Exploring Lexical Complexity, Fluency, and Kanji Use in JFL Free Writing

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Second language learners face numerous challenges in acquiring proficiency in writing, particularly in languages with complex writing systems such as Japanese. This study investigated the lexical diversity, lexical density, writing fluency, and kanji use among intermediate and advanced Japanese as a Foreign Language (JFL) learners in their free writing. The sample comprised 48 undergraduate students with different proficiency levels (intermediate and advanced). Participants were asked to write a Japanese essay on a given topic within a time limit. Results revealed significant differences between the two proficiency levels across all variables. Advanced learners exhibited higher lexical diversity, greater writing fluency, and increased kanji use compared to their intermediate counterparts. Conversely, intermediate learners demonstrated higher lexical density, indicative of a preference for simpler vocabulary and linguistic structures. These findings underscore the importance of proficiency level in shaping language production abilities and highlight the nuanced relationship between proficiency and written language skills in a second language context. This suggests the need for targeted instructional interventions to support JFL learners' acquisition of written language skills and calls for further research to explore the underlying mechanisms driving proficiency-related differences in language production abilities.

第二言語学習者、特に複雑な表記体系を持つ日本語学習者は、文章の執筆に際し多くの問題に直面する。本研究では、中級及び上級の日本語学習者の作文における語彙の多様性、語彙密度、文章の流暢さ、漢字使用を調査した。日本語学習者48名は制限時間内に日本語作文を書いた。その結果、全ての変数において

2つの習熟度レベルの間に有意差が見られた。上級学習者は語彙の多様性、文章の流暢さ、漢字の使用率が高いことが示されたが、中級学習者は語彙密度が高く、より単純な語彙と言語構造であるという傾向を示した。すなわち、言語生産能力を形成する上での習熟度レベルの重要性を強調し、第二言語の文脈における習熟度と書く能力の微妙な関係を示している。これは日本語学習者の書く能力の習得を支援する指導介入の必要性を示唆しており、言語生産能力における熟達度に関連した違いを生み出す根本的な過程を探るための更なる研究が必要であることを示す。

Lexical diversity, also referred to as lexical richness (Daller et al., 2003), is a term used to quantify the variety of vocabulary in texts and is often used as a metric for assessing students' overall language proficiency. Conversely, lexical density measures the proportion of lexical words (e.g., nouns, verbs, adjectives, and some adverbs) within a text (Johansson, 2008). Generally, texts with lower density are more easily comprehensible, with spoken texts typically exhibiting lower lexical density compared to written texts (Halliday, 1989; Ure, 1971). However, as argued by Johansson (2008), a text may exhibit high lexical diversity (i.e., containing numerous word types) but low lexical density (i.e., containing many pronouns and auxiliary verbs), or vice versa.

In higher education, students' writing richness, including lexical diversity and density, are commonly evaluated to gauge their language skills. On the other hand, free writing, a form of creative expression, provides students with the opportunity to freely express their thoughts, feelings, and opinions (Elbow, 1973). It is associated with enhanced writing fluency because it fosters confidence and reduces limitations and anxiety (Listyani & Tananuraksakul, 2019; Maloney, 2022; Shekarabi, 2017, 2020, 2023, in press; Spiro, 2014).

Proficiency in writing constitutes a pivotal aspect of language acquisition, yet second language (L2) learners frequently grapple with the complexities of intricate writing systems such as Japanese. A comprehensive understanding of the determinants shaping writing proficiency, including factors such as lexical complexity and fluency, is imperative for devising efficacious pedagogical strategies. Moreover, the role played by kanji characters in Japanese script remains inadequately explored within the framework of L2 acquisition. This

study aims to bridge these knowledge gaps by scrutinizing variations in lexical diversity, lexical density, fluency, and kanji use across intermediate and advanced Japanese as a Foreign Language (JFL) learners, thereby offering valuable insights for educators and researchers. Investigating how JFL learners across different proficiency levels such as intermediate and advanced produce different text lengths in Japanese free writing assumes paramount importance. Furthermore, since the Japanese writing system incorporates three distinct character types (i.e., hiragana, katakana, and kanji), it is essential to explore potential disparities in kanji use among JFL learners based on their proficiency levels in the context of free writing. Another crucial aspect involves examining the impact of free writing on JFL learners' lexical density and diversity across varying proficiency levels.

Lexical Diversity and Lexical Density

Lexical complexity is a multifaceted construct encompassing primary dimensions: lexical diversity and lexical density (Lu, 2012). Writing development is closely associated with these lexical dimensions, as evidenced by the presence of more unique, content-rich, or infrequent words in a learner's text, indicative of higher text quality or proficiency (Friginal et al., 2014; Kormos, 2011; Wolfe-Quintero et al., 1998; Yoon & Polio, 2017; Zenker & Kyle, 2021).

Lexical diversity is defined as the proportion of unique words relative to the total word count in a given text (Lu, 2012). This metric is commonly assessed using the type-token ratio, or "the ratio of unique word types to the overall word tokens present in the text (Lu, 2014, p. 4)." Conversely, lexical density is quantified as the ratio of lexical or content words to the total word count, encompassing both lexical (content) and grammatical (functional) terms (Ure, 1971).

Given that the lexicon constitutes a vital component of written language and serves as an indicator of language proficiency, lexical diversity and lexical density hold significant positions in writing assessment and research. Grant and Ginther (2000) examined essays written at three proficiency levels (3, 4, and 5 out of 6 levels, with 1 being the lowest), comparing type-token ratio, average word length, and essay length. They observed a consistent increase in both lexical diversity

and density as proficiency levels advanced, with essays by more proficient writers featuring longer and more varied words.

In another study, Cumming et al. (2006) investigated lexical complexity (type-token ratio) and average word length in essays from a TOEFL essay task across three proficiency levels (representing Score Levels 3, 4, and 5). They noted significant differences between Levels 3 to 4 and Levels 3 to 5, though no significant distinctions were observed between Levels 4 to 5. Additionally, they found that average word length was influenced by proficiency level, albeit with a small effect size.

Durrant and Brenchley (2019) examined children's use of written vocabulary across school years and observed that the frequency of low-frequency words did not differ significantly across year groups. However, specific lexical parts of speech exhibited variations, with the mean frequencies of verbs and adjectives decreasing significantly with age while the mean frequency of nouns increased. Their findings suggest that younger children's writing is characterized by extensive repetition of high-frequency verbs and adjectives along with low-frequency nouns, indicating a preference for fiction-like vocabulary over academic-like vocabulary.

Writing Fluency and Free Writing

Writing fluency encompasses speed, coherence, and fluidity in expression. A seamless flow of ideas facilitated by proficient language processing distinguishes proficient writers and underscores the importance of fluency as a hallmark of writing competence. Writing fluency remains a multifaceted construct in second language acquisition research, with varying definitions proposed (Abdel Latif, 2013; Fellner & Apple, 2006). Wolfe-Quintero et al. (1998) characterized it as the rapid, appropriate, and coherent production of written text, while van Gelderen et al. (2011) emphasized the rapid and efficient retrieval of lexical items for grammatical production. Yasuda (2022) further defines writing fluency as "the development of the ability to rapidly produce coherent second language (L2) written output through efficient linguistic knowledge retrieval" (p. 2).

Numerous studies have explored writers' cognitive load during the writing

process, echoing Kellogg's (1988, 1996) observations of the limitations of working memory and cognitive burden on L2 writers' text length and quality. Despite extensive research and considerations of task complexity, no clear consensus has emerged. Johnson et al. (2012) investigated the impact of pre-task planning on written output, concluding that a certain proficiency level is necessary to free up attentional resources for fluent output. Conversely, Ong and Zhang (2010) found a negative correlation between task complexity and fluency, with the more cognitively demanding conditions yielding greater text quantity. While findings on how task complexity affects fluency remain inconclusive, they suggested that alternative approaches may be more effective in enhancing fluency than task manipulation alone.

One such approach is free writing, which shows promise in increasing text length and improving writing fluency (Yasuda, 2022; Azizi, 2015; Karimpour & Asl, 2016) and improving essay coherence (Shekarabi, 2017). Free writing practices conducted over several weeks have led to significant improvements in written fluency, with participants demonstrating higher word production rates post-engagement (Weston et al., 2011). Moreover, the benefits of free writing extend to English as a Foreign Language (EFL) learners in higher education contexts, with free writing sessions resulting in substantial increases in text output (Hwang, 2010). Guided free writing interventions have also proved effective, as evidenced by statistically significant increases in word counts observed among college-level EFL students after a semester of practice (Maloney, 2022). Maloney further underscores the positive impact of free writing on writing fluency in creative contexts among Japanese English as a Second Language (ESL) students, suggesting that free writing provides learners with the opportunity to enhance their linguistic fluency and creativity. The collective evidence suggests that free writing can serve as an effective strategy for augmenting text length and enhancing writing fluency in second language learners.

Using Kanji in Writing

The Japanese writing system is renowned for its complexity, comprising three primary scripts: hiragana, katakana, and kanji. Hiragana and katakana are

phonetic scripts representing syllabic sounds and are used primarily for native Japanese words and loanwords, respectively. In contrast, kanji characters are logographic symbols mostly derived from Chinese characters, each representing a unique concept or idea. Kanji characters play a crucial role in Japanese text as they convey both meaning and sound, enabling nuanced expression and comprehension.

The complex shapes of each kanji and varied readings are what make learning and using kanji the most difficult part for JFL learners. Besides this complexity, there are exceptions in reading kanji where the characters are used for their phonetic sound rather than their meaning. It can be confusing because the meaning of the kanji cannot match the word it stands for (Shekarabi & Tajfirooz, 2023). One such example of this challenge is the following: The Japanese word for adult is 大人, pronounced "otona", but this pronunciation has absolutely nothing to do with the readings of these kanji. Literally, the character 大 means big, and 人 means "individual" or "person." Etymologically, the character 大 is pronounced "ookii" and "ta," and 人 is pronounced "hito" and "jin" originally. Therefore, the word, 大人 is pronounced differently from the kanji that are included in it.

Due to their ideographic nature, kanji characters offer a concise and efficient means of communication, allowing writers to convey complex ideas with minimal text. The ability to use kanji is an obvious sign of orthographic knowledge on the part of learners with respect to the conventions of writing and of teachers with respect to written Japanese texts (Liao et al., 2022). However, mastering kanji use presents a formidable challenge for learners of JFL because it requires memorization of thousands of characters, each with multiple readings and meanings. Although learning kanji is challenging for learners of Japanese, especially those from an alphabetic background, they believe that learning kanji and using them in their Japanese production is important since this will allow them to be positively evaluated and known as professional Japanese learners (Shekarabi & Tajfirooz, 2022). More proficient learners may thus use more kanji in their written texts (Shekarabi & Tajfirooz, 2023).

Both kanji acquisition and use among JFL learners have garnered significant

research attention, with scholars exploring various factors influencing kanji proficiency. Studies have identified several key determinants of kanji acquisition, including learners' prior language experience, exposure to written Japanese texts, and instructional approaches. For example, learners with a background in Chinese may demonstrate a comparative advantage in kanji recognition and recall due to shared character forms and meanings (Matsumoto, 2013; Hagiwara, 2016). Additionally, extensive reading and writing practice coupled with effective instructional strategies have been shown to facilitate kanji learning and retention among JFL learners (Mori et al., 2020).

Studies have delved into the impact of task constraints on writing Japanese as JFL learners' kanji use strategies during writing tasks. Constraints such as time limitations and topic specificity can influence learners' approaches to kanji use (Sara & Diner, 2022). Additionally, research highlights the importance of employing various learning strategies, both direct and indirect, to enhance kanji mastery among Japanese language learners (Matsuda, 2021). Furthermore, investigations into the relationship between strategy use and effectiveness in kanji learning have been conducted, shedding light on learners' perceived effectiveness of kanji learning strategies (Lensun, 2018; Shekarabi & Tajfirooz, in press).

In structured writing tasks such as essay composition, learners may demonstrate heightened focus on kanji selection and integration to enhance accuracy and coherence (Ivarsson, 2018). Research suggests that the number of kanji remembered and used by students significantly impacts their essay writing abilities, indicating a correlation between kanji proficiency and writing performance (Thomas, 2013; Toyoda & McNamara, 2011).

The Current Study

Previous research has illuminated various aspects of writing crucial for L2 learners. Writing development is intricately linked to lexical dimensions such as lexical diversity and lexical density, with higher text quality and proficiency often characterized by the presence of more unique, content-rich, or infrequent words in learners' texts (Friginal et al., 2014; Kormos, 2011; Yoon & Polio, 2017;

Zenker & Kyle, 2021). Given the fundamental role of lexicon in written language and its significance as an indicator of language proficiency, lexical diversity and lexical density hold paramount importance in writing assessment and research.

Concurrently, writing fluency, defined as the ability to rapidly produce coherent L2 text, has garnered attention in L2 acquisition research. Evidence suggests that free writing, as a method to remove limitations and foster the expression of ideas, can effectively enhance writing fluency in L2 learners (Elbow, 1973). Moreover, studies have explored how task constraints such as time limitations and topic specificity, influence Japanese learners' strategies in using kanji characters during writing tasks. Therefore, in free writing exercises, learners may adopt a more flexible approach to kanji use, for example, by prioritizing fluency and creativity over lexical precision. Despite these findings, it remains unclear how lexical diversity, lexical density, fluency, and kanji use is manifested in JFL learners' free writing and how these variables vary across proficiency levels.

Considering these gaps, this study aims to address the following research questions:

RQ1. To what extent does lexical diversity differ between intermediate and advanced JFL learners in Japanese free writing?

RQ2. To what extent does lexical density differ between intermediate and advanced JFL learners in Japanese free writing?

RQ3. To what extent does fluency differ between intermediate and advanced JFL learners in Japanese free writing?

RQ4. To what extent does kanji use differ between intermediate and advanced JFL learners in Japanese free writing?

Methodology

Research Design

This study employs a quantitative cross-sectional research design to investigate variations in lexical diversity, lexical density, writing fluency, and kanji use among JFL learners at intermediate and advanced proficiency levels.

Participants

The study included 48 undergraduate students (39 female and 9 male) enrolled in JFL courses at a national university in Iran. Participation was voluntary, and participants provided informed consent prior to the study. Among the participants, 25 were second-year students, while 23 were fourth-year students. Persian was the participants' first language, and their average age was 22 years. According to the Japanese educational program at the university, second-year students were considered to have an intermediate proficiency level, while fourth-year students were deemed to have an advanced proficiency level, approximately corresponding to B1 and C1 levels on the Common European Framework of Reference for Languages (CEFR) scale, respectively.

Data collection

Participants were instructed to compose a Japanese essay on the topic of "Some people are against keeping a pet and consider it a cause of human disease while others are in favor of keeping pets. What is your opinion?" An expository writing task was chosen for two reasons: firstly, it aligns with the conditions of free writing since students are required to express their ideas; secondly, all participants had completed two Japanese writing courses as part of their university curriculum in their first year of study, thereby familiarizing them with such topics.

They were allotted 15 minutes to write continuously, without pauses, to the best of their ability. Consistent with Elbow's (1973) recommendations for free writing, participants were instructed to refrain from reading, editing, or revising their text during the writing period. They were encouraged to maintain a continuous flow of ideas, even if experiencing difficulty in generating content; it was conveyed to them that no additional text could be added once the 15-minute period had elapsed.

As highlighted by Elbow (1973), this approach promotes productivity and alleviates apprehension associated with a blank page, thereby fostering increased writing fluency, coherence, and idea generation. A total of 48 Japanese essays were collected, comprising a cumulative total of 9,975 Japanese characters.

Data Analysis

Lexical diversity and lexical density were evaluated using the Apache Solr 4.0 program integrated with Kuromoji, a Japanese morphological analyzer developed by Atilika Inc. Kuromoji is distributed under the Apache License v2.0 and uses the MeCab dictionary and statistical model, which was developed by Kudo et al. (2004). Kuromoji offers experimental support for UniDic (Den et al., 2007).

For the assessment of writing fluency, the total number of Japanese characters produced by each participant was used. This measure aligns with established conventions in fluency research, as demonstrated by previous studies (Johnson, 2017; Baba & Nitta, 2014; Hwang, 2010; Ong & Zhang, 2010; Sasaki, 2000, 2004; Wolfe-Quintero et al., 1998).

Regarding kanji use, the total number of kanji characters was tabulated for analysis. Regarding the distinction between kanji and words, if a word is written in kana (hiragana or katakana) instead of kanji, it was counted as a word but not as a kanji. Similarly, in cases of misspelling or incorrect writing of kanji, the word was counted as a word but not as a kanji.

Results

To investigate whether lexical diversity, lexical density, fluency, and the use of kanji vary between intermediate and advanced JFL learners in their free writing, first the normality and homogeneity of variance in the aforementioned data were assessed. As presented in Table 1, the data pertaining to lexical diversity, fluency, and the use of kanji were found to exhibit normal distributions in both the intermediate and advanced groups, and the homogeneity of the variance was confirmed ($p > .05$). To ascertain differences between the intermediate and advanced groups, an independent sample t-test was employed. Bonferroni adjustment was $p > .01$. However, due to violation of the normality assumption in the data concerning lexical density ($p > .05$), a Mann-Whitney U test was used to examine differences between the intermediate and advanced groups in terms of lexical density.

Table 2 presents the descriptive statistics for the lexical diversity measures observed in both the intermediate and advanced proficiency groups. The mean

Table 1

Tests of normality and homogeneity of variances

	Groups	Kolmogorov-Smirnov Test			Levene's Test	
		Statistic	df	p	F	p
Lexical diversity	Intermediate	.106	25	.200	1.917	.173
	Advanced	.161	23	.127		
Lexical density	Intermediate	.213	25	.005	4.791	.034
	Advanced	.162	23	.121		
Fluency	Intermediate	.154	25	.128	3.397	.072
	Advanced	.124	23	.200		
Kanji use	Intermediate	.154	25	.129	17.581	.000
	Advanced	.173	23	.071		

Table 2

Descriptive statistics for lexical diversity, fluency, and kanji use in intermediate and advanced JFL learners' free writing

Groups	N		Lexical diversity	Fluency	Kanji use
Intermediate	25	Mean	181.652	169.760	17.560
		SD	24.879	35.666	12.793
		95% CI	171.38-191.92	155.03-184.48	12.27-22.84
Advanced	23	Mean	205.826	249.173	34.521
		SD	31.125	55.581	24.988

Note: SD = Standard deviation; 95% CI = 95% Confidence interval for the mean

difference for lexical diversity in the writing of the advanced proficiency group was approximately 24.17 points higher than that of the intermediate group. Furthermore, an independent sample t-test indicated a large and statistically significant difference in lexical diversity between the intermediate and advanced groups ($p > 0.005$). (These findings are detailed in Table 3.) Consequently, it can be inferred that advanced learners employed a wider range of vocabulary compared to intermediate learners in their essays.

Using a Mann-Whitney U test, differences in lexical density were assessed between the intermediate and advanced groups. As indicated in Table 4, the analysis revealed a statistically significant difference in lexical density between the intermediate and advanced learners' Japanese essays ($p > .01$). Specifically, the results demonstrated that the median lexical density in the essays of intermediate learners (median = 16.80) was higher than that of advanced learners (median = 12.25). However, this observed difference was small ($\eta^2 = .021$). Consequently,

Table 3

Independent sample t-test results and effect sizes for lexical diversity, fluency, and kanji use in intermediate and advanced JFL learner's creating writing

	t	df	p	Cohen's *d*
Lexical diversity	-2.984	46	.005	0.85
Fluency	-5.940	46	.000	1.70
Kanji use	-2.922	32.175	.006	0.85

Table 4.

Mann-Whitney U test results for lexical density in intermediate and advanced JFL learners' free writing

Groups	*N*	Median	U	Z	p
Intermediate	25	16.800	134.000	-3.168	.002
Advanced	23	12.250			

it can be inferred that intermediate JFL learners used a greater number of lexical words in their texts compared to advanced JFL learners, particularly under free writing conditions.

In terms of writing fluency between the intermediate and advanced groups, the mean difference between the groups indicated that the advanced group wrote slightly greater than 79.41 characters more than the intermediate group (Table 2). This finding suggests that advanced learners produced a greater volume of text under free writing conditions compared to intermediate learners. In essence, the average number of Japanese characters generated by advanced learners in their free writing essays exceeded that of intermediate learners. As shown in Table 3, an independent sample t-test revealed a highly significant difference in writing fluency between the advanced and intermediate groups ($p > .001$).

Concerning the extent of kanji use among intermediate and advanced JFL learners writing under free writing conditions, the mean difference between the two groups indicated that intermediate learners employed approximately 16.96 fewer kanji characters compared to advanced learners despite both groups being subject to identical time constraints. The results of an independent sample t-test revealed a statistically significant difference in kanji use between the writings of intermediate and advanced learners ($p > .01$). Notably, due to the violation of equality of variances in the kanji use data, the results assuming unequal variance were reported (Table 3).The total number of kanji used by intermediate learners was 439, while advanced learners used 794.

Discussion

This study investigated lexical diversity, lexical density, writing fluency, and kanji use among intermediate and advanced JFL learners in their free writing. The findings revealed significant differences between the two proficiency levels across all variables. Advanced learners demonstrated higher lexical diversity, greater writing fluency, and increased kanji use compared to their intermediate counterparts. Conversely, intermediate learners exhibited higher lexical density, suggesting a propensity for simpler vocabulary and linguistic structures. These results highlight the importance of proficiency level in shaping language

production abilities and underscore the nuanced relationship between proficiency and written language skills in a second language context.

The findings regarding lexical diversity and lexical density in the free writing of intermediate and advanced JFL learners underscore the influence of proficiency level on vocabulary usage and text composition. Consistent with previous research (Grant & Ginther, 2000; Cumming et al., 2006), advanced learners exhibited significantly higher lexical diversity compared to their intermediate counterparts. This suggests that these advanced learners possess a broader repertoire of vocabulary, enabling them to express ideas with greater nuance and sophistication. Conversely, intermediate learners demonstrated higher lexical density, indicating a tendency to utilize a greater proportion of lexical words relative to the total word count. This may reflect a preference for familiar vocabulary and simpler linguistic structures among intermediate learners, potentially due to limitations in vocabulary breadth and syntactic complexity (Durrant & Brenchley, 2019).

The disparities in writing fluency between intermediate and advanced JFL learners' free writing reflect the proficiency-related differences in language production abilities. Advanced learners exhibited significantly greater fluency, generating a higher volume of text within the allotted time frame. This aligns with previous research highlighting the positive impact of proficiency on writing fluency (Yasuda, 2022; Weston et al., 2011). The observed increase in fluency among advanced learners may stem from their enhanced linguistic competence and automaticity in language processing, allowing for more efficient idea generation and expression. This improvement is likely influenced not only by free writing practices but also by the additional two years of coursework completed by the advanced learners. During those two years, students engaged in advanced reading and writing courses that included extensive reading practices, structured writing assignments, and exposure to diverse text genres. Those activities likely contributed to their increased linguistic competence and automaticity by building vocabulary, improving syntactic complexity, and fostering critical thinking in Japanese. Furthermore, students may have participated in activities such as peer editing, intensive kanji practice, and discussions in Japanese, all of which would

enhance their overall language proficiency. Moreover, by encouraging the flow of ideas, reducing writer's block, building confidence, and focusing on content over form, the use of free writing practices may have contributed to the improvement in fluency among advanced learners, as evidenced by previous studies (Hwang, 2010; Maloney, 2022).

The findings regarding kanji use among intermediate and advanced JFL learners shed light on the nuanced relationship between proficiency level and script integration in Japanese writing. Advanced learners employed a significantly greater number of kanji characters compared to intermediate learners, indicative of their heightened proficiency in kanji recognition and utilization. This aligns with previous research highlighting the positive correlation between kanji proficiency and overall writing performance (Thomas, 2013; Toyoda & McNamara, 2011). The observed proficiency-related differences in kanji use may reflect advanced learners' ability to leverage kanji characters for lexical precision and stylistic variation, thus enhancing the overall coherence and sophistication of their writing. Moreover, this finding underscores the importance of kanji mastery in fostering effective communication and expression in written Japanese.

Research on lexical diversity, lexical density, writing fluency, and kanji use among intermediate and advanced JFL in Iran is noteworthy for university educators in Japan. It is crucial to develop effective teaching strategies that address the distinct needs at different proficiency levels. Advanced learners show higher lexical diversity, writing fluency, and kanji use, indicating a need for targeted instruction that would support vocabulary expansion, fluency, and increased kanji use for non-Japanese students planning to live or study in Japan. The two additional years of study undertaken by advanced learners highlight the importance of long-term, scaffolded learning approaches that gradually build on prior knowledge through advanced reading and writing courses, intensive kanji practice, and exposure to authentic Japanese texts. Incorporating free writing as a regular activity in these courses may further accelerate learners' fluency and confidence in written production. Intermediate learners' higher lexical density suggests a reliance on simpler words, highlighting the need for teaching methods that expand their linguistic repertoire and syntactic complexity at this level of

their language training. These findings underline the importance of proficiency-based teaching approaches not only for Japanese language education but also for second language acquisition research. For educators in Japan, applying these insights to curriculum design can facilitate a smooth transition of JFL learners to higher levels, ensuring they are well-prepared for academic and social integration. This study also emphasizes the value of targeted instruction and practice, and suggests further research into the mechanisms driving these differences to refine pedagogical approaches.

Free writing is also effective for self-assessment by teachers in establishing their own competencies and helping to enhance the learning of their students. The assignments will demonstrate clarity of thought, argumentation, and mastery of the material in the concerned subject area, hence giving insights into their pedagogical strengths and weaknesses. This approach is more nuanced than tests, reflecting the teacher's authentic voice and thought processes. Free writing in students creates a low-stress, inspired environment for free creative and critical self-expression (Nation & Macalister, 2020). It allows students to try ideas free from the pressure of formal assessment and, as a result, helps the student better understand the topic and write more fluently. Additionally, it creates confidence among learners about their writing skills through regular habit formation—an absolute must for continuous improvement.

Future research should explore the underlying mechanisms driving proficiency-related differences in lexical diversity, lexical density, writing fluency, and kanji use among JFL learners. Longitudinal studies could track learners' language development over time to elucidate the trajectory of skills acquisition and identify effective pedagogical approaches for promoting language proficiency in a second language context. Furthermore, investigations into the role of individual differences such as cognitive and affective factors in shaping language production abilities should provide valuable insights into the complex interplay between learner characteristics and written language skills development. Additionally, the limited sample size in this study restricts the generalizability of the findings, highlighting the need for further research with a larger sample. Overall, this study contributes to our understanding of the factors

influencing written language proficiency in JFL learners and offers promising avenues for future research to explore.

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