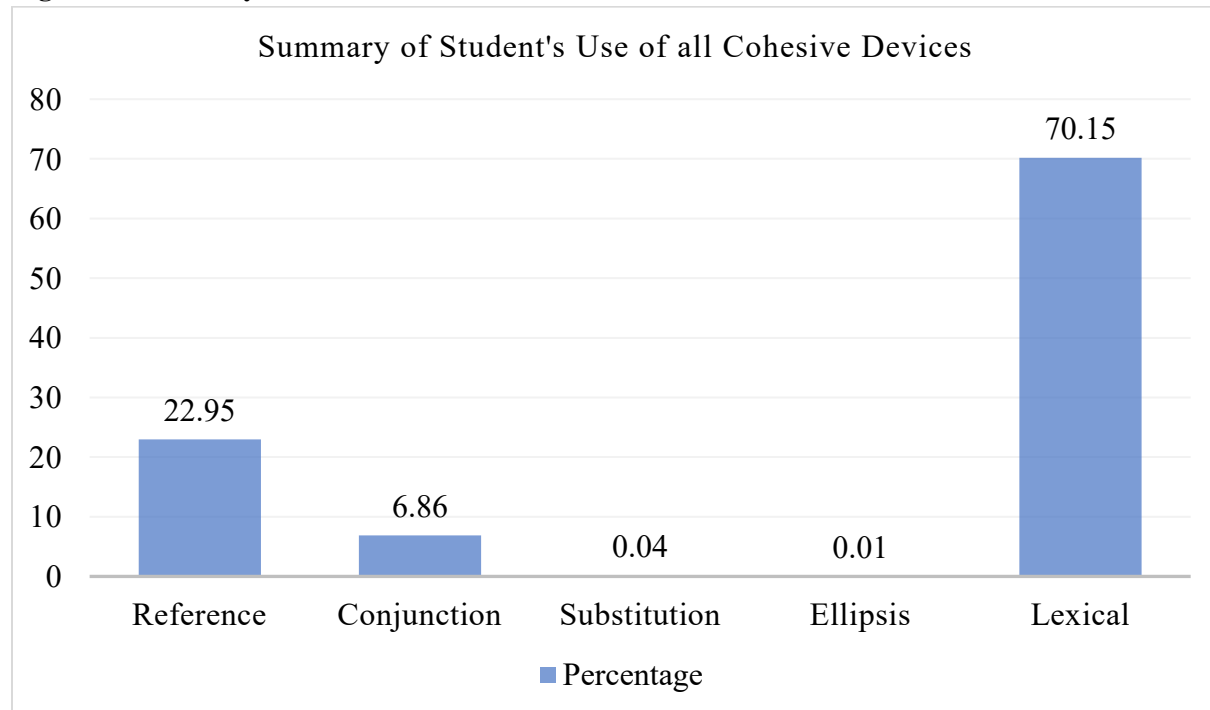
Table 2: Analysis of Students' Use of All Cohesive Devices

Type of Cohesive Device	Number	Percentage (%)
References	4538	22.95%
Conjunctions	1356	6.86%
Substitutions	7	0.04%
Ellipsis	1	0.01%
Lexical	13872	70.15%
Total	19,775	100.00%

Note. Field Survey, 2023

Figure 1 provides a visual representation of this distribution, clearly illustrating the disproportionate use of lexical devices compared to other cohesive elements. This visualisation emphasises the limited

variety in students' cohesive device usage and the potential need for more balanced instruction in different types of cohesive devices.

Figure 2: Summary of the Use of All CDs

Note. Field Survey, 2023

Teaching and Assessment Methods

The investigation of teaching practices revealed important insights into how cohesive devices are taught and assessed in secondary schools. Table 3 shows that the majority of teachers (74.3%, n=26) reported cohesive devices were available "to a great

extent" in student textbooks, with an additional 17.1% (n=6) indicating availability "to a very great extent." Only a small minority (2.9%, n=1) reported no availability, suggesting that most schools have adequate basic resources for teaching cohesive devices.

Table 3: Do Students' Textbooks Contain All Types of Cohesive Devices?

	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	1	2.90	2.90	2.90
To a less extent	1	2.90	2.90	5.70
To a moderate extent	1	2.90	2.90	8.60
To a great extent	26	74.30	74.30	82.90
To a very great extent	6	17.10	17.10	100.0
Total	35	100.0	100.0	

Note. Field Survey, 2023

The teaching methods employed by teachers showed considerable variation, as detailed in Table 4. Three approaches emerged as equally prevalent, each employed by 25.7% (n=9) of teachers: giving examples of usage in sentences, filling gaps and tests, and teaching as concepts appear in textbooks.

Word-meaning matching was used by 14.3% (n=5) of teachers, while sample essay analysis was the least common approach at 8.6% (n=3). This distribution suggests a relatively balanced approach to teaching methods, though with limited use of comprehensive text analysis.

Table 4: How Teachers Teach Cohesive Devices

	Frequency	Percent	Valid Percent	Cumulative Percent
Giving examples of how they are used in sentences, paragraph development	9	25.70	25.70	25.70
Matching words with their meanings	5	14.30	14.30	40.00
Filling gaps and tests	9	25.70	25.70	65.70
Teaching as they appear in textbooks	9	25.70	25.70	91.40
Use of a sample essay	3	8.60	8.60	100.00
Total	35	100.0	100.0	

Note. Field Survey, 2023

Assessment practices showed a strong preference for structured exercises, as evidenced in Table 5. Fill-in-the-blank exercises dominated assessment methods at 45.7% (n=16), followed by essays and

creative writing at 22.9% (n=8), and composition writing at 20.0% (n=7). The reliance on fill-in-the-blank exercises suggests a focus on discrete skills rather than integrated writing assessment.

Table 5: Most Common Mode of Testing Sentence Connectors in the Textbooks

	Frequency	Percent	Valid Percent	Cumulative Percent
Composition writing	7	20.00	20.00	20.00
Sentences with blanks requiring learners to fill in a connector	16	45.70	45.70	65.70
Passage with connectors requiring learners to identify and name the types of connectors	4	11.40	11.40	77.10
Essays and creative writing	8	22.90	22.90	100.00
Total	35	100.0	100.0	

Note. Field Survey, 2023

Teachers faced several significant challenges in teaching cohesive devices, as shown in Table 6. The

most prominent challenge was inadequate teaching materials, reported by 62.9% (n=22) of teachers.

This finding appears to contrast with the reported availability of cohesive devices in textbooks, suggesting that while basic materials are available, supplementary resources for effective teaching may

be lacking. Learner confusion about types and uses of cohesive devices was the second most common challenge (20.0%, $n=7$), followed by general unfamiliarity with cohesive devices (11.4%, $n=4$).

Table 6: Challenges Encountered When Teaching Cohesive Devices

	Frequency	Percent	Valid Percent	Cumulative Percent
Inadequate, appropriate teaching, learning and aiding materials	22	62.90	62.90	62.90
Learners confusing on the types and uses of connectors	7	20.00	20.00	82.90
Unfamiliarity with what cohesive devices are	4	11.40	11.40	94.30
Lack of cooperation from learners	2	5.70	5.70	100.00
Total	35	100.0	100.0	

Note. Field Survey, 2023

Correlation Analysis and Writing Quality

Statistical analysis revealed significant relationships between cohesive device usage and writing quality. As shown in Table 7, the overall correlation between total cohesive device usage and

writing scores was strong and positive ($r = 0.79$, $p < 0.001$). Both grammatical devices ($r = 0.74$, $p < 0.001$) and lexical devices ($r = 0.79$, $p < 0.001$) showed strong correlations with writing quality, suggesting that increased use of cohesive devices generally corresponds with higher quality writing.

Table 7: Correlations between Cohesive Device Usage and Writing Quality

Correlations		Scores	Cohesive devices
Scores	Pearson Correlation	1	.79**
	Sig. (2-tailed)		.00
Cohesive devices	Pearson Correlation	.79**	1
	Sig. (2-tailed)	.00	

Note. Field Survey 2023.

Table 8: Correlation between Composition Scores and the Grammatical CDs

Correlations (Grammatical CDs Combined)		Scores
Scores	Pearson Correlation	1
	Sig. (2-tailed)	
	N	50
Grammatical CDs	Pearson Correlation	.737**
	Sig. (2-tailed)	.000
	N	50

Note: Field Survey 2023

Table 9: Correlation Between Composition Scores and the Lexical CDs

Correlations (Lexical CDs Combined)		Scores
Scores	Pearson Correlation	1
	Sig. (2-tailed)	
	N	50
Lexical CDs	Pearson Correlation	.794**
	Sig. (2-tailed)	.000
	N	50

Note: Field Survey 2023

Further analysis of specific categories (Table 8) revealed varying strengths of correlation with writing quality. Among reference devices, demonstrative references showed the strongest correlation ($r = 0.64$, $p < 0.001$), followed by personal references ($r = 0.57$, $p < 0.001$). Additive conjunctions demonstrated a moderate positive

correlation ($r = 0.57$, $p < 0.001$). Notably, repetition showed the strongest correlation overall ($r = 0.79$, $p < 0.001$), despite concerns about overreliance on this device. Weaker correlations were found for antonymy ($r = 0.36$, $p = 0.01$) and synonymy ($r = 0.155$, $p = 0.28$).

Table 10: The Correlation between Reference Sub-Categories and Writing Quality

	Personal References	Demonstrative References	Comparative References
Person Correlation	.57	.64	.25
Sig. (2-tailed)	.00	.00	.08
N	50	50	50

Note. Field Survey, 2023

Appropriate Use of Cohesive Devices

The analysis of appropriate usage patterns (Table 9) demonstrated high levels of accuracy in students' application of cohesive devices. Of the 19,700 instances of appropriate usage, repetition dominated

at 70.21% ($n=13,832$), followed by references at 22.66% ($n=4,465$). While the high rate of appropriate usage (99.62% overall) indicates a good basic understanding of cohesive devices, the heavy reliance on repetition suggests limited range in students' cohesive strategies.

Table 11: Appropriate Use of Cohesive Devices to Create Cohesion in Students' Written Compositions

Cohesive Devices Used	Appropriate use	Percentage %
Grammatical cohesion	References	4,465
	Conjunctions	1,356
	Substitution	7
	Ellipsis	1
Lexical cohesion	Repetition	13,832
	Synonymy	7
	Antonymy	25
	Hyponymy	1
	Meronymy	6
Total Number of Cohesive Devices	19,700	100%

Note. Field Survey, 2023.

These findings collectively indicate that while students generally use cohesive devices appropriately, their usage is heavily skewed toward basic devices, particularly repetition and personal references. The strong correlations between cohesive device usage and writing quality suggest that these devices play a crucial role in effective writing, even when the range of devices used is limited.

DISCUSSION

The present study investigated cohesive device usage in secondary school students' compositions in Njoro Sub County, Kenya, revealing several significant patterns and implications for English language teaching and learning. The findings demonstrate complex relationships between cohesive device usage, writing quality, and pedagogical approaches, which warrant detailed examination.

Analysis of cohesive device patterns revealed a strong preference for lexical cohesive devices, which constituted 70.15% of all devices used. This finding aligns with Zhang's (2000) research, which similarly found lexical devices to be the most frequently employed cohesive elements in student writing. However, the current study found that within lexical devices, repetition dominated at 69.9%, suggesting limited vocabulary diversity among students. This heavy reliance on repetition, coupled with minimal use of other lexical devices such as synonymy (0.03%), antonymy (0.13%), and hyponymy (0.00%), indicates potential limitations in students' lexical resources. Ghasemi's (2013) observation that learners tend to prefer certain cohesive devices due to knowledge limitations and discourse familiarity provides a theoretical framework for understanding this pattern.

Reference devices emerged as the second most frequent category, accounting for 22.95% of total usage. The predominance of personal references (14.31%) over demonstrative (7.52%) and comparative references (1.12%) suggests students'

greater comfort with basic pronominal and possessive forms. This pattern aligns with Liu, & Braine's (2005) finding that personal references often represent the first cohesive devices mastered by language learners. The relatively lower usage of demonstrative and comparative references points to areas requiring additional pedagogical attention.

Particularly noteworthy was the minimal usage of substitution (0.04%) and ellipsis (0.01%), indicating significant gaps in students' advanced writing skills. This finding mirrors Wachera's (2015) observations in Gikuyu texts, where these more sophisticated cohesive devices were rarely employed. The limited use of these devices may reflect their complexity and students' hesitancy to employ more advanced cohesive strategies in their writing.

The teaching and learning dynamics revealed through this study present both opportunities and challenges. While 74.3% of teachers reported extensive availability of cohesive devices in textbooks, the limited variety in actual usage suggests a disconnect between resource availability and effective learning outcomes. This disparity supports Rahman's (2013) assertion that explicit instruction and practice opportunities, rather than mere exposure, are crucial for developing competency in cohesive device usage.

Assessment methods emerged as another area of concern. The predominant use of fill-in-the-blank exercises (45.7%) for evaluation may not adequately prepare students for authentic writing tasks. Wandera's (2012) critique of traditional assessment methods resonates with this finding, suggesting a need for more comprehensive evaluation approaches that better develop students' writing skills.

The identification of inadequate teaching materials as the primary pedagogical challenge (62.9%) highlights systemic issues in English language instruction. This finding reflects broader educational challenges in developing countries, as

noted by various researchers, including Ghasemi (2013) and Liu, & Braine (2005). The impact of resource constraints on teaching effectiveness necessitates attention at both the policy and institutional levels.

Statistical analysis revealed a strong positive correlation ($r = 0.787$) between cohesive device usage and writing quality, providing empirical support for the importance of these devices in effective writing. This finding validates Witte, & Faigley's (1981) assertion regarding the significant influence of cohesion on writing quality. The strength of this correlation, particularly given the substantial sample size ($n=50$) and diverse writing contexts, underscores the importance of cohesive device instruction in writing pedagogy.

Different categories of cohesive devices showed varying correlations with writing quality, offering nuanced insights into their relative importance. Repetition, despite its potential indication of limited vocabulary, showed the strongest correlation ($r = 0.792$) with writing quality, possibly reflecting the importance of clear theme maintenance in student writing. Demonstrative references exhibited a strong correlation ($r = 0.635$), suggesting the significance of clear textual pointing in academic writing. Personal references showed a moderate correlation ($r = 0.570$), indicating their supportive role in maintaining textual cohesion. These findings align with Zhang's (2010) research on the relationship between specific cohesive devices and writing quality.

The findings suggest significant implications for pedagogy and curriculum development. The dominance of repetition indicates a need for enhanced vocabulary instruction, supporting Salkie's (1995) emphasis on vocabulary diversity in writing. The limited use of advanced cohesive devices suggests the need for more explicit instruction in these areas, while the current reliance on fill-in-the-blank exercises indicates a need for more varied assessment approaches.

Resource development emerges as a critical need, particularly in terms of supplementary teaching materials focusing on advanced cohesive devices, interactive learning resources, and comprehensive assessment tools. These resources should support the systematic instruction of cohesive devices across various writing contexts and promote progressive learning objectives for different cohesive device categories.

The study's theoretical implications extend beyond pedagogical concerns, contributing to the broader understanding of cohesion in second language writing. The findings support Halliday, & Hasan's (1976) framework while highlighting context-specific usage patterns and demonstrating clear relationships between cohesive device variety and writing quality.

Several limitations warrant consideration when interpreting these findings. The focus on written compositions may not fully reflect students' cohesive device knowledge, and the cross-sectional nature of the study limits understanding of developmental patterns. Additionally, the regional specificity of the study may affect the generalizability of findings to other contexts.

Future research directions should include longitudinal studies of cohesive device development, comparative analyses across different linguistic and educational contexts, and intervention studies testing various teaching methodologies. The role of digital tools in cohesive device instruction also merits investigation, particularly given the increasing importance of technology in language education.

This comprehensive analysis of cohesive device usage in secondary school writing provides valuable insights for English language teaching and learning. The strong correlation between cohesive device usage and writing quality, combined with clear patterns of usage and challenges, offers a foundation for improving writing instruction. While students demonstrate basic competency in cohesive device

usage, significant room exists for improvement in the variety and sophistication of cohesive devices employed. These findings have important implications for curriculum development, teacher training, and resource allocation in English language education.

CONCLUSION

This study has provided substantial insights into the use of cohesive devices by secondary school students in Njoro Sub-County, Kenya. The research findings reveal complex patterns in students' application of cohesive devices and highlight significant implications for English language instruction in secondary education.

The analysis demonstrates that students predominantly rely on lexical cohesive devices, particularly repetition, which constituted 69.9% of all cohesive devices used. While this indicates students' basic understanding of textual cohesion, it also reveals limitations in their linguistic repertoire. The strong correlation ($r = 0.787$) between cohesive device usage and writing quality confirms the crucial role these devices play in effective written communication. However, the minimal use of advanced cohesive devices such as substitution (0.04%) and ellipsis (0.01%) suggests a significant gap in students' writing skills.

The teaching and learning challenges identified in this study, particularly the inadequacy of teaching materials reported by 62.9% of teachers, point to systemic issues that require attention. The predominant use of fill-in-the-blank exercises (45.7%) for assessment indicates a need for more diverse and comprehensive teaching approaches. These findings align with previous research by Liu, & Braine (2005) and Zhang (2010) regarding the relationship between cohesive device mastery and writing quality.

Recommendations

Several key recommendations emerge from this research. First, there is a pressing need for enhanced

vocabulary instruction that emphasises the use of diverse cohesive devices beyond simple repetition. Second, teaching materials should be developed that specifically target advanced cohesive devices, providing students with structured opportunities to practice their use in authentic writing contexts. Third, assessment methods should be diversified to encourage the application of a broader range of cohesive devices.

The findings also suggest the importance of incorporating systematic instruction of semantic relations of words, including synonymy, hyponymy, and meronymy, to help students recognise stylistic variations and appreciate the richness of lexical items. This approach would contribute to reducing the overreliance on repetition observed in student writing.

To address these needs effectively, several practical measures are recommended for implementation at various levels:

At the classroom level, teachers should integrate explicit instruction on cohesive devices across different writing genres, providing students with multiple opportunities to practice using varied cohesive devices in authentic writing tasks. Regular feedback should focus specifically on cohesive device usage and its impact on text coherence.

At the institutional level, schools should prioritise the development and acquisition of supplementary teaching materials that support the instruction of advanced cohesive devices. Professional development programs should be implemented to enhance teachers' capacity to effectively teach and assess cohesive device usage.

At the curriculum level, the findings suggest a need for reviewing and potentially revising the current approach to teaching cohesive devices. The curriculum should emphasize progressive development of cohesive device usage, moving from basic to more sophisticated applications.

These findings contribute significantly to our understanding of cohesion in second language writing within the Kenyan context. The study not only identifies current patterns and challenges but also provides a foundation for improving writing instruction in secondary schools. The strong correlation between cohesive device usage and writing quality underscores the importance of addressing the identified gaps in teaching and learning.

Future research directions might include longitudinal studies examining the development of cohesive device usage over time, investigation of effective interventions for teaching advanced cohesive devices, and comparative studies across different linguistic and educational contexts. Such research would further enhance our understanding of how best to support students in developing sophisticated writing skills.

The outcomes of this study have significant implications for English language teaching in Kenya and similar educational contexts. Addressing the identified challenges and implementing the recommended measures helps educators and policymakers enhance students' mastery of cohesive devices and their overall writing competence. This improvement in writing skills is crucial not only for academic success but also for students' future professional development in an increasingly competitive global environment.

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