

Contribution of Critical Reading Skills and Scientific Vocabulary Mastery to Exposition Text Writing Skills

Maharani Dwi Putri Asriati¹, Erizal Gani²

¹ Universitas Negeri Padang, Padang, Indonesia; maharanidwiputriasriati@gmail.com

² Universitas Negeri Padang, Padang, Indonesia; erizalgani@fbs.unp.ac.id

ARTICLE INFO

Keywords:

Critical Reading Skills;
Exposition Text Writing Skills;
Scientific Vocabulary

Article history:

Received 2022-02-10

Revised 2022-07-19

Accepted 2022-12-26

ABSTRACT

The purpose of this study was to describe the contribution of critical reading skills to students' exposition text writing skills, to describe the contribution of scientific vocabulary mastery to students' exposition text writing skills, to describe the contribution of students' critical reading skills and scientific vocabulary mastery to students' exposition text writing skills. This type of research is quantitative with a descriptive method using a correlational design. The population of this research is the students of class X senior high school totalling 223 people. Sampling was carried out using proportional random sampling. The number of research samples was 45 students. The research instrument is an objective test and a performance test. The research data were in the form of exposition text writing skill scores, critical reading skills test scores, and students' scientific vocabulary mastery scores which were converted into grades. Data analysis used the Pearson product-moment correlation test, multiple correlation test, t-test, f-test, and determinant coefficient to determine the contribution of the independent and dependent variables. The results showed that critical reading skills contributed significantly 36.72% to the skill of writing exposition texts. Mastery of scientific vocabulary contributed significantly by 36.97% to the skill of writing expository text. Critical reading skills and scientific vocabulary mastery together contribute to the skill of writing expository text by 42.25%. In conclusion, critical reading skills and scientific vocabulary mastery together have a significant contribution to exposition text writing skills.

This is an open-access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Maharani Dwi Putri Asriati

Universitas Negeri Padang, Padang, Indonesia; maharanidwiputriasriati@gmail.com

1. INTRODUCTION

Writing skills are needed in the world of education. It would be an exaggeration to say that writing skills are work and an educated person or an educated nation (Lapasau, 2015). Writing skills and reading skills have a very close relationship. If reading skills are good, then someone's writing skills are also good. In principle, people want their writing to be read when writing something. At least we can read for ourselves. The close relationship between writing and reading skills is in terms of intent. The author's intention is to teach or teach and want to understand and understand what is written. Article writing skills is a very important language skills for students (Fitri, R. & Basri, 2019).

One of the writing skills is the skill of writing exposition text. An exposition text is an essay that provides an explanation of something, either an event or an event (Janah, N., 2014). The explanation of something aims to convey information clearly and precisely to the reader. In writing an exposition text, the writer needs to have sufficient knowledge of the subject or topic with the ability to analyze problems concretely. Thus, the skill of writing expository texts must be mastered well by students. The factor that causes students' difficulties in writing expository texts is that students do not have good critical reading skills. Writing skills are accompanied by good critical reading skills (Helfani, 2013).

Exposition text is one type of text that is studied by class X semester 1 students in the 2013 Curriculum with Core Competence (KI) skills, namely "constructing exposition texts by paying attention to the content (problems, arguments, knowledge, and recommendations), structure and language and domains. abstract (writing, reading, counting, drawing, and composing) according to what is learned in school and other sources with the same point of view/theory". Based on the results of the author's interview with the Indonesian class teacher of SMA Negeri 4 Sungai Penuh, Ms. Mike Amalia, S.Pd. On August 2, 2021, information was obtained that students had difficulty expressing ideas in writing. This is because students' knowledge is still minimal because students have never been taught to write texts according to the function, structure, and linguistic features of the text, lack of understanding in developing sentences into paragraphs, more precisely, students lack vocabulary mastery.

Students also have not been able to convince the reader that the topic presented is an important topic to be discussed as the purpose of the exposition text. Students have difficulty in determining and distinguishing the structure of the exposition text in their writing. This can be proven in the students' exposition text writing which is not in accordance with the structure of the exposition text, namely thesis, argumentation, and reaffirmation. There are still many uses of language that are not in accordance with the linguistic characteristics of the exposition text in students' writing. Students are not able to place these linguistic features well in their writing.

In addition to critical reading skills, another factor that affects writing skills is the mastery of popular scientific vocabulary. Students do not master popular scientific vocabulary (Wijana, I., D., 2013). This is because students do not find out the meaning of a vocabulary so students find it difficult to remember popular scientific vocabulary. Whereas in expository texts, it is necessary to have a popular scientific vocabulary because, in the structure of the exposition text, there are facts and opinions (Nurismilida, 2016). Popular scientific vocabulary is needed to express a fact and enrich the language so as to make it easier to develop a paragraph (Himawanto, 2017). Vocabulary is an element of language that supports language activities, the lack of mastery of vocabulary can affect one's reading. Mastery of vocabulary is the most important vehicle for speaking freely as a means of direct and indirect communication. The richer the vocabulary a person has, the more likely he is to be skilled in the language.

Based on the results of observations of several students, information was obtained that students consider learning to write a difficult thing because students find it difficult to develop ideas into a coherent written form, especially in the right text structure. Students find it difficult to assemble the right vocabulary. Students consider writing activities to be boring. Students do not understand the function of the text, the structure of the text, and its linguistic features. Reading sources about the exposition text is still lacking. Students feel lazy to read books related to writing exposition text skills.

Students' understanding of reading is still lacking. Based on these problems, it can be concluded that the skills in writing expository texts for class X students at SMA Negeri 4 Sungai Penuh are still low. This can be seen from the results of student learning achievements that have not reached the Minimum Completeness Criteria (KKM), which is 70. The average value of student training is only able to reach a value of 65.00.

Students' mistakes in writing exposition texts can be seen from the results of research conducted by Fadlilhaqqi, M. (2015). The research revealed that in general, students also had difficulty in making arguments in the preparation of expository texts. Students have difficulty in choosing vocabulary and arranging words into a communicative sentences. Students have difficulty in arranging coherent sentences in a paragraph. Students also find it difficult to find evidence that fits the reason. Sentences composed by students are difficult to understand. In writing, they also pay less attention to EBI. This is due to a lack of writing practice, lack of insight, and lack of knowledge about writing techniques. The factor that causes students' difficulties in writing expository texts is that students do not have good critical reading skills. Good critical reading skills should accompany writing skills (Restuningsih et al., 2017). Critical reading greatly affects one's writing skills. The better a person's critical reading skills, the better his writing skills will be (Jenicek, 2006).

Based on interviews that have been conducted with Indonesian language teachers, information about students' critical reading skills was obtained. In general, students experience problems in reading activities. This is caused by the lack of students' skills in understanding the contents of the reading. If students are given a critical reading skill test, students have difficulty in distinguishing between main ideas, and explanatory ideas, and answering questions related to understanding the contents of the exposition text reading. Students still have difficulty understanding the exposition text, especially the function of the exposition text, its structure, the linguistic elements of the exposition text, and the contents of the exposition text so that the exposition text produced by students does not describe the answers to the function, structure (statement of opinion, argumentation, and reaffirmation of opinion), linguistic elements (repetition of words, pronouns, and conjunctions), and the contents of the exposition text. Lack of student interest in reading so that if students are instructed to read, students are not serious about doing it. Students are lazy to read and lazy to look for books or reading sources so that the results of students' reading skills become less than optimal. So, from these problems, it can be seen that there are still many students who are not complete in critical reading.

In addition to critical reading skills, another factor that affects students' writing skills is the mastery of scientific vocabulary. Mastery of scientific vocabulary plays an important role in underlying writing skills because students who have high mastery of scientific vocabulary will easily pour ideas into their writing. Vocabulary mastery is determined by the number of books read in a month and the number of times students read in a week and the type of books read (Usri, 2019). In fact, students of SMA Negeri 4 Sungai Penuh have low mastery of scientific vocabulary.

Based on these problems, the researcher assumes that by reading critically and mastering scientific vocabulary, students will gain knowledge about the exposition text they read. If students have critical reading skills and good mastery of scientific vocabulary, it will be easier to write. On the other hand, students who do not have critical reading skills and good mastery of scientific vocabulary will find it difficult to write because they do not understand the writing they read. This encourages researchers to conduct research on the contribution of critical reading and mastery of scientific vocabulary to the skill of writing expository texts.

Students' mistakes in writing expository texts in general, students also have difficulty in making arguments in the preparation of exposition texts (Janah, N., 2014). In addition, students have difficulty in choosing vocabulary and arranging words into a communicative sentences. Students have difficulty in arranging coherent sentences in a paragraph. In addition, students also find it difficult to find evidence that matches the reasons. Sentences composed by students are difficult to understand. In writing, they also pay less attention to EBI. This is due to a lack of writing practice, lack of insight, and lack of knowledge about writing techniques.

The factor that causes students' difficulties in writing expository texts is that students do not have good critical reading skills. Writing skills should be accompanied by good critical reading skills. Critical reading greatly affects one's writing skills (Subadiyono, 2017). The better a person's critical reading skills, the better his writing skills will be.

Based on the background of the problem that has been disclosed, several factors can be identified that affect the writing skills of the X grade students of SMA Negeri 4 Sungai Penuh. These factors are grouped into three. First, the lack of students' critical reading skills. Second, students do not master vocabulary. This makes it difficult for students to develop their writing when writing exposition texts. Third, the lack of students' ability in writing exposition texts, this is due to the lack of students doing exposition text writing exercises, so students have difficulty developing writing ideas.

Based on the identification of the problems that have been revealed, the problem limits lead to students' skills in writing exposition texts. The author limits the research to the contribution of critical reading skills and mastery of popular scientific vocabulary to the writing skills of tenth-grade students of SMA Negeri 4 Sungai Penuh. Based on the limitation of the problem, the following problems are formulated: Is there a contribution of critical reading to the writing skill of the tenth-grade students of SMA Negeri 4 Sungai Penuh?; Is there any contribution of scientific mastery to the writing skill of the tenth grade students of SMA Negeri 4 Sungai Penuh?; and Is there a contribution of critical reading and scientific mastery to the skill of writing expository texts for X-grade students of SMA Negeri 4 Sungai Penuh?

This research was conducted with the following objectives: To describe the contribution of critical reading to the writing skills of the tenth-grade students of SMA Negeri 4 Sungai Penuh; Describe the contribution of popular scientific mastery to the writing skills of the tenth-grade students of SMA Negeri 4 Sungai Penuh; Describe the contribution of critical reading and popular scientific mastery to the writing skills of the tenth-grade students of SMA Negeri 4 Sungai Penuh.

2. METHODS

This type of research is quantitative research. It is called quantitative because the data in this study are in the form of numbers, namely scores of critical reading skills, mastery of popular scientific vocabulary, and writing skills of exposition texts. The score is obtained from tests given to students. Then the data is processed using statistical formulas. This is in accordance with the opinion of Ahyar et al. (2020) which says that research is said to be quantitative because the information or data obtained is required to use numbers, starting from data collection, data interpretation, and the appearance of the results. The method in this study is a descriptive method with a correlational design. This study will be used to describe the contribution of critical reading skills and mastery of scientific vocabulary to the writing skills of the tenth-grade students of SMA Negeri 4 Sungai Penuh.

This research was conducted at SMA Negeri 4 Sungai Penuh. The selection of schools as objects was carried out on the grounds that problems were found in these schools and no relevant research had been conducted. The research time used as a benchmark is in the odd semester of the 2020/2021 academic year, namely on 15, 16, 17, 22, and 23 November 2021.

The population in this study were students of class X SMA Negeri 4 Sungai Penuh who were registered in the academic year 2021/2022, which consisted of 7 classes, namely class X IPS.1, X IPS.2, X IPS.3, X IPS.4, X I.A. 1, X IPA.2, and X IPA.3. The total number of students in class X SMA Negeri 4 Sungai Penuh is 223 students. Researchers took research samples with a percentage of 20% of the population per class because the research subjects were more than 100. So, the sample in this study amounted to 45 students.

Table 1. Population and Research Sample

No.	Class	Population	Sample (20%)
1.	X IPS.1	31 person	6 person
2.	X IPS.2	31 person	6 person
3.	X IPS.3	31 person	6 person
4.	X IPS.4	33 person	7 person
5.	X IPA.1	33 person	7 person
6.	X IPA.2	31 person	6 person
7.	X IPA.3	33 person	7 person
Amount		223 person	45 person

3. FINDINGS AND DISCUSSION

The data of this research are the scores obtained by the tenth graders of SMA Negeri 4 Sungai Penuh from the results of tests of critical reading skills, mastery of scientific vocabulary, and writing skills of exposition texts. Thus, the research data are grouped into three data groups, namely, one data related to the dependent variable (Y), and two data related to the independent variable (X1 and X2). The dependent variable data is the exposition text writing skill data and the independent variable data is a critical reading skill (X1) and scientific vocabulary mastery (X2). These three data groups will be described in sequence in the form of frequency distribution, mean score (M), mode (Mo), median (Med), and standard deviation. The data in this study are in the form of scores obtained through objective tests of critical reading skills and scientific vocabulary mastery and exposition text writing skills. Thus the data of this study were grouped into three groups. The following is a description of the data obtained based on the results of research on the three variables.

2.1 Critical Reading Skills (X1) Class X Students of Senior High School

Data on critical reading skills were obtained through multiple choice objective tests with four alternative answers (A, B, C, and D). The test consists of 40 items determined based on four assessment indicators. The four assessment indicators are interpreting meaning, applying concepts, analyzing, and assessing the content of the reading. Of the 40 questions, the highest score obtained was 39, and the lowest score was 21.

Table 2. The score of Critical Reading Skills for Grade X Students of SMA Negeri 4 Sungai Penuh as a whole

No	Variabel	Skor	Frekuensi	Persentase
1	Critical Reading Skills	21	1	2,22
		23	1	2,22
		27	6	13,33
		28	2	4,44
		29	1	2,22
		30	1	2,22
		31	3	6,67
		32	7	15,56
		33	5	11,11
		34	3	6,67
		35	4	8,89
		36	4	8,89
		37	3	6,67
		38	2	4,44

	39	2	4,44
Amount		45	100,00

2.2 Mastery of Scientific Vocabulary (X2) Class X Students of Senior High School

Data on scientific vocabulary mastery was obtained by giving multiple-choice type objective tests with four answer options (A, B, C, and D). The test consists of 41 items with four assessment indicators. The four assessment indicators are (1) synonyms of words, (2) antonyms of words, (3) meaning of words, and (4) choice of words. A score of 1 is given if the student is able to answer the item correctly, while a score of 0 is given if the student answers the item incorrectly. Of the 41 items, the highest score obtained was 39, and the lowest score was 21. The overall acquisition of a scientific vocabulary mastery score for class X SMA Negeri 4 Sungai Penuh can be seen in Table 3 below:

Table 3. The score of Scientific Vocabulary Mastery of Grade X Students of SMA Negeri 4 Sungai Penuh as a whole

No	Variabel	Skor	Frekuensi	Persentase
1	Scientific Vocabulary Mastery	21	1	2,22
		23	1	2,22
		27	6	13,33
		28	2	4,44
		29	1	2,22
		30	1	2,22
		31	3	6,67
		32	7	15,56
		33	5	11,11
		34	3	6,67
		35	4	8,89
		36	4	8,89
		37	3	6,67
		38	2	4,44
	39	2	4,44	
Amount		45	100,00	

2.3 Exposition Text Writing Skills (Y) Class X Students of Senior High School

The exposition text writing skill data was obtained through a performance test. Students are asked to write an exposition text according to the context that has been given in at least three paragraphs. After the data is collected, the data is then scored based on predetermined indicators, namely being able to develop (1) the structure of the exposition text, (2) the function of the text, and (3) the use of linguistic aspects. In detail, the overall score for writing exposition texts for students of class X SMA Negeri 4 Sungai Penuh can be seen in Table 4 below:

Table 4. Exposition Text Writing Skills Score of Class X Students of SMA Negeri 4 Sungai Penuh as a whole

No	Variable	Score	Frequency	Percentage
1	Exposition Text Writing Skills	11	4	8,89
		10,5	8	17,78
		10	8	17,78
		9,5	8	17,78
		9	9	20,00
		8,5	4	8,89

	8	2	4,44
	7,5	1	2,22
	7	1	2,22
Jumlah		45	100,00

Based on the results of research on class X students of SMA Negeri 4 Sungai Penuh, it is known that critical reading skills contribute to the skills of writing expository texts. This shows that students' exposition text writing skills are influenced by their critical reading skills. The correlation coefficient of critical reading skills on writing exposition text skills is 0.606 with 0.05. Then, the contribution of critical reading skills to writing exposition text skills is 36.72%. Based on the calculation results, it is known that the two variables have a positive relationship. It means the higher the students' critical reading skills, the better the students' writing skills in expository texts.

This finding confirms that, on the one hand, critical reading skills contribute to the skill of writing exposition texts, but on the other hand these findings also reveal that critical reading skills need to be improved. Critical reading skills are needed by students in the learning process so that every reading they read becomes useful knowledge and can increase their knowledge. This is in accordance with the opinion of Sultan (2018), reading is an important activity. Through reading, activities can get ideas. This idea can be developed so that the critical reading skills possessed can produce a writing. So, there is a relationship between a person's critical reading skills and his writing ability.

Based on the results of the research and the results of data analysis, it is known that the mastery of scientific vocabulary of class X students of SMA Negeri 4 Sungai Penuh is classified into five categories, namely very good, good, more than enough, enough, and almost enough. The average value of scientific vocabulary mastery of class X SMA Negeri 4 Sungai Penuh with a mastery level (76-85%) is in good qualification (B) on a scale of 10. Minimum Completeness Criteria (KKM) Indonesian language lessons in class X SMA Negeri 4 Sungai Full is 75. Thus, it can be concluded that the average grade X students of SMA Negeri 4 Sungai Penuh have reached the KKM.

The indicator that is mostly controlled by students is the indicator of determining the meaning of words with the level of mastery (76-85%) being in good qualification (B) on a scale of 10. Based on the average value obtained, it can be said that most students are able to determine the meaning of the reflected word. of their vocabulary mastery. This can be seen from the scores obtained by students with an average of being in good qualification (B). Students are able to determine the meaning of words contained in a reading or statement. This is in accordance with the opinion Pratama, R. (2016), "The meaning of the word is the meaning of the language unit as given or known by the layman, which is usually a general meaning that is less accurate." The meaning of the word is the study of the meaning of the word is semantics.

The results of the research on the tenth graders of SMA Negeri 4 Sungai Penuh showed that the correlation coefficient of critical reading skills and mastery of scientific vocabulary together on the skill of writing expository texts contributed 42.25%. This shows that the exposition text writing skill is influenced by the students' critical reading skills and scientific vocabulary mastery. Besides that, there are 57.75% other variables that determine the success of students' exposition text writing skills.

Based on the research findings, it can be seen that the results of the analysis of writing exposition texts for students of class X SMA Negeri 4 Sungai Penuh, the average arithmetic score of students are in the good category (79.69), students' critical reading skills are in the more than adequate category (67.12), and students' scientific vocabulary mastery is in the category of more than enough (70.05).

Reading skills arise because of the purpose to meet a need. Encouragement is an external factor that arises in the form of mastery of scientific vocabulary, that mastery of vocabulary has a very important role in helping students develop their ideas and ideas when writing an exposition text.

Critical reading skills and scientific vocabulary mastery have a relationship with exposition text writing skills (Prayatni, E., 2014). This statement has been proven by research results. The results showed that critical reading skills and scientific vocabulary mastery together gave a significant

contribution to students' exposition text writing skills. So, the low score of students' exposition text writing skills can be improved by improving their critical reading skills and mastery of scientific vocabulary. Based on the research findings, it can also be concluded that the writing skills of the X grade students of SMA Negeri 4 Sungai Penuh should be able to be improved.

As previously explained, things that play an important role in the skill of writing expository texts are critical reading skills and mastery of scientific vocabulary. Students who have a lot of mastery of scientific vocabulary usually find it easier to write. With a high mastery of scientific vocabulary, students will be actively encouraged to carry out critical reading activities. Critical reading skills will lead students to be able to express ideas in written form, especially writing exposition texts.

4. CONCLUSION

Critical reading skills directly contribute to the skills of writing expository texts. The better the critical reading skills, the better the students' exposition text writing skills and vice versa. Mastery of scientific vocabulary directly contributes to the skill of writing expository texts. Mastery of students' scientific vocabulary is high, then the skill of writing expository texts will also be high and vice versa. Critical reading skills and mastery of scientific vocabulary together contribute directly to the writing skills of the tenth-grade students of senior high school. Students who have good critical reading skills and mastery of scientific vocabulary can certainly improve students' exposition text writing skills.

REFERENCES

- Ahyar, H., Andriani, H., & Sukmana, D., J. (2020). *Metode Penelitian Kualitatif & Kuantitatif* (Issue Maret).
- Fadlilhaqqi, M., D. (2015). *Peningkatan Keterampilan Memproduksi Teks Eksposisi secara Lisan dengan Pola Kolaboratif Think Pair Share melalui Media Video pada Peserta Didik Kelas X IPA B SMA Semester Semarang*.
- Fitri, R., L., & Basri, I. (2019). The Contribution of Critical Reading Skills to Writing Exposition Text Skills for Class VIII Students of SMP Negeri 1 Mapat Tunggal Selatan. *Journal of Indonesian Language and Literature Education*, 8(1), 175–181.
- Helfani, R. (2013). *Hubungan Kemampuan Membaca Kritis dengan Kemampuan Menulis Paragraf Argumentasi Siswa Kelas VIII SMP Negeri 1 Sawahlunto*.
- Himawanto. (2017). Profile of Scientific Articles in the Environmental Sector in Indonesia: Bibliometric Analysis. *Literature Lantern*, 3(1), 27–41.
- Janah, N., M. (2014). *Hubungan Minat Baca dan Penguasaan Kosakata dengan Kemampuan Menulis Teks Eksposisi pada Siswa Kelas X SMA Negeri Sekabupaten Bantul*.
- Jenicek, M. (2006). How to read, understand, and write 'Discussion' sections in medical articles. An exercise in critical thinking. *Med Sci Monit*, 12(6), 28–36.
- Lapasau, M. (2015). Scientific Language in Indonesian and German Advertising Texts. *Journal of Sociotechnology*, 14(2), 113–123.
- Nurismilida. (2016). The Use of Scientific Words and Popular Words in Writing Scientific Papers for Students. *School Journal*, 1(1), 1–5.
- Pratama, R., A. (2016). P Development of Critical Reading Module with Character Value-Based Direct Instruction Model. *Dialectics: Journal of Language, Literature, and Indonesian Language and Literature Education*, 3(2), 173–190.
- Prayatni, E., T. (2014). Development of Critical Reading Teaching Materials Based on Responsive Interventions. *Journal of Literature*, 13(1), 1–13.
- Restuningsih, A., Dantes, N., & Sudiana, N. (2017). Critical Reading Ability in terms of Critical Thinking Ability and Reading Interest in Fifth Grade Students of SD Kristen Harapan Denpasar. *Pendasi: Indonesian Journal of Basic Education*, 1(1), 45–54.
- Subadiyono. (2017). Development of Critical Reading Textbooks. *Ark: Journal of Language and Literature Education*, 16(1), 57–72.

Sultan. (2018). *Membaca Kritis*.

Usri, M. (2019). *Hubungan Penguasaan Kosakata Bahasa Indonesia dengan Kemampuan Menulis Karangan Narasi Siswa SD Inpres Paccinongan Kabupaten Gowa*.

Wijana, I., D., P. (2013). User Of Language in Popular Scientific Works. *Journal Arbitrer*, 1(1), 19–36.

