

Exploring Vietnamese university students' lexical richness in different types of efl essay writing

Nguyen Thuc Nhi*

*University of Foreign Languages and International Studies, Hue University

Received: 9/10/2024; Accepted: 16/10/2024; Published: 23/10/2024

Abstract: This study examines how different task types impact lexical richness in Vietnamese EFL students' writing. It focuses on lexical diversity, density, and sophistication in opinion and compare/contrast essays. Results show significant differences in these lexical aspects between essay types. Opinion essays exhibit higher lexical diversity and density, while Compare/contrast essays use more academic vocabulary, indicating distinct lexical sophistication levels.

Keywords: Lexical richness, EFL essay writing, Vietnamese EFL students

1. Introduction

Writing is one of the four main skills in language learning, alongside reading, speaking, and listening. It is regarded as the most challenging and sophisticated language skill as it engages extensive thinking processes and perception. Since writing is the primary means of communication, students who want to succeed academically and in the workforce need to have strong writing abilities.

Sufficient vocabulary knowledge is a precondition for effective language use and comprehension of texts. The ability to use vocabulary extensively and diversely is regarded as a necessary first step toward producing qualified writing. The quality of L2 writing is significantly influenced by lexical richness. Lexical richness refers to the quality of vocabulary in a language sample.

As each genre of writing requires a diverse set of abilities and information, assigning writers to only one sort of genre or assignment cannot accurately reflect the language user's entire writing expertise. However, research related to how students display their lexical richness in Opinion essays and Compare/contrast essays has yet to be explored. These two types of writing genres are chosen because they are incorporated in the target writing course at a university in Vietnam. Therefore, this research was conducted with the aim of exploring how different task types affect lexical richness in EFL Writing.

2. Methodology

2.1. Participants

100 second-year students majoring in English at a university in Vietnam are the participants in this study. Participants were from two classes of "Writing

4" with the same teacher, one of the final writing courses offered by their university. As participants all passed the previous writing course, they were at least at the B1 level of the Common European Framework of Reference (CEFR). These two classes were called Class A and Class B in this research to ensure confidentiality.

2.2. Data collection

Students were required to handwrite one opinion and one compare/contrast essay on the same topic of Education as summarized below:

- Opinion essay: Express a viewpoint on whether homeschooling is more effective than traditional schooling or not

- Compare/contrast essay: Compare and contrast homeschooling and traditional schooling

The impacts of genres will only be evaluated within the same topic due to the possibility that topics' effects may compound those of genres. Students were required to handwrite 250 words for each essay without using any resources (e.g., dictionaries, teacher/peer help). According to Laufer and Nation (1995), texts should be at least 200 words in length in order to produce accurate data about vocabulary use. The time allotted for each essay was 50 minutes. There was a one-week interval between each essay to avoid the variables associated with being educated or self-taught over long periods of time (Nguyen, Newton, & Tran, 2022).

Class A will write the opinion essay first and then write the compare/contrast essay one week later. Meanwhile, Class B will follow the opposite pattern, which means the compare/contrast essay will take place prior to the opinion essay. In this way, this

research will follow a counterbalanced design, thus diminishing practice effects of topic familiarity.

2.3. Data analysis

2.3.1. Data distribution analysis

The Kolmogorov-Smirnov (K-S) test of normality was used with the software SPSS before the data was analyzed to determine whether it was distributed normally, which is a need for the statistical tests that were applied later. In SPSS, a distribution is not considered normal if the Sig. value is less than 0.05. If not, the data can be thought of as roughly regularly distributed.

2.3.2. Students' writings analysis

After being collected, students' writings were de-identified, typed, and saved as doc. files. Writing below 200 words or with unreadable handwriting was eliminated. Different tools appropriate for computing each feature were employed in order to assess various aspects of lexical richness, notably lexical diversity, complexity, density, and errors in students' written performances.

Lexical diversity was measured by using an online freeware D_Tools design by Meara and Miralpeix (2015). To indicate the level of lexical diversity, the program reports a value of D, which may vary between 1 and 120. Lexical sophistication was analyzed by utilizing a program called AntWordProfiler (Anthony, 2014). It is a program that analyzes the vocabulary load in a text. This software allows users to generate a profile of the vocabulary in a text by comparing the vocabulary in the text against three default vocabulary lists, GSL1000, GSL2000 (West, 1953), and Academic Word List (AWL) (Coxhead, 2000). Lexical density was measured by calculating the percentage of content words (nouns, verbs, adjectives, and adverbs) over total ones (Ure, 1971). To obtain this, TagAnt, developed by Anthony (2015), was used. This program, a tagging tool based on TreeTagger, classifies words in a text into different content or functional word types by giving a Part-Of-Speech (POS) tagger to each word.

3. Result and discussion

To explore the differences between lexical richness in Opinion and Compare/contrast essays, data from aspects of lexical richness, namely lexical diversity, lexical density, and lexical sophistication, in the writings from Class 1 and Class 2 are reported as follows.

3.1. Lexical Diversity

Opinion essays have a mean D value of $M = 105.06$ and a standard deviation of $SD = 22.07$, suggesting that Opinion writings have a greater lexical diversity

overall. The comparatively moderate standard deviation indicates that although there is considerable variability in the lexical diversity of Opinion essays, it is not too significant.

In contrast, the Mean D value for Compare/Contrast essays is $M = 80.64$, much less than the mean value for Opinion essays. The standard deviation of Compare/Contrast essays is slightly higher than that of Opinion essays, with $SD = 22.90$. This implies that while the average level of lexical diversity in Compare/contrast essays is lower, there is a slightly higher range of diversity within these essays.

In order to examine the effects of task types on lexical diversity, a paired-sample t-test was performed for the normally distributed data (KS test, $p > .05$). The results of the paired-sample t-test show that $t = 7.955$. With a significance value of $p = 0.000$, the lexical diversity of two writing task types differs significantly from one another, as indicated by the p-value being considerably below the 0.05 threshold.

In conclusion, the lexical diversity of Opinion and Compare/contrast essays differs significantly. In particular, lexical diversity in Opinion essays is noticeably larger than in Compare/contrast essays, with the greater mean D value in Opinion essays and the statistically significant difference in the paired-sample t-test findings supporting this conclusion.

3.2. Lexical Density

For Opinion essays, the mean lexical density value is $M = 57.40$, and the standard deviation is $SD = 4.31$. This indicates that Opinion essays typically have a high average lexical density, while there may be considerable variance in the degree of lexical density between writings. The standard deviation suggests moderate variability in lexical density among the Opinion essays.

The mean lexical density for Compare/Contrast essays is $M = 55.92$, with a standard deviation of $SD = 3.21$, which is rather lower than the other writing task types. This implies that lexical density in Compare/Contrast essays is often lower than that of Opinion essays. Furthermore, compared to Opinion essays, the lexical density in Compare/Contrast essays is slightly more consistent and varies less between essays, as indicated by the smaller standard deviation.

A paired-sample t-test (KS test, $p > .05$) was conducted for the normally distributed data to investigate the impact of task types on lexical density. The paired-sample t-test yields a t-value of $t = 2.550$ and a significance value of $p = 0.013$, below the standard alpha threshold of 0.05. This suggests that, while it is not as noticeable as the difference in lexical

diversity, the lexical density difference between Opinion and Compare/Contrast essays is statistically significant.

In summary, Opinion essays differ statistically significantly from Compare/contrast essays in that they have a slightly higher lexical density. Despite the minor mean difference in lexical density, the significance level indicates that this difference is unlikely to be the result of chance.

3.3. Lexical Sophistication

The GSL2000 (Sig. = .200) and AWL (Sig. = .200) have p-values greater than 0.05, indicating a normal distribution across the entire population (Field, 2005). As a result, paired-sample t-tests were conducted to compare the effects of task types on these constructs for the normally distributed data. For constructs in Class 1 where $p \leq 0.05$, such as GSL1000 (Sig. = .005) and NIL (Sig. = .004), Wilcoxon Signed Rank Tests were applied instead of paired-sample t-tests.

Regarding GSL1000, Opinion essays had a mean score of $M = 79.06$, which is nearly equal to Compare/Contrast essays ($M = 79.38$). This indicates that both task types used similar amounts of the most common 1000 words from the General Service List (GSL). The comparable standard deviations ($SD = 4.64$ for Opinion essays and $SD = 4.43$ for Compare/Contrast essays) suggest similar variability in the use of these frequent words. The Wilcoxon Signed Rank Test ($Z = 0.258$, $p = 0.797$) further supports that there is no significant difference in the use of GSL1000 words between the two essay types. Thus, both tasks demonstrate equal lexical sophistication in their use of the most frequent English words.

Concerning GSL2000, Opinion essays showed a slightly higher mean score ($M = 4.65$) compared to Compare/Contrast essays ($M = 4.09$), indicating more frequent use of the second 1000 most common words in Opinion essays. Standard deviations reveal slightly lower variability in Opinion essays ($SD = 1.34$) than in Compare/Contrast essays ($SD = 1.47$). The paired-sample t-test ($t = 2.345$, $p = 0.022$) confirmed that this difference is statistically significant, suggesting a higher level of lexical sophistication in Opinion essays for the GSL2000.

For AWL, Compare/Contrast essays had a higher mean score ($M = 9.33$) than Opinion essays ($M = 8.47$), reflecting greater use of academic vocabulary in Compare/Contrast essays. Both essay types had similar variability ($SD = 2.69$ for Compare/Contrast essays and $SD = 2.83$ for Opinion essays). The paired-sample t-test ($t = -2.241$, $p = 0.029$) indicated a statistically significant difference, showing that

Compare/Contrast essays display greater lexical sophistication in academic word use.

Regarding NIL, Opinion essays had a slightly higher mean score ($M = 7.82$) compared to Compare/Contrast essays ($M = 7.33$), implying the use of more uncommon words in Opinion essays. The variability was higher in Compare/Contrast essays ($SD = 3.16$) than in Opinion essays ($SD = 2.29$). The Wilcoxon Signed Rank Test ($Z = -2.062$, $p = 0.039$) confirmed this difference, suggesting that Opinion essays may use more distinctive or less frequent vocabulary than Compare/Contrast essays.

4. Conclusion

In conclusion, Opinion and Compare/Contrast essays differ significantly in terms of lexical sophistication. Compared to Compare/Contrast essays, Opinion essays tend to use more words from the second tier of common words (GSL2000) and less common vocabulary (NIL). Compare/Contrast essays, on the other hand, use a higher level of academic vocabulary (AWL) than Opinion essays. However, the most frequent 1000 words (GSL1000) are used equally in both essay formats. These results indicate that although the most common words used in both writing task types are comparable, their approach to less common and academic vocabulary is different, indicating different levels of lexical sophistication.

References

- [1]. Anthony, L. (2014). *AntWordProfiler* (Version 1.4.0) [Computer Software]. Tokyo, Japan: Waseda University.
- [2]. Anthony, L. (2015). *TagAnt* (Version 1.2.0) [Computer Software]. Tokyo, Japan: Waseda University.
- [3]. Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238.
- [4]. Laufer, B., & Nation, P. (1995). Vocabulary size and use: Lexical richness in L2 written production. *Applied Linguistics*, 16(3), 307-322.
- [5]. Meara, P., & Miralpeix, I. (2015). *D_Tools* (Version 2.0) [Computer Software]. Swansea University.
- [6]. Ure, J. (1971). Lexical density and register differentiation. In G. E. Perren & J. L. M. Trimm (Eds.), *Applications of linguistics: Selected papers of the 2nd International Congress of Applied Linguistics* (pp. 443-452). Cambridge University Press.
- [7]. Nguyen, B. T. T., Newton, J., & Tran, Q. P. N. (2022). The effect of topic on EFL writing by Vietnamese tertiary students: Insights from combining a lexical richness analysis with student self-reports. *Language Related Research*, 13(5), 18-36.