A CORPUS ANALYSIS OF LEXICAL SOPHISTICATION IN *LLT JOURNAL: A JOURNAL ON LANGUAGE AND LANGUAGE TEACHING*

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Abstract
This research focused on the description of lexical sophistication in *LLT Journal: A Journal on Language and Language Teaching* To obtain the description of lexical sophistication in LLT Journal: A Journal on Language and Language Teaching, the researcher used a corpus software called Tool for the Automatic Analysis of Lexical Sophistication (TAALES). Sixty-six articles published in 2016, 2017 and 2018 were used as the data of this study. There were five descriptions of lexical sophistication *in LLT Journal: A Journal on Language and Language Teaching*, namely word frequency, word range, n-gram, academic list and word information. The word frequency (87%) showed the good amount of percentage in the articles. Word range (87%) showed the use of words in the articles were delivered properly. N-gram (35%) showed the sign of low lexical sophistication scores. Academic list (15%) showed low lexical sophistication scores. Word information (60%) showed high lexical sophistication scores. The percentage of each description of lexical sophistication showed that the academic list gained the lowest percentage among the other descriptions of lexical sophistication. It can be inferred that the academic list aspect in *LLT Journal: A Journal on Language and Language Teaching* needs to be upgraded.

Keywords: lexical sophistication, corpus linguistics, vocabulary, academic writing, LLT Journal

Introduction
Vocabulary works as a primary function in learning the second language to earn communicative ability and acquisition process (Norbert, 2000). A writer can express ideas and convey information in the target language accurately by using suitable vocabulary (Juanggo, 2018). One of the challenges in learning language is the limitation of vocabulary in a second language (Alqahtani, 2015). In English as a second language (ESL) and English as a foreign language (EFL), they need to learn vocabulary to be successful in mastering English language skills, such as listening, speaking, writing, and reading (Alqahtani, 2015). Vocabulary knowledge is used to enhance the level of language proficiency in English second learners. When the range of vocabulary increased, the level of language proficiency will be improved (Juanggo, 2018).

Regarding vocabulary knowledge, two terms for measuring the lexical richness in the texts are lexical diversity and lexical sophistication (Signes & Arroitia, 2015). Lexical diversity deals with how many different words are used in the text, whereas lexical sophistication refers to the portion of advanced vocabulary (Signes & Arroitia, 2015). Astika (1993) states the usage of advanced vocabulary turns into one of the conditions of an academic writing context. Unconsciously, lexical sophistication is currently applied in academic writing (Juanggo, 2018).

Lexical sophistication has to do with advanced, difficult and unusual words. It is also considered as "rareness" words (Crossely & Kyle, 2018). The sophisticated or advanced words are the words that are infrequently used in a text. It tends to be more difficult because it is rarely used in a text or daily communication. The examples can be seen below:

(1) The *food* is *tasty*.
(2) The *cuisine* is *succulent*.

The examples above show the use of different vocabularies but they have the same meaning. "cuisine" and "succulent" are considered sophisticated words. The word *food* is more often used rather than *cuisine*. It also occurred in the same case as the word *tasty* and *succulent*. The word *succulent* is rarely used rather than *tasty* either in a text or in daily communication. In a nutshell, the word *cuisine* and *succulent* are considered as sophisticated and advanced words.

Lexical sophistication has become an interesting area to be analyzed by some researchers in the past couple of years. Laufer and Nation (1995) discovered that there was a positive relation among the quality of writing written by EFL learners and those two lexical items, namely lexical diversity and lexical sophistication. They conclude that learners with higher language proficiency earn better quality in writing and earn more advanced words in their writings production and range of vocabulary. On the contrary, Juanggo (2018) found the use of advanced vocabulary was achieved by low proficient learners were larger than the use of advanced vocabulary by high proficient learners. Kyle and Crossley (2018) found out the tool for assessing the level of lexical sophistication, namely the Tool for Automatic Analysis of Lexical Sophistication (TAALES). The tool is made for measuring and developing aspects of lexical sophistication, such as word frequency, word range, academic vocabulary, and etc. Kyle and Crossley also conducted research together in 2016. Kyle and Crossley (2016) found the aspects of lexical sophistication such as range and bigrams are important things of essay quality in writings, yet the lexical sophistication indices are not strong predictors of essay quality in source-based tasks. Moreover, Crossley and McNamara (2010) conducted that second learners' writers who classified on high proficient learners did not produce more cohesive texts, but they produce texts that were more sophisticated.

The study on measuring the level of lexical sophistication of scientific journals in Indonesia has not been conducted. Therefore, the researcher chooses the topic of lexical sophistication in this research. The topic is chosen based on the fact that lexical sophistication is an important component of academic writing proficiency. Writing proficiency is one of the keys to measure academic success

(Kyle & Crossley, 2016). This research aims to describe the lexical sophistication in *LLT Journal: A Journal on Language and Language Teaching* by measuring the lexical sophistication. The researcher limited the scope of data from the articles published in 2016, 2017, and 2018 because the researchers considered those three years as the most recent years.

Lexical sophistication

Lexical sophistication is the production or the proportion of advanced or difficult vocabulary created by writers in their writings (Juanggo, 2018). He also stated that sophisticated vocabularies are the words that the students did not know yet at their education level (Juanggo, 2018). However, there is still no specific definition of "advanced" or "sophisticated" words. Therefore, in measuring lexical sophistication, the classification of words labeled "advanced" depends on the researcher's definition (Kyle & Croosley, 2014).

Lexical Sophistication is one of the components of lexical richness. According to Signes and Arroitia (2015), lexical richness consists of four aspects. They are lexical variation, lexical sophistication, lexical density and a low number of errors. The lexical richness of a text is the number of different words are used in a text, but lexical density produces a measure of the portion of lexical items such as nouns, verbs, adjectives and some adverbs. Signes and Arroitia (2015) also explained the differences between lexical in linguistics one another. Lexical diversity, density, richness, and sophistication have the same focus in a text. It is vocabulary usage in a text. However, they have different proportions in a text. Texts that have lower density are easier to understand and spoken texts have lower lexical density scores than written texts. It shows that lexical sophistication has another focus rather than lexical diversity, density and richness. The more sophisticated text has a higher level and the more sophisticated text is less understood by readers (Signes & Arroitia, 2015).

The Indices of Lexical Sophistication

According to Kyle and Crossley (2014), there are five indices of lexical sophistication. They are word frequency, word range, n-gram frequency, academic list and word information.

1) Word Frequency

Word frequency is influenced by the times calculation of a word appears in texts. Words that appeared unfrequently in a text are considered more sophisticated than words that appeared frequently (Kyle, Crossley, & Berger, 2017).

Table 1 The examples of word frequency.

A	Edifice	Cuisine	Egregious
VS			
B	Building	Food	Bad

Table1 shows the difference between words that are considered as sophisticated words and words that are not considered as sophisticated words. Those words have the same meaning as another. The *edifice* has the same meaning as *building*. The *cuisine* has the same meaning as *food*. The *egregious* has the same meaning as *bad*. The difference between words that are in column A and B is column A consists of sophisticated words while the words in column B are not considered as sophisticated words.

2) Word Range

Word Range refers to the usage of word frequency that occurred in a text. The range also measures account for how widely a word or word family is used. That is why word frequency and word range are quietly related to each other (Kyle & Crossley, 2016).

Table 2 The example of the occurrences of word frequency.

Cent	1.526 documents	49.50%
Next	2.753 documents	89.30%
Four	2.754 documents	89.33%

3) N-Gram Frequency

Crossley (2014) stated that n-grams are the combinations of n number of words, such as the bigram *on other the hand*. N-grams such as *the end of*, *put of the* and *a lot of* occurring frequently, whereas n-grams such as *now not only*, *time some of*, and *is about being* occurred rarely in a text (Crossely & Kyle, 2018).

4) Academic List

The important part of academic socialization is learning academic language (Hyland, 2009). Academic language consists of words and phrases that appear often in an academic context. However, they appeared rarely in general language (Kyle & Croosley, 2014). Academic List has two sources as the source of data. They are Academic Formula List (AFL) and the Academic Word List (AWL). Academic Word List (AWL) is based on an academic corpus consisting of journal articles and textbooks, while Academic Formula List (AFL) is based on spoken and written academic corpora (Kyle & Croosley, 2014).

The academic word list (AWL) was developed by Averil Coxhead at the School of Linguistics and Applied Language Studies at Victoria University of Wellington, New Zealand. The list contains 570 word families that were chose

because they appear with great amount of numbers in a range of academic texts. The 570 words are divided into 10 groups (Kyle & Croosley, 2014).

Table 3 The vocabularies of Academic Word List

Group 1	Sector • available • financial • process • individual • principle …….
Group 2	Community • resident • range • construction • strategies • elements…….
Group 3	Comments • convention • published • framework • implies • negative…..
Group 4	Overall • emerged • regime • implementation • project • hence……..
Group 5	Alter • stability • energy • aware • license • enforcement • draft • styles….
Group 6	Intelligence • transformation • presumption • acknowledged • utility……
Group 7	Intervention • confirmed • definite • classical • chemical • voluntary……
Group 8	Highlighted • eventually • inspection • termination • displacement…….
Group 9	Behalf • unified • commenced • erosion • anticipated • minimal • ceases…
Group 10	Whereby • inclination • encountered • convinced • assembly • albeit….

The academic formula list (AFL) was developed by Rita Simpson-Vlach and Nick C.Ellis from the University of Michigan. The AFL consists of three groups, namely written-spoke, written only and spoken only (Kyle & Croosley, 2014).

Table 4 The Vocabularies of Academic Formula List

Number	Formula
1	in terms of
2	at the same time
3	from the point of view
4	in order to
5	as well as
6	part of the

7	the fact that
8	in other words
9	the point of view of
10	there is a

5) Word Information

Word Information refers to the interest of writers while they are writing their writings. Word Information is about how the writers wrote deliberately their ideas into the words, sentences and text, how they arrange their ideas into texts such as journals an articles (Kyle & Croosley, 2014).

Table 5 The explanation of some aspects of the word information

Concreteness	It is based on perceptions of how abstract a word is based on how simple it is to describe the meaning of that word.
Familiarity	It is based on judgments of how familiar words are for adults and correlated with frequency counts.
Image Ability	It is based on judgments of how easy it is to create an image of a word.
Meaningfulness	It is based on judgments of how related a word is to other words.
Age of Exposure	It is based on human judgments of the age at which a particular word is learned.

Method

This study is a corpus-based study. The data were the articles in *LLT Journal: A Journal on Language and Language Teaching*. The researchers retrieved the source of data from the official website of *LLT Journal: A Journal on Language and Language Teaching*; http://e-journal.usd.ac.id/index.php/LLT/index, in the form of Portable Document Format (PDF).

The researchers used TAALES to process the document to be ready to be analysed. According to Croosley (2018), the purpose of the tool is to determine a wide range of classic and developed indices of lexical sophistication. For instance, TAALES measures indices related to lexical properties at both the word and phrase

level. The data were converted to the "txt" form. The process started when the data are in the form of the "txt".

The first step was entering the data into the computer. All of the data should be changed into the form of "txt" format so that they can be read by the computer program. After all the data had been inputted into the computer, then it was processed using TAALES to measure the lexical sophistication that is related to the description of lexical sophistication. The processing of the data in the computer program did not take a long time. Once finished, the program showed the information in terms of the percentage of each index in terms of word frequency, word range, n-gram indices, academic list indices and word information indices. Each of indices would have some results in different sources of the program.

Findings and Discussion

This part presents the description of lexical sophistication in the LLT Journal: A Journal on Language and Language Teaching. The descriptions are word frequency, word range, n-gram, academic language, and word information.

Word frequency

Word frequency is a group of sophisticated words that occurs in the texts. It based on how many times the group of sophisticated words occurs in the texts (Kyle & Croosley, 2014). The frequency of occurrences of word frequency in *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018 could be seen in table 4.1.

Table 6 The frequency of occurrences of word frequency.

Year	Total	Percentage	Total Words
2016	14	90%	48.457
g2017	18	87%	73.777
2018	34	85%	154.845

The occurrences of word frequency are influenced by the words that are considered as sophisticated words (Juanggo, 2018). Words that are considered as sophisticated words are the words that are barely found in daily communication and terms of difficulties, sophisticated words are more difficult than the other words (Kyle, Crossley, & Berger, 2017). Here are the examples of the words that are not considered as word frequency in some articles:

(1) The second reason is the researcher **got** a story from a teacher of one of the elementary schools. (A2-16)
(2) Being a researcher who also **happens** to teach in classes contributes massive opportunity to observe students' problem in the classroom. (B17-17)

(3) Dewaele (2004) **says** that "some swearwords and taboo words (S-T words) are the verbal equivalent of nitro-glycerine." (C33-18)

One of the writers preferred to choose "got" or "get". "Get" is a word that we found very often in a text. Then, it could be concluded that "get" is a word that is not considered as sophisticated.

(1) The writer **discovered** that all participants employed situational code switching in their instructional languages in their classes. (A6-16)
(2) Another definition of headlines comes from Dor (2003) who **states** that newspaper headlines are commonly characterized as "short, telegram-like summaries" of the news. (B26-17)
(3) **Conversely**, those graded below 62 belong to low graded.(C61-18)

Some of the writers preferred to use "state" and "discover" instead of using "say" and "found".
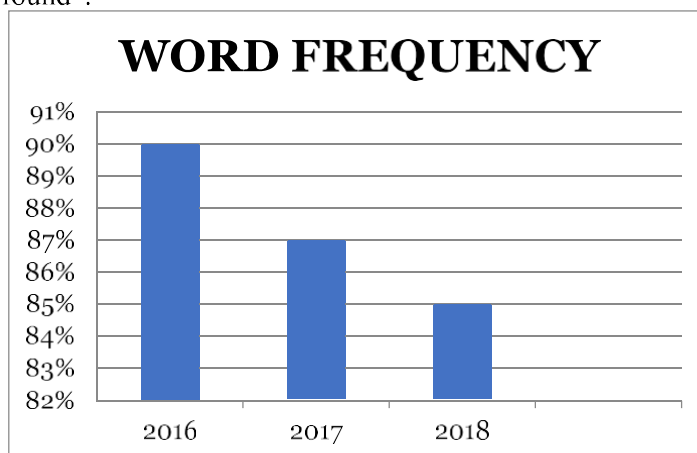

Figure 1 The Percentage of Word Frequency

The percentage of word frequency is influenced by the occurrence of the familiar words in texts (Kyle, Crossley, & Berger, 2017). Figure 4.1 shows the frequency of occurrences of word frequency in *LLT Journal: A Journal on Language and Language Teaching* from the year 2016 up to 2018. As it presents, there is a decreasing stage from the year of 2016 up to 2018. The highest percentage was reached in 2016 with 90%. In 2016, 14 journals were written by 20 writers. The total words in those 14 articles were 48.457 words. It can be concluded that the 90% percentage of the total words were the words that are considered as word frequency.

There were 18 articles in 2017 that were written by 24 writers. As it presents in the chart, the percentage in 2017 is 87%. The total words in those 18 articles were

73.777 words. It can be concluded that the 87% percentage of the total words, were the words that are considered as word frequency. In 2018, there were 34 articles written by 64 writers. As it presents, 2018 is the lowest percentage of those three years. The percentage in 2018 is 85%. The total words in those 34 articles were 154.845 words. It can be concluded that the 85% percentage of the total words were the words that are considered as word frequency.

The percentage in those three years showed a decreasing point from 2016 until 2018. The decreasing point as seen in Table 4.1 means that the less percentage in each year considered being more sophisticated. In conclusion, the decreasing stages that showed in Table 4.1 indicated an improvement in each year. The statement is in line with the previous study written by Kyle, Crossley and Berger (2017). The research has shown that articles consist of less familiar words likely to be considered sophisticated (Kyle, Crossley, & Berger, 2017). This supports recent finding that suggests word frequency is one of the aspects of lexical sophistication (Kyle, Crossley, & Berger, 2017). In addition, this result is in line with the previous study written by Kyle, Crossley, & Berger (2017) that has a result word frequency earned 3.6% of the variety in lexical proficiency points.

Word range

If the word frequency based on counts of how many times the group of words occurred in the text, the word range is focused on those words that are used in the sentence. It tends to go in a context (Kyle & Croosley, 2014). The frequency of occurrences of word range in *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018 could be seen from Table 7.

Table 7 The Frequency of occurrence of word range

Year	Total	Percentage	Total Words
2016	14	90%	48.457
2017	18	87%	73.777
2018	34	85%	154.845

Word frequency and word range are related to each other. Word Frequency focused on the occurrences of the word and word range focused on language usage (Kyle & Crossley, 2016).
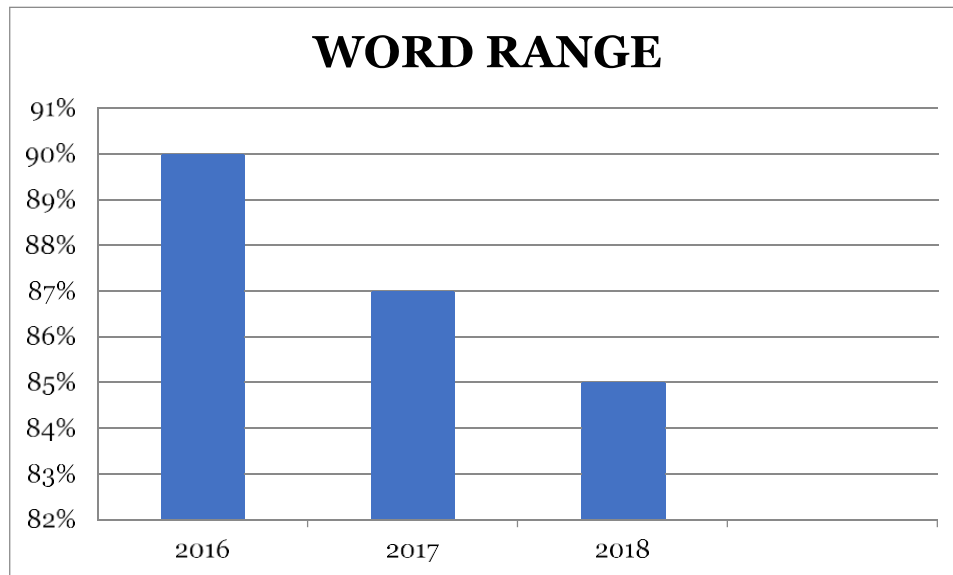
Figure 2 The Percentage of Word Range

Figure 2 shows the frequency of word range that occurred in the *LLT Journal: A Journal on Language and Language Teaching* from the year of 2016 up to 2017. Based on the results, the frequency of word range and word frequency was the same. It happened because word range and word frequency are related to one and another. They have a continuous line to drag on one another (Kyle & Croosley, 2014). Word range only focused on the use of word frequency in the sentence. The percentage of word range in 2016 was 90%. That means that 90% of the total words are considered as word frequency. In terms of word range, 90% of word frequency was used properly in the sentence and they were able to deliver the meaning to the reader. The decreasing stages from 2016 up to 2018 means that the lower percentage in each year in the context of word range earns higher lexical sophistication scores. This suggests that the usage of more specific words is an important indicator of lexical sophistication (Kyle, Crossley, & Berger, 2017). The result of this study is in line with the previous study written by Kyle, Crossley & Berger (2017) stating that word range earned 13.9% of the variety in lexical proficiency points.

N-Gram indices

N-Gram is a small unit combination of *n* number of words. N-Grams, such as *the end of*, *put of the* and *a lot of* occurs many times, whereas n-grams, such as *now not only*, *time some of* and *is about being* occurs rarely (Kyle, Crossley, & Berger, 2017). The frequency of occurrences of n-gram indices in *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018 could be seen in Table 8.

Table 8 The Frequency of occurrence of n-gram

Year	Total	Percentage	Total Words
2016	14	32%	48.457
2017	18	37.5%	73.777
2018	34	36%	154.845

The n-gram frequency is interacted with analytical scores of lexical sophistication (Kyle & Croosley, 2014). Texts that include more frequent n-grams tend to earn a higher analytical score of lexical sophistication (Kyle & Crossley, 2016). Here are some examples of occurrences of n-gram indices in some journals:

(1) First, the students should be able to apply a skill and use sciences, technology, and arts in their field to solve problems **as well as** being able to adapt to a particular situation.(A12-16)

(2) **As a result**, English language education learners will be able to speak English politely. (A3-16)

(3) **At the end of** the semester, students delivered an oral presentation discussing their growth and struggles as writers and where they planned to go from here in terms of development. (B23-17)

(4) Then, the age of students is considered **as one of the** factors that influence the selection or choice of learning strategies they use when learning language.(C36-18)

(5) On the other hand, the students with the age between 20-21 years old use compensation **as one of the** strategies since the other two strategies (metacognitive and social) are also utilized by the other groups of age. (C36-18)
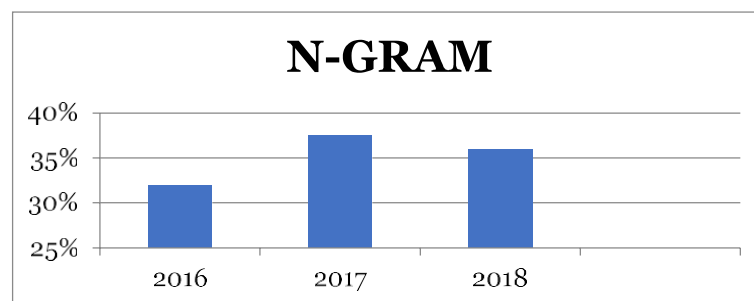

Figure 3 The Percentage of N-Gram

Figure 3 shows the frequency of occurrences of N-Gram in the *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018. As it showed

in the chart, the graphic is randomly increasing per year. There were some improvements in 2017. However, it was slowly going down in 2018.

The data stated that total words in *LLT Journal: A Journal on Language and Language Teaching* from 2016 were 48.457 words. It can be concluded that 32% percentage of the total words were the words that were considered as n-gram. In 2017, there was an increasing point in the amount of 5.5% from the previous year. The total words in 2017 were 73.777 words. It can be concluded that the 37.5% percentage of the total words were the words that were considered as N-Gram. In 2018, the chart showed a decreasing point in the amount of 1.5%. The total words in 2018 were 154.845 words. It can be concluded that 36% percent of the total words were the words that were considered as N-Gram.

The result indicated that the use of n-gram in the *LLT Journal: A Journal on Language and Language Teaching* earned low lexical sophistication scores. Texts that consist of high scores of bigrams and trigrams tended to gain high lexical sophistication scores. This supports recent findings that suggest collocation knowledge is one of the aspects of lexical sophistication (Kyle, Crossley, & Berger, 2017). The result of this study is in line with the previous finding that was written by Kyle, Crossley & Berger (2017). They stated the scores of n-gram defined nearly 28% of the variety in lexical proficiency scores.

Academic list

Academic List is the group of words that occurs barely in general language but occurs frequently in academic texts (Kyle & Croosley, 2014). There are two sources used to analyze the data. They are the Academic Word List (AWL) and the Academic Formulas List (AFL). The AWL is based on an academic corpus containing journal articles and textbooks. The AFL is based on spoken and written academic journal articles and textbooks (Kyle & Croosley, 2014). The frequency of occurrences of the academic list in *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018 could be seen in Table 9.

Table 9 The frequency of occurrence of academic list

Year	Total	Percentage	Total Words
2016	14	14,5 %	48. 457
2017	18	15%	73.777
2018	34	15%	154.845

The larger percentage of academic list in a text is a sign that the text is sophisticated text. The percentage shows how many words in the journals that included as Academic List in Academic Word List (AWL) and Academic Formula List (AFL) (Kyle, Crossley, & Berger, 2017). Here are some examples of occurrences of the academic list in some articles:

(1) As in Government of South Australia (2012) writes that recount texts are "used to relate experiences or retell events for **the purpose of** informing, entertaining or reflecting".(A4-16)

(2) Learning facilitator, **on the other hands**, refers to a type of a teacher that pays more attention on students' learning process by becoming their facilitator.(B21-17)

(3) Performance **in the context of** this study is closely related to public speaking, which means there will always be performance done in the Public Speaking class.(C40-18)

(4) In daily conversations, language reflects the **context** in which it is used.(A3-16)

(5) Dittmar (1976) reveals four characteristics of language attitude, i.e. the selection of primary language that people use in a multilingual community, the distribution of the language, the differences of dialect, and the interaction among individuals **based on the** common problems that arise.(C46-28)

(6) Taking memes' original **definition** into perspective, researcher would like to develop a new strategy to enhance students' classroom participation and the teaching and learning process of English.(B15-17)

(7) Lapp et al. (1996, p. 580) state that there were some **labels** of integration model of education, namely "full inclusion, inclusive education, heterogeneous schooling, or supported education."(C45-18)

(8) Freeman (2000) stated that knowledge got by the students from learning a language through listening, reading, and writing is insufficient because the students have to be able to speak as the **implementation** of the knowledge. (C44-18)
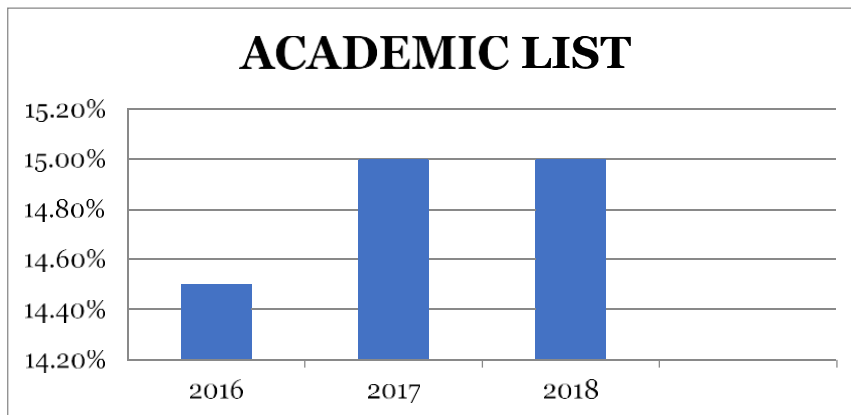
ACADEMIC LIST

15.20%
15.00%
14.80%
14.60%
14.40%
14.20%

2016   2017   2018

Figure 4 The Percentage of Academic List

Figure 4 shows the frequency of occurrences of Academic List in *LLT Journal: A Journal on Language and Language Teaching* from 2016 until 2018. The graphic presents an improvement per year. It started at 14.5% in 2016. It continued with 15% in 2017 and 2018.

In 2016, the total words were 48.457 words. It can be concluded that the 14.5% percentage of the total words were the words that are included as Academic List. In 2017, there was an increasing point in the amount of 0.5%. The total words in 2017 were 73.777 words. It can be concluded that the 15% percentage of the total words were the words that are included as Academic List.

Based on the result, the academic list is one of the descriptions of lexical sophistication that obtained the lowest percentage among the other indices of lexical sophistication. The increasing stages in every year indicated that the use of academic list in the articles improves increasingly per year. This result explained the word choice of academic vocabulary needed to be one of the attention to the writer while writing a scientific journal or article. The correlation to the previous studies are unavailable because this is the first study that conducted a research about word choice of academic list scores.

Word information

Word information is related to the psychological of the writers while they write their writings. Word information has some word properties to be analyzed. They are concreteness, familiarity, imageability and meaningfulness (Kyle & Croosley, 2014). The frequency of occurrences of the word information in *LLT Journal: A Journal on Language and Language Teaching* from 2016 to 2018 could be seen from Table 10.

Table 10 The Frequency of Word Information

Year	Total	Percentage	Total Words
2016	14	63%	48.457
2017	18	61%	73.777
2018	34	57%	154.845

Word formation is quite related to the word-choice of the writers while they are writing scientific journals or articles (Kyle, Crossley, & Berger, 2017). The percentage of word information is calculated by adding the score for each word properties (Kyle & Croosley, 2014).
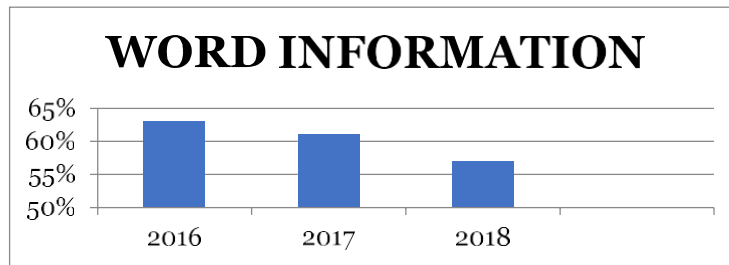
Figure 5 The Percentage of Word Information

Figure 5 shows the frequency of word information in *LLT Journal: A Journal on Language and Language Teaching* from the year of 2016 until 2018. The graphic shows there is a decreasing point constantly per year in the aspect of word information. The graphic explained about how depth the writer wrote the writings in the journals based on the psychological word information. In 2016, the percentage was 63%. It explained that 63% includes the concreteness of the writings, familiarity of the writings, and image-ability of the writings and meaningfulness of the writings. The decreasing stages that happened frequently each year in *LLT Journal: A Journal on Language and Language Teaching* indicated the level of familiarity words that were in the articles. This result aligns with Kyle, Crossley & Berger (2017) who state that he articles that included less familiar words tended to earn higher lexical sophistication scores (Kyle, Crossley, & Berger, 2017). Generally, the results indicate that the 66 articles of *LLT Journal: A Journal on Language and Language Teaching* from 2016, 2017 and 2018 earned a high percentage of lexical sophistication. Regarding lexical sophistication, one of the key findings is that the writers use more percentage of advanced words. Moreover, some aspects needed to be improved to make the journals better in the next publication such as the introduction of lexical sophistication in the aspect of the academic list.

Conclusion

The research result showed that word frequency and word range gained the highest aspects with an average percentage of 87%. Meanwhile, the academic list gained the least aspect with an average percentage of 15%. It can be concluded that based on five aspects of lexical sophistication that had been analyzed, some of them needed improvement, such as an academic list. The percentage of the academic list was not more than 20%, which showed that 66 articles from LLT Journal: A Journal on Language and Language did not consist of enough academic list.

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