



SNAP TO READ

# THE EFFECT OF THE POMODORO TECHNIQUE ON STUDENTS' WRITING PERFORMANCE ACROSS CRITICAL THINKING LEVELS

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## **Abstract:**

*Pomodoro technique deals with time management strategy of the students. This paper investigates the effect of the Pomodoro technique combined with video learning on students' writing performance. The study was implemented by employing forty-five students of the English Language department in Indonesia. This study uses experimental research design. The experimental group and the control group were used to assign them to assess students' writing performance across critical thinking levels. Therefore, the pre-test and post-test in writing were conducted in this study to get the quantitative data analysis whereas the questionnaire, which was given after the post-test, was used to get qualitative data on students' critical thinking levels. The result of this study revealed that the Pomodoro technique combined with video learning was effective to enhance the students' writing performance. Additionally, the different levels of students' critical*

*thinking in the experimental group would not affect the students' writing performance even though there was the treatment taught in it.*

**Keywords:** *Pomodoro, video learning, descriptive writing, critical thinking*

## INTRODUCTION

Students' performance in higher education is affected by some factors, namely academic factors and non-academic factors. The academic factors that impact students' performance especially on writing are like critical thinking, understanding of texts, accessing quality resources, feedback, etc. (Adam & Blair, 2019). One of the non-academic factors that impact students' chances of attaining success in writing performance is time management. Many students find it hard to regulate both their study and their daily routine. Moreover, they get a feeling of objection to producing their writing massively whether for academic writing tasks or writing for pleasure. The students' entire problem related to writing productivity is because they have not able to manage the time well. Many of them just said that they have no time to write. To be able to increase their writing productivity, they have to examine their time usage and know their time go (Shellenbarger, 2016). It leads to time mismanagement, increasing levels of anxiety, poor sleep pattern, and stress (O'Connell, 2014; Scherer, et al., 2017; Baothman, at al., 2018).

Time management defines effective time associated with greater academic performance and lower levels of anxiety in students' learning time. Adams & Blair (2019) in their study defines that time management is a cluster of behavioral skills as students learn coping strategies that allow them to negotiate competing demands. Like in the extensive writing, the students are tasked with many products of writings which tend to cause fluctuations in students' workload in addition to their work-life balance. Therefore, the students' behavior such as their time perspective becomes the predictor of poor time management that can be linked to a particular negative examination outcome (Scherer, et al., 2017). Besides, the students need to examine the

time use effectively and the institution gives assisting in the development of time management techniques which can lower students' time mismanagement and feeling of anxiety.

In line with the aforementioned issues, this study was aimed to examine the effect of the Pomodoro technique on students' writing performance across critical thinking levels. The strategy is useful to make the students with not only higher academic stand took fewer and shorter breaks, but also the lower academic too. Pomodoro is one of the strategies that many academics have suggested which is surprisingly straightforward but incredibly effective in resolving this nonacademic issue and raising student productivity. Pomodoro Technique is a simple tool for managing time and it can decrease pressure from time, can increase the sense of decisions, alleviate the interruption, keep motivation constantly, and enhance concentration (Cirillo, 2013). The basic concept behind using the Pomodoro is the creation of focused, timed work sessions during which the students focus on a descriptive text (Burton, 2016).

The foundation for the Pomodoro combines the cognitive techniques, works of the mind, and notions of structuring objectives. Compared with the other time management techniques, the Pomodoro also helps people use time flexibly and effectively, not only improve their working and learning efficiency. Unfortunately, the Pomodoro might make goal-oriented and scheduled activities (Cirillo, 2006). Meaning that the Podomoro may not fit all solutions and be perfect for everyone. Sometimes, it is hard to handle environmental factors or interruption that might not allow the user to use the Pomodoro successfully. Otherwise, due to the Pomodoro that needs to be helped by a mechanical object (a clock or software), discontinuing the use of the Pomodoro would cut off people's positive effects (Shellenbarger, 2016).

Some studies have been conducted under the Pomodoro topic since time management is linked to psychology, therefore this technique is employed many on across psychological perspectives. According to Feng (2016), people increasingly rely on electronics, and a large proportion of people have a habit of dilatory behavior. It leads to feeling failure and the

avoidance of tasks is the main reason for procrastination (Feng, 2016). Therefore, Pomodoro gives a reward for focus work and is a good method of beat that destructive habit. However, it is not ideal for everybody and all kinds of work. Even though it has some limitations, it is still a good tool to tackle users' daily to-do lists (Feng, 2016). Another study stated that the Pomodoro Technique can help one to focus on and manage one's workload (Mastel and Innes, 2013). Besides, it is reminiscent of mindfulness in the idea of breaking things down into smaller segments that can be accomplished (Cirillo, 2013). In line with the use of Pomodoro, many researchers concluded that applying the Pomodoro Technique in daily activities, people begin to realize that the high-intensity works may conduct lower efficiency, thus it reduces the level of procrastination.

Dealing with the previous studies on the Pomodoro technique, this study focused on writing descriptive texts effectively and efficiently across the students' critical thinking. The researcher drags Pomodoro into ELT to scaffold students in writing descriptive text. For the second semester students, writing a descriptive paragraph is not as easy as writing descriptive in the senior high. Since at the university level, students are asked to submit the task with a higher difficulty level directly after the course. The problem is they waste many times to think about what they will write. Besides, the students' mindfulness is the state of being aware, focused, and present in the moment, have to train to the students. Moreover, while mindfulness is training, the video related to the descriptive text is also shown to scaffold their idea in writing descriptive text. Therefore, this present study investigated the effectiveness of the Pomodoro technique combined with video learning on students' writing performance across critical thinking.

The common principle of Pomodoro is to do the task every 25 minutes, and then take a 5 minute break. In this recent study, the researcher applied the principle of Pomodoro in the Paragraph Writing class. This course has 3 credits (150 minutes) that have been taken in the first semester of English department students. Besides, they have descriptive text as a first genre

of the text that should be learned. In the teaching procedure, the lecturer put a mechanical kitchen timer that sits on the desk while he was teaching descriptive texts. In this way, the students could hear the ticking time of the timer as they progress through the teachers' task. The physical presence of the timer and the audible sound of time passing serve as constant reminders to stay focused on the task (Burton, 2016). However, nowadays Pomodoro timer apps are available for computers, tablets, and smartphones.

In the beginning, the teacher should explain the use of Pomodoro as a tool for helping students' mindfulness on writing. As shown in Table 1, students can have a rest after finishing one Pomodoro cycle. The following is the procedure of teaching writing using video as the students' scaffolding in creating descriptive text in the 25 minutes cycle of Pomodoro:

1. The first 25 minutes is the time for students to watch the video.
2. They have to rest for 5 minutes after the 25 minutes left.
3. The second 25 minutes continue to focus on writing descriptive text based on the video.
4. They have a break 5 minutes again.

During each Pomodoro cycle, the students need to concentrate on their work. If they are suddenly interrupted by other things, they need to drop off the current Pomodoro and start a new one.

Table 1. Pomodoro Cycle

20'	25'	5'	25'	5'	25'	5'	25'	5'	10'
Pre-teaching	Watching video	break	Writing	break	Watching video	break	Writing	break	Post-teaching
	First Pomodoro Cycle				Second Pomodoro Cycle				
150 minutes = 3 credits									

There are several steps the students should follow in Pomodoro technique. First, do the pre activities in teaching for around 20 minutes to activate students on the theme of writing. Next, to start a Pomodoro session the teacher sets the timer to 25 minutes and the students start watching the video. When the 25 minutes are completed, the students ask to take a 5-minute break. In the breaking session, the students may do eating, drinking, cheating,

checking e-mail, and so on. Then the teacher asks students to begin the next 25-minute Pomodoro to write descriptive text, followed by a 5-minute break as one cycle of Pomodoro session. Afterward, continue to the second cycle of Pomodoro and the last is post-activity conducted by the teacher to get the reflection of the teaching writing descriptive text.

Students' writing performance deals with the students' writing scores on the descriptive texts. When students write a descriptive text, they may need higher critical thinking. In terms of skills, producing a connected, meaningful, and extended piece of writing is the most difficult thing for learners to do. Moreover, the major problems of students in writing skills may be because of the low level of critical thinking, not because of their lack of knowledge in the subject matter (Djiwandono, 2013; Indah, 2017; Zare, 2018). Despite existing numerous approaches in teaching writing evolved from different methods of teaching, studying EFL writing is still one of the most challenging areas for teachers and students. Husna (2019) indicates that students' writing in an EFL classroom context should show their awareness of their own communicative goals, of the writing context, and the intended readers. Besides, she investigated the relationship between critical thinking ability and reading comprehension of texts, including some unknown words.

Recently, many studies have focused their attention on critical thinking and different language skills and aspects of language learning. This present study deals with the effect of Pomodoro on students' descriptive writing performance combined with video learning across students' critical thinking levels. Moreover, the research questions are formulated as follows:

1. Is there any difference in writing performance between students taught using the Pomodoro technique and those taught using conventional teaching?
2. Is there any difference in writing performance between students who have high and low critical thinking levels after being taught using the Pomodoro technique?

## METHOD

The study was carried out to see the effectiveness of the Pomodoro technique combined with video learning in the students' writing performance on descriptive text across the students' critical thinking levels. The quantitative design was implemented in this study. It was also chosen due to limited access; in this case, the writer was allowed to have two classes of forty-five participants or a sample of this study. Because it was not possible to randomly assign participants of the research, the researcher uses a nonrandomized control group, pretest-posttest design. The students were divided into two groups; the first group consisted of 22 students which were taught by the Pomodoro technique combines with video learning. And the second group, which consisted of 23 students taught by reading textbook.

The procedure of doing this study was by administering the pre-test and post-test to two groups. In the sequence of treatment, the students learned to write descriptive text in the five sessions, including the administration of pre-test and post-test. The pre-test administered in the first meeting, followed by three meetings of the treatment session, and the last meeting is for the post-test. Therefore, there were five meetings for treatment.

Table 2. Schedule for Treatment class for each meeting

20'	25'	5'	25'	5'	25'	5'	25'	5'	10'
Pre-teaching	Watching video	break	Writing	break	Watching video	break	Writing	break	Post-teaching
	First Pomodoro Cycle				Second Pomodoro Cycle				
	Pre-Writing		Writing		Reviewing		Editing and publishing		
20 minutes	120 minutes								10 minutes
150 minutes = 3 credits									

In the first group, the students learned to write descriptive text in three meetings. Each of them ran in 120 minutes and the paragraph writing class had 3 credits, so it ran in the 150 minutes (see Table 2). In all three meetings, the students get a different topic to write about, so the researcher

provided three topics for each meeting: The Wild Animal, Biography of the Idol, and Tourist Resort. Moreover, the stages of writing descriptive text were conducted at four sessions, namely pre-writing, writing, reviewing, and editing and publishing. On the other hand, the second group learned to write descriptive text using Reading textbook in three meetings too. The teaching procedure was the same as the first group.

Both groups, the first and the second group, administered the pre-test and the post-test. The first meeting was for the pre-test and the fifth meeting was for the post-test respectively conducted in both classes. The teaching procedure for the first and the second group is shown in Table 1.

Table 3. Teaching procedure

Meeting	Activities	
	The first group	The second group
1	<b>Pre-test</b> Conducted in the third week of September 2019	<b>Pre-test</b> Conducted in the third week of September 2019
2/ 3/ 4	<b>Pre-writing stage:</b> <ul style="list-style-type: none"> <li>Students ask to watch the video learning related to the topic given for 25 minutes.</li> <li>Get a 5 minutes break.</li> </ul> <b>Writing stage:</b> <ul style="list-style-type: none"> <li>During 25 minutes, students ask to write a descriptive text based on the video.</li> <li>Get 5 minutes break</li> </ul> <b>Re-writing stage:</b> <ul style="list-style-type: none"> <li>Students ask to watch again the video for 25 minutes.</li> </ul>	<b>Pre-writing stage:</b> Students are asked to read the text related to the topic given.  <b>Writing stage:</b> Students are asked to write a descriptive text based on their reading.  <b>Re-writing stage:</b> Students allow reading again the text related to the topic given.



	<b>Editing and Publishing:</b> <ul style="list-style-type: none"> <li>Students ask to correct the vocabulary, grammar, and mechanical aspects (such as punctuation and spelling) for 25 minutes.</li> <li>Having a 5 minutes break, students can submit the product of writing to the teacher.</li> </ul>	<b>Editing and Publishing:</b> <p>Students are asked to correct the vocabulary, grammar, and mechanical aspects (such as punctuation and spelling). After that, students can submit the product of writing to the teacher.</p>
5	<b>Post-test</b> Conducted in the second week of October	

There were three instruments used in this study, the first instrument namely writing test, which was used to collect the data on students' writing scores. The second instrument used was the scoring rubric (see Appendix 1). The scoring rubric was based on the need in scoring descriptive text adapted from Brown (2004) that consists of five components: Format and mechanic (5 points), Vocabulary (15 points), Content (30 points), Organization (30 points), Grammar and Sentence Structure (20 points). And the third instrument used in this study was the critical thinking questionnaire which was adapted from homepage of Foundation for Critical Thinking, [www.criticalthinking.org](http://www.criticalthinking.org).

The critical thinking questionnaire covers eight elements: Purpose; Key questions, problem, or Issue; Point of view; Information; Concepts; Assumptions; Interpretations and Inferences; and Implications and Consequences. The questionnaire involved 14 questions in which four intervals, namely “always, often, seldom, and never” are chosen to gain a firm answer from the provided questions. If the answers were mostly on ‘always’ meaning that thinking skill is exemplary, skilled, accuracy, precision, relevance, depth, breadth, logicality, and fairness. If the answers were mostly on ‘often’ meaning that thinking is competent, effective, accurate, and clear. Meanwhile, if the answer was mostly on ‘seldom’ meaning that thinking is

inconsistent, ineffective; shows a lack of consistent competence: is often unclear, imprecise, inaccurate, and superficial. Then, when most answers were on 'never' meant that thinking is unskilled and insufficient, marked by imprecision, lack of clarity, superficiality, illogicality, inaccuracy, and unfairness. Therefore, 'always' and 'often' were categorized as high critical thinking level if the students choose them most often. On the other hand, 'seldom' and 'never' were categorized as low critical thinking level if they were chosen most often. Moreover, the questionnaire was carried out online via Google Form and presented as shown in Table 2.

In analyzing the data, the first was administering a pre-test to ensure the group equivalency and support the information about students' characteristics in both groups. Then, the fulfillment of the statistical assumption was accomplished using homogeneity and normality tests from the learners' writing scores of the post-test. Accordingly, the analysis on the comparison of the post-test scores of the experimental and control groups as well as the comparison of the post-test scores of the sub-groups (high-critical thinking and low-critical thinking) was conducted by using parametric statistical analysis of t-test.

Table 4. Critical thinking questionnaire (adapted from Foundation for Critical Thinking, [www.criticalthinking.org](http://www.criticalthinking.org))

No	Element of Reasoning	Always	Often	Seldom	Never
1	<b>Purpose:</b> Do you demonstrate a clear understanding of the assignment's purpose?				
2	<b>Key Question, Problem, or Issue:</b> Do you clearly define the issue or problem, accurately identify the core issues, and appreciate their depth and breadth?				
3	<b>Point of View:</b> Do you identify and evaluate relevant significant points of view?				

4	Do you demonstrate fair-mindedness toward the problem?				
5	<b>Information:</b> Do you gather sufficient, credible, relevant information (statements, logic, data, facts, questions, graphs, assertions, observations, etc.)?				
6	Do you include information that opposes as well as supports the argued position?				
7	Do you distinguish between information and inferences drawn from that information?				
8	<b>Concepts:</b> Do you identify and accurately explain/use the relevant key concepts?				
9	<b>Assumptions:</b> Do you accurately identify assumptions (things taken for granted)?				
10	Do you make assumptions that are consistent, reasonable, and valid?				
11	<b>Interpretations, Inferences:</b> Do you follow where evidence and reason lead to obtaining defensible, thoughtful, logical conclusions, or solutions?				
12	Do you make deep (rather than superficial) inferences?				
13	<b>Implications, Consequences:</b> Do you identify the most significant implications and consequences?				
14	Do you distinguish probable from improbable implications?				

## FINDINGS AND DISCUSSION

### Comparison of the Pre-test Score from the first and the second groups

The researcher already compared the students' descriptive text using Pomodoro combined with video learning and the printed text one. The pre-

test was conducted to explore the effectiveness of the Pomodoro technique. Moreover, the pre-test score of students from the first group was initially compared to the pre-test score of the second group. The descriptive statistics of the pre-test score is shown in the following Table 3.

Table 5. Statistics descriptive of the Pre-test

	Class	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	The first group	22	76.54	2.79	.59
	The second group	23	76.13	3.13	.65

From Table 5, the mean score of the first group was 76.54 and the standard deviation was 2.79. While the mean score of the second group and the standard deviation was respectively 76.13 and 3.13. Besides, the results of the comparison of the pre-test score also analyze using independent sample t-test to know the significant difference of pre-test score (see Table 4)

Table 6. Comparison of the Pre-test score using Independent Samples t-test

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test	Equal variances assumed	.143	.707	.459	43	.648	.406	.885	-1.379	2.19
	Equal variances not assumed			.460	42.7	.648	.406	.882	-1.374	2.18

The result from Table 6 showed that the p-value was 0.648, which means that there was no significant differences in the pre-test score between

the first group and the second group. Moreover, before the treatment was conducted, the skill of both groups were equal.

### **Comparison of the Post-test Score from the first group and the second Group**

The post-test scores of first group were also compared to the post-test score of the second group. Finding from descriptive statistics implied that the score in the post-test from both groups were slightly different. Comparing the descriptive statistics on the mean score of the pre-test, it can be assumed that there was an improvement in the students' writing performance after they used the Pomodoro technique. In the post-test, the first group had 87.71 on the mean score with standard deviation was 3.09. Meanwhile, the mean score of the second group was 81.36 with the standard deviation was 2.87 (see Table 7). The mean score of the first group was higher than the mean score of the second group.

Table 7. Statistics descriptive of Post-test

	Class	N	Mean	Std. Deviation	Std. Error Mean
Post_test	The first group	22	87.71	3.09	.66
	The second group	23	81.36	2.87	.59

Furthermore the independent sample t-test was applied to examine the effect of the Pomodoro technique combined with video learning on the students' writing performance. The result was displayed in Table 6 to answer the first research question.

Table 8. Comparison of Post-test score using Independent Samples t-test

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
post_test	Equal variances assumed	.079	.78	7.14	43	.000	6.35	.89	4.55	8.15
	Equal variances not assumed			7.13	42.38	.000	6.35	.89	4.55	8.15

Based on the statistical description above, it can be inferred that there was a significant difference on the post-test between the first group and the second group (p-value 0.000). Therefore, it can be asserted that the students taught by using the Pomodoro technique combined with video learning achieved better writing performance than those taught by using printed text teaching methods.

### **Comparison of the Writing Performance between Students' High Critical Thinking and Students' Low Critical Thinking Level in the Pomodoro Technique**

To determine whether the critical thinking level of the students in the first group contributed to the effect of the Pomodoro treatment or not, as well as revealing the research question number 2, the independent sample of the t-test was employed. The result of the comparison of the post-test score between students' high-critical thinking and students' low-critical thinking in the first group was shown in Table 9.

The statistical data as shown in Table 9 revealed that there was no significant difference in the writing performance of the students with high critical thinking and low critical thinking levels since the p-value was 0.99. In a nutshell, the categorization of high critical thinking and low critical

thinking level did not affect the writing performance of the students taught by the Pomodoro technique combined with video learning.

Table 9. Comparison of the post-test between critical thinking level using Independent Samples t-test

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
post_test	Equal variances assumed	.641	.429	.010	36	.99	.015	1.56	-3.15	3.18
	Equal variances not assumed			.009	20.56	.99	.015	1.66	-3.45	3.48

## DISCUSSION

The results of the present study are discussed to address the two research questions. From the first statistical analysis using a t-test, it was found that the students taught using the Pomodoro technique combined with video learning had better writing performance than those taught using printed text/textbook method. The effectiveness of using the Pomodoro technique combined with video learning was supported by some factors: the students' mindfulness in the Pomodoro 25 minutes section, the students' break after focusing, and the scaffolding of video learning as sources of information and learning material.

Concerning the first research question, the result of this study indicated that the Pomodoro technique combined with video learning was an effective way to develop students' writing performance. The results supported the findings from the previous studies on the implementation of the Pomodoro

technique to facilitate postgraduate students' academic writing (Zahariades, 2015; Burton, 2016; Shellenbarger, 2016; Kumar & Aitchison, 2017; Wilmot, 2018). Besides those, some scholars argued that using the Pomodoro technique increased productivity and helped stop procrastination (Mastel & Innes, 2013; Giesbrecht, 2015; Feng, 2016). The present study attempted to blend the Pomodoro technique with video learning to assist students in the writing process. Fortunately, compared with those findings, the current study performed the same successful result.

The group that used textbook as the source to write descriptive text tended to have lower mean score both in the pre-test and the post-test compare with the group used the Pomodoro combined with video learning. It might be caused by some factors such as the students' mindfulness in the 3 credits hour without break and the textbook as the only printed source. The students' mindfulness in the section of writing was the important aspect to allow them to write and finish the assignment easily. Furthermore, 3 credits hours without break section was hard for them to maintain concentration and mindfulness on the writing activity. Thus, they ideally get time to break in each session to obtain the inspiration from others' environment.

The second question deals with the comparison of writing performance with high and low critical thinking in the first group. In the past, it has been discussed that the Pomodoro technique combined with video learning has attempted significant results in enhancing students' writing performance. However, the result of the comparison between high and low critical thinking students in the first group revealed that there was no significant difference in the post-test score ( $p\text{-value} = 0.99$ ). The findings in this study had similarities as well as deference from the study conducted by Indah (2017). Writing performance could also act as a mediator between the critical thinking abilities that were bolstered by topic knowledge. However, the topic familiarity of teacher-initiated topics did not have a direct contribution toward critical thinking skills. Thus far, this finding of the present study defined that the high and low of students' critical thinking level had the same opportunity to



use the Pomodoro technique combine with video learning in learning writing in a foreign language.

## CONCLUSION

This present study investigated the effect of using the Pomodoro technique combined with video learning across critical thinking levels. In conclusion, this study has shown that the Pomodoro technique, which deals with the time management of the learners in producing the products of writing, enables them to have high productivity. While Pomodoro combined with video learning can be chosen as an alternative to teaching foreign language writing. A successful resulting the implementation of Pomodoro, combined video learning for Indonesia EFL students on writing performance has also revealed that writing performance using the Pomodoro technique combined with video learning is not influenced by the students' high and low critical thinking. Therefore, whenever the EFL teachers would like to apply the Pomodoro technique combined with other media in teaching language skills, they do not have to worry about the students' critical thinking levels.

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## APPENDIX 1:

Writing's Scoring Rubric adapted from Brown (2004)

Indicator	Maximum Score	Actual Score
<b>Format &amp; Mechanics—5 points</b> <ul style="list-style-type: none"> <li>There is a title and it is centered.</li> <li>The first line is intended.</li> <li>There is a period after every sentence and commas are used correctly.</li> <li>Capital letters are used correctly</li> <li>The spelling is correct.</li> </ul>	1 1 1 1 1	
<b>Vocabulary—15 points</b> <ul style="list-style-type: none"> <li>The vocabularies used are suitable and varied.</li> </ul>	15	
<b>Content—30 points</b> <ul style="list-style-type: none"> <li>The paragraph fits the assignment.</li> <li>The paragraph is interesting to read.</li> <li>The paragraph shows that the writer used to care and thought.</li> </ul>	5 10 15	
<b>Organization—30 points</b> <ul style="list-style-type: none"> <li>The paragraph begins with a topic sentence that has both a topic and a controlling idea.</li> <li>The paragraph contains several specific and factual supporting sentences that explain or prove the topic sentence, including at least one example.</li> <li>The paragraph ends with an appropriate concluding sentence</li> </ul>	10 20 10	
<b>Grammar and Sentence Structure—20 point</b> <ul style="list-style-type: none"> <li>The sentences are formed structurally.</li> </ul>	20	
Total	100	