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Aspects of Writing Knowledge and EFL Students' Writing Quality

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Abstract

Writing knowledge pertaining to process, system, content, and genre plays an essential role to produce an intelligible composition. The purpose of the present study is twofold – to investigate the correlation between aspects of writing knowledge and quality of writing, and to investigate the contribution of the overall and individual aspects of writing knowledge to writing quality. The participants were 54 second-year ELT undergraduate students of a university in Indonesia. A writing test and multiple-choice test on writing knowledge were used as the instruments of data collection. The analysis employed Pearson correlation coefficient and multiple

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regressions. The result revealed a significant positive correlation between writing knowledge and writing quality. As a unit, the knowledge of process, system, content, and genre, indicates a significant contribution to the writing quality. Individually, however, only process knowledge significantly contributes to the writing quality. It provides additional pieces of evidence that process knowledge be given special attention, thus writing instruction should allow students to learn writing knowledge explicitly and implicitly.

Keywords: EFL students, writing knowledge, writing quality.

1. INTRODUCTION

Writing is an activity of creating a written product done recursively. It requires a wide range of knowledge and the ability to produce an intelligible text. Knowledge about writing plays an important role as a source in the writing process and product. Various kinds of knowledge about writing are stored in long-term memory and used by writers during the writing process (Gillespie et al., 2013). The knowledge can enhance the fluency and quality of writing if it is accessible and creatively utilized by writers (Kellogg, 2008). However, knowledge about the first language (L1) writing which is different from the second language (L2) or foreign language (FL) writing can cause trouble to students' L2/FL compositions. L2/FL writers generally find it hard to write because of the issue or topic given as well as the language needed to express their ideas (Asraf et al., 2018).

Learning to write in an L2/FL does not simply compose and revise, writing instruction needs to include all knowledge about writing. Hyland (2007) classifies the knowledge about writing that ESL (English as a Second Language)/EFL (English as a Foreign Language) students need to possess into five, i.e., process, system, content, genre, and context knowledge. Process (meta-cognitive) knowledge plays an essential role in activating students' meta-cognition, which becomes the central element of writing tasks. It is also considered an integral component of self-regulated writing (Englert et al., 1992). The knowledge of process writing possessed by the students helps them prepare and complete a writing task. During the writing process, the students' meta-cognitive knowledge works for thinking about the topic and text type, the planning and the steps of writing, and the strategies used in completing the task. Different meta-cognitive knowledge degrees reflect various activities (Lee, 2006) and writing quality (Yanyan, 2010). In fact, Surat et al. (2014) reported insufficient metacognitive knowledge influenced the low score of L2 writing. Knowledge about the substantive writing process, which is ranged between text, was also found as a predictor of L2 students' writing scores (Gillespie et al., 2013).

Another knowledge believed as a predictor for writing quality is system knowledge or meta-linguistic. This knowledge refers to the rules in writing an academic text pertaining to vocabulary, grammar, and mechanics in writing (Hyland, 2003). These three components are considered necessary in rating compositions. In each writing scoring rubric, they are included as the traits of assessing writing, either by using a holistic scoring method (as in ETS, 2019) or by using an analytic scoring method (as in Brown, 2000; Hyland, 2003; Oshima & Hogue, 2007). Alderson (2005)

found a strong positive correlation between vocabulary knowledge and language skills and writing obtained the most significant effect on vocabulary knowledge. In line with Anderson, a straightforward relation was found between vocabulary knowledge and students' writing quality (Gillespie et al., 2013; Johnson et al., 2016). Writing quality is also determined by the degree of grammar knowledge since ideas or messages cannot be expressed in single words; instead, they must be cast in grammatical sentences that indicate relationships between constituent clauses containing those single words (Schoonen et al., 2003). Students' syntactic knowledge (Beers & Nagy, 2009), specific grammatical structures in terms of tenses (Javidnia & Mahmoodi, 2015), error correction and language analytic ability (Roehr, 2007), Grammar Judgment Tests (GJTs), and explanation of ungrammatical sentences (Gutiérrez, 2012) positively correlate to writing quality. Moreover, Gutiérrez's (2012) study revealed that implicit and explicit knowledge of grammar is significantly associated with writing quality. In addition, Talosa & Maguddayao (2018, p. 180) found that L2 learners' syntactic errors are significantly related to their year level and exposure to writing. The studies indicated system knowledge greatly contributes to writing quality.

The third aspect of knowledge about writing is content. It refers to topics or themes that students are demanded to write about (Hyland, 2003). It is the main point for developing a paragraph into a coherent idea. Content knowledge influences students in planning before writing. How well the students understand the topic or theme of the writing task affects organizing and translating ideas into text (Berry, 2001) as well as the writing quality. He adds that the familiarity of topic knowledge influences students' awareness of revision during the writing process. Esmaeili (2000) and Berry (2001) found a positive correlation between content or topic and writing quality. Suppose the issue is familiar to the students, their awareness of revising the draft increases.

The last two aspects are genre and context, which are interrelated. Genre is the classification of texts based on communicative purposes, which is the context. In this case, genre constructs the context of the situation, so students as writers can determine their position (persona), their audience, and their purposes before writing the task (Devitt, 2004). In addition, genre constructs the context of culture, referring to the rhetorical pattern of thought. Many studies on L2 writing have investigated the influence of genre knowledge on writing quality. The findings have proved genre knowledge as a predictor of writing quality. Gillespie et al. (2013), for example, found that students' knowledge about particular genres' characteristics positively affected their writing quality. Another study by Beers and Nagy (2011) focused on grammatical structures used in particular texts and found that students' grammatical knowledge positively correlated with their writing quality in different genres. In addition, Muñoz-Luna and Taillefer (2014) found a positive relation between metalinguistic knowledge, genre awareness, and writing performance. It showed that the high-scoring writers possessed higher knowledge of grammatical and discursive features, showed better awareness of a recursive way of writing, and structured their essays in clearer paragraphing and a sequential order than the lower-scoring writers.

Overall, the previous findings have shown that writing knowledge and writing quality have a positive correlation. However, the previous studies only investigated an individual aspect or several aspects of writing knowledge, not the aspects as a whole. The whole aspect of knowledge about writing is required to be mastered for writing development. The learning of these aspects cannot be separated from one to another

(Hyland, 2003). The investigation on the overall aspect of writing knowledge and writing quality is not known yet. Also, studies about how much writing knowledge has on writing quality were limited in number, so the results were unclear. Therefore, this study examined the correlation between the overall aspect of writing knowledge and the quality of an essay written by EFL undergraduate students. This study also examined the influence of each aspect on the writing quality as stated in the following research question.

1. Is there any relation between knowledge about writing and writing performance of EFL undergraduate students?
2. If any, how strong is the contribution of each aspect and sub-aspect of knowledge about writing to the writing performance?

2. LITERATURE REVIEW

2.1 Academic Writing in L2/EFL

Academic Writing in L2 reflects an interaction containing purposeful and contextualized communication involving four elements: L2 writers, L1 readers, L2 text or documents, and context for L2 writing (Silva, 1993). The L2 writers are the doers (the students) who express their personal knowledge, attitudes, cultural orientation, language proficiency, and motivation in their writing. The L1 readers refer to the primary audiences of academic context like teacher/lecturer and writer's classmates. The L2 text relates to genre, purposes, modes, discourse structures, syntax, lexis, and conventions. The context for L2 writing refers to a situation that informs the reader about why and how a text is written. It refers to the environment where the students learn (i.e., a college or a university). The four elements interact in a variety of authentic EFL/ESL settings.

In addition to the four main elements of writing, there are some other elements influencing students' writing products, i.e., interests, needs, values, beliefs, knowledge, requirements, limitations, and opportunities. From all of these elements, knowledge about writing is a key for the success of students' writing because it can be obtained by students through explicit or/and implicit learning. Knowledge about writing, as a result of the review of findings from previous studies, strongly affects the quality of writing.

2.2 Knowledge about Writing

Referring to Hyland's (2007) classification of writing knowledge, five aspects of writing knowledge were investigated in the present study: process, system, content, genre, and context knowledge. The process knowledge or metacognitive refers to declarative, procedural, and conditional knowledge (Surat et al., 2014). Declarative knowledge is related to facts and information. It is 'knowledge about' or 'knowledge concerning' L2 writing such as knowledge about characteristics of good writing and good writers. Procedural knowledge is about 'how' to conduct cognitive activities related to strategies used in planning and writing the task. Finally, conditional knowledge refers to 'when' and 'why' a certain strategy or procedure is used. These three elements greatly contribute to students' way of producing good essays.

A system of rules is directed to writing as a formal text which is coherent and unified. System knowledge enables students to write compositions fluently and accurately. It is also called metalinguistic knowledge or language-related knowledge (Schoonen et al., 2003). System knowledge is differently classified by different authors. Moreover, Bowker (2007) categorizes it into punctuation and grammar. Cook (2001) and Cook and Bassetti (2005), on the other hand, refer to meaning-based (morphemes), sound-based (syllables and phonemes), and writing direction. Finally, Schoonen et al. (2003) refer it to vocabulary, syntax, and orthography (spelling). The present study refers to system knowledge to Hyland's (2003) classification: vocabulary (lexis), grammar (syntax), and mechanics (punctuation and capitalization).

Familiarity with topics or themes to write about is an influential knowledge for students to develop coherent writing. This knowledge is known as content knowledge (Hyland, 2003). Familiar topics give advantages to students. They can write better compared to when they write a text with an unfamiliar topic (Berry, 2001; Esmaeili, 2000; He & Shi, 2012). However, some topics for writing activities in the writing instruction may be unfamiliar for many students such as earthquakes, left-handedness, the computer revolution, and styles of popular music. For students who have personal knowledge of such topics, it is easy for them to organize and write meaningful texts about them (Hyland, 2003). For others who do not have experience with such topics, the topics become less or not familiar and they get difficulty in planning and writing the tasks. Therefore, familiar issues must be considered in designing writing instructions.

Genre is about text classification based on communicative purpose. It is closely related to three contexts i.e., the context of situation, culture, and other genres (Devitt, 2004). Language and its social function determine how a text is presented. The distinctiveness of social functions defines language use so a specific goal can be achieved. Genre is also constructed by the context of a culture which refers to the rhetorical pattern of thought. In the ESL context, the teachers can use genre to associate the formal and functional language properties that need to be associated (Kim & Kim, 2005). Cheng's (2008) study shows that genre improves the quality of the students' narrative paragraphs. Since genre and context knowledge cannot be separated, in this study, they are a unit aspect, i.e., genre knowledge.

3. METHOD

This study employed a quantitative correlation research design since it measured the relationship between Indonesian EFL undergraduate students' writing knowledge and the quality of their writing (Creswell, 2014). The correlation was seen from how many degrees of the students' writing knowledge reflected their writing quality. Furthermore, how much the students' writing knowledge contributed to students' writing quality was also scrutinized.

3.1 Participants

The participants were 54 second-year ELT undergraduate students of Universitas Tadulako, Central Sulawesi, Indonesia. Purposive random sampling was employed to obtain participants with sufficient writing knowledge. Only students who had passed

Sentence Based-Writing and Paragraph Based-Writing, and took Academic Writing courses were taken as participants. Referring to the curriculum implemented at this university, the students are expected to be skillful in writing academic topics about a thesis statement, structural pattern, organization, coherence, and unity of an essay (English Education Study Program, Faculty of Teacher Training and Education, 2016). Thus, they were assumed to master writing knowledge.

3.2 Procedures

Firstly, the students were assigned to write a timed-opinion essay in 90 minutes. The students were given a writing prompt to help them understand the topic and instructions clearly. The students were asked to do the test on knowledge about writing for about 90 minutes on the following day. Prior to the writing knowledge test, the prompt test was administered to avoid the influence of the students' answers to the knowledge test on their composition. The written compositions were then rated using an analytic rubric by two raters holding doctoral degrees with experience in teaching EFL writing. The students' responses to the writing knowledge test in the answer sheets were input by the researchers. Both scores were analyzed to see the correlation between the overall aspect of writing knowledge and writing quality and examined the influence of writing knowledge on writing quality, as seen in Figure 1 (adapted from Hyland, 2007).

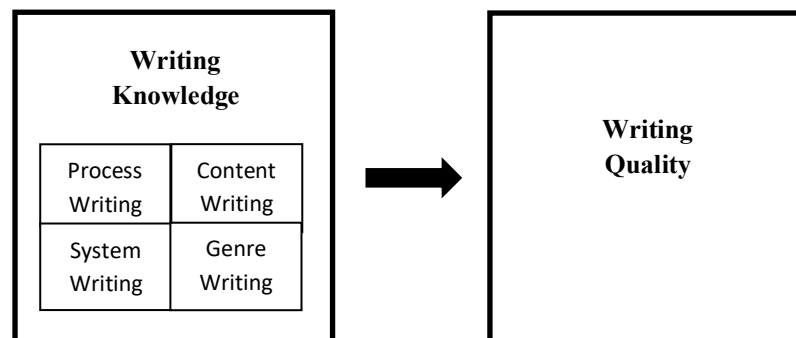


Figure 1. Correlation between writing knowledge and writing quality (Hyland, 2007).

3.3 Instruments

A multiple-choice test of writing knowledge (i.e., knowledge of the process, system - vocabulary, grammar, and mechanics, content, and genre) consisting of 116 items was administered to measure the students' writing knowledge. The test on aspects of writing knowledge was partly developed, partly modified from the tests used in the previous studies, and partly adopted from the existing tests. To evidence the validity of the knowledge test, the present study employed content validity in which expert judgment is necessarily needed (Creswell, 2014; Grimm & Widaman, 2012; Sudijono, 2012). The expert judgment referred to the representativeness of variables investigated and the dimension, the appropriateness of questions toward the variables, the purpose of testing, and the language used. Two experts who were experienced

English lecturers with at least five-year experience in teaching essay writing and expertise in constructing a test rated the link.

The two experts rated the reliability of the test on writing knowledge. The results of the computation showed that Cronbach's alpha was .828 indicating that the test of writing knowledge is considered highly reliable (see Table 1).

Table 1. The reliability of the test on knowledge about writing.

Aspect	Cronbach's Alpha	N of Items
Process	.766	16
System:		
Vocabulary	.879	25
Grammar	.848	40
Mechanic	.813	10
Content	.828	10
Genre	.766	15
Total		116

The other test, the writing test used to measure the quality of students' writing, was a timed-impromptu test and developed based on the writing syllabus used in the Writing Course. Since the instructional objectives mentioned in the syllabus directing to guide the students to write opinion essays, the test used as the instrument of the current study asked the students to write reasons for attending a university. The validity and reliability tests of the test were carried out in a pilot study. The students' compositions in the pilot study were rated, input, and calculated by using Pearson correlation to examine the validity of the writing test (Table 2). The result shows that at the .01 level, the writing test is valid. Regarding the test of reliability, by using Cronbach's alpha, the reliability of the writing test is .903.

Table 2. Validity of writing test.

		Content	Organization	Vocabulary	Grammar	Mechanic	Total	
Content	Pearson Cor.	1	.848**	.790**	.792**	.758**	.941**	
	Sig. (2-tailed)		.000	.000	.000	.000	.000	Valid
	N	79	79	79	79	79	79	
Organization	Pearson Cor.	.848**	1	.825**	.761**	.781**	.942**	
	Sig. (2-tailed)	.000		.000	.000	.000	.000	Valid
	N	79	79	79	79	79	79	
Vocabulary	Pearson Cor.	.790**	.825**	1	.860**	.869**	.918**	
	Sig. (2-tailed)	.000	.000		.000	.000	.000	Valid
	N	79	79	79	79	79	79	
Grammar	Pearson Cor.	.792**	.761**	.860**	1	.807**	.892**	
	Sig. (2-tailed)	.000	.000	.000		.000	.000	Valid
	N	79	79	79	79	79	79	

Table 2 continued...

Mechanic	Pearson Cor.	.758**	.781**	.869**	.807**	1	.880**	
	Sig. (2-tailed)	.000	.000	.000	.000		.000	Valid
	N	79	79	79	79	79	79	
Total	Pearson Cor.	.941**	.942**	.918**	.892**	.880**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
	N	79	79	79	79	79	79	

** Correlation is significant at the .01 level (2-tailed).

The essay was scored analytically and based on five components: content/evidence (30), organization/purpose (30), vocabulary (15), grammar (15), and mechanics (10). Concerning writing knowledge, content refers to the content knowledge, the organization refers to the genre knowledge, vocabulary, grammar, and mechanics refer to the system knowledge. The whole text written by the students was the reflection of the process knowledge.

3.4 Data Analysis

The set of writing knowledge in ordinal scale and writing quality was statistically computed using Pearson correlation by using a computer with an SPSS program. For the second question, the data were calculated using regression analysis. There were three stages of calculation by using regression analysis. Firstly, the data were calculated by using a simultaneous test (F-test) to examine the contribution of the overall aspect of writing knowledge to the writing quality. Secondly, the data were calculated partially by using a t-test to see the contribution of each aspect and sub aspect to the writing quality. Finally, the data were computed using Goodness of fit to examine the influence of the overall aspect of writing knowledge on writing quality.

4. RESULTS

The current research investigated whether the aspects of writing knowledge can simultaneously predict writing quality. Answering the research question, the finding presents the correlation between writing knowledge and writing quality, follows by the contribution of writing knowledge to the quality of writing.

4.1 The Correlation between Writing Knowledge and Writing Quality

The Pearson correlation result showed that the correlation between the students' knowledge of writing and their writing quality is significant. As seen in Table 4, the relation between the knowledge about writing and writing quality seen from the overall aspect and sub aspect is positive. The level of the relation is moderate ($r = .466$, $p < .01$). It means that the students' writing quality is average/fair since their knowledge about writing is fair.

In Table 3, based on the scoring of the test of knowledge of writing and the writing test, the students' highest score in writing performance was 77.49, while the lowest score was 46.60. Their average score was 60.26. When looking at the average score of each aspect and sub-aspect of knowledge about writing, the highest score was on content knowledge (58.91). In contrast, the lowest score was on vocabulary knowledge (27.06). Regarding the individual scores, the students' highest scores were on the content and mechanic knowledge, i.e., 80, whereas the lowest score they got was vocabulary knowledge, i.e., 4. In a nutshell, the students' mastery of writing knowledge was indeed at the acceptable level (Brown, 2004).

For the writing test, the students' compositions were rated by using an analytic scoring system. Based on their essay results, the students' highest score was 80, while the lowest one was 20. Their average score was 44.65, which meant that the students' writing performance was poor. Referring to the descriptive data of the students' writing quality and knowledge, it explains how much knowledge of writing a student has reflected the degree of his/her writing quality.

Table 3. Relation between knowledge about writing and writing performance.

		Knowledge about writing	Writing
Knowledge about writing	Pearson Correlation	1	.466**
	Sig. (2-tailed)		.000
	N	54	54
Writing	Pearson Correlation	.466**	1
	Sig. (2-tailed)	.000	
	N	54	54

**Correlation is significant at the 0.01 level (2-tailed)

Dealing with the first question, as predicted, the finding of the present study is consistent with the results of the earlier studies. Even though this study focuses on the overall aspect, while the previous studies (Beers & Nagy, 2009, 2011; Crossley et al., 2014; Gillespie et al., 2013; Javidnia & Mahmoodi, 2015; Johnson et al., 2016; Olinghouse & Wilson, 2003; Yanyan, 2010) focus only on an individual or several aspects of knowledge about writing, the findings reveal positive relation between writing knowledge writing and writing quality.

4.2 The Contribution of Writing Knowledge to the Quality of Writing

Answering the second question about how much the students' writing knowledge contributes to their writing quality, employing a t-test, the correlation between the four aspects of writing knowledge was statistically computed. The result shows that only the process knowledge influences the writing quality among the four aspects of writing knowledge ($r = .027$, $p < .05$). The observed value of coefficient showed that process knowledge positively puts 29% contribution to writing quality. However, it is not the highest contributor to the writing quality. The system knowledge has the highest contribution of all aspects of writing knowledge ($b = .293$, $p < .05$), though it does not show significant relation. The other two aspects of writing knowledge contributing to writing quality are content ($b = .104$, $p < .05$) and genre ($b = .133$, $p < .05$). Based on Table 4, the contribution of the aspects of knowledge about writing to the writing performance is as follows:

$$\hat{Y} = -2.862 + .290 \text{ process knowledge} + .293 \text{ system knowledge} + .104 \text{ content knowledge} + .133 \text{ genre knowledge.}$$

Table 4. Aspects of knowledge of writing and writing quality.

Coefficients Model		Unstandardized coefficients		Standardized coefficients		
		B	Std. Error	Beta	t.	Sig.
1	(Constant)	-4.030	11.813		-.341	.734
	Process	.290	.127	.297	2.286	.027
	System	.293	.191	.206	1.533	.132
	Content	.104	.104	.125	1.005	.320
	Genre	.133	.093	.183	1.426	.160

a. Dependent Variable: WP-Weighted

To see the contribution of the students' writing knowledge to the quality of writing, firstly, it was statistically analyzed by using a simultaneous test (F-test) to see the contribution of the overall predictor variable (a general aspect of writing knowledge) to the dependent variable (quality of writing). The result reveals a significant contribution to the writing knowledge's overall aspect of the writing quality ($r = .002$, $p < .01$). The simultaneous test indicates that writing knowledge is a predictor of writing quality (see Table 5).

Table 5. Simultaneous contribution of writing knowledge to quality of writing.

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2180.145	4	545.036	5.063	.002a
	Residual	5275.407	49	107.661		
	Total	7455.552	53			

a. predictors: (constant), genre, process, content, system

b. dependent variable: wp weighted

The last step was to investigate how much the overall aspect of knowledge about writing affects the writing quality. By using Goodness of fit, the result indicates that the overall aspect of knowledge about writing contributes 29.2%, which is considered low (Table 6). The other 70.8% is affected by other aspects excluded in this study.

Table 6. Contribution of overall aspects of writing knowledge to writing quality,

Model Summary					
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
Dimension	1	.541 ^a	.292	.235	10.37600

a. Predictors: (Constant), Genre, Process, Content, System

In addition, the scores of the students' writing quality were rated by two experts in writing classes and the results of inter-rater reliability are shown in Table 7. The involvement of two raters aimed at providing reliability of the scoring. The scores given by the two raters were tested using inter-rater reliability Pearson Product Moment Correlation to measure the reliability of scoring the students' writing ability. Table 7 shows that the level of significance was significantly reliable at .323, so the two scores taken from both raters fulfilled the need for inter-rater reliability.

Table 7. The results of inter-rater reliability of the two scores.

Correlations		Rater1	Rater2
Rater1	Pearson Correlation	1	.323**
	Sig. (2-tailed)		.009
	N	64	64
Rater2	Pearson Correlation	.323**	1
	Sig. (2-tailed)	.009	
	N	64	64

** . Correlation is significant at the 0.01 level (2-tailed).

5. DISCUSSION

The present study comes with evidence that the four aspects simultaneously contribute to the writing quality. The finding of the present study is consistent with the results of the previous studies (Beers & Nagy, 2009, 2011; Crossley et al., 2014; Gillespie et al., 2013; Javidnia & Mahmoodi, 2015; Johnson et al., 2016; Olinghouse & Wilson, 2003; Yanyan, 2010), although these studies focus on individual aspects of writing knowledge on writing quality. The current findings endorse the requirement for FL/L2 writers to possess writing knowledge. Hyland (2003, p. 27) suggests that L2 writers are required to own “content, system, process, genre, and context knowledge” to produce suitable compositions. To produce good writing quality, the students certainly need to own a particular degree of knowledge in writing. The study confirms that the contribution of the knowledge about writing as a unit is considered necessary; thus, they should be taught explicitly.

The finding from the t-test analysis shows a different degree of knowledge on each of the aspects. It reflects that the contribution of each aspect of the writing knowledge on the quality of the students’ essay is various. Besides, this shows different degrees of the need for the knowledge to be taught. Thus, these multiple contributions can be used to select and develop the content (of writing materials), which aspect is chosen as the core element of the content material and presented at the beginning of a lesson which can be carefully determined.

On the correlation between process knowledge and writing quality, the present finding agrees with one of Yanyan’s (2010) results that meta-cognitive knowledge correlates positively with writing quality. She even found that meta-cognitive knowledge correlates positively with language proficiency which is not investigated in the present study. Unlike the majority of the previous studies, the present study investigated all of the EFL students’ writing knowledge covering process, system, content, and genre. Furthermore, the previous studies conducted by researchers (Gillespie et al., 2013; Saddler & Graham, 2007; Xinghua, 2010) involved L1 children whereas the present study involved FL adults. The subjects are different, but the findings are similar. The previous studies found that the L1 children’s process knowledge and quality of writing are low, and the correlation of the two variables is positive. The present study also revealed that EFL students’ writing knowledge is fair while their writing quality is low. Regarding the correlation, the present study also showed a positive relationship between the two variables.

The process knowledge in which the correlation is significant with the writing quality is the central element of doing writing tasks (Hyland, 2003). It is taught explicitly, and then it is practiced by the students while accomplishing a writing task. The process approach is dominantly applied in these activities. Furthermore, the system knowledge comprising vocabulary, grammar, and mechanics is explicitly taught by using the product approach. Even though nowadays, the teaching of English is directed to communicative competence which promotes the importance of learning the language rather than linguistic knowledge (Altasan, 2017), based on the present findings, the FL students still need to learn linguistic knowledge explicitly. Therefore, the product approach is yet required to be implemented in FL writing instruction.

Concerning the system knowledge, the finding of the present study supports Beers and Nagy's (2009) findings, which shows the strong influence of grammar on writing a specific text genre. Similarly, it fixes with the previous findings from Crossley et al. (2014) that grammar and mechanical accuracy positively correlate with writing quality even though the degree is different. The correlation between grammar and essay scores is weak, while the relation between mechanical accuracy and essay scores is strong. The finding also supports the previous findings from Johnson et al. (2016) in some cases. Johnson et al. (2016) investigated vocabulary on receptive vocabulary, aural vocabulary, productive vocabulary, and vocabulary use. Their findings show that receptive, aural, and productive vocabulary positively relates to writing quality, while vocabulary use refers negatively to it. Compared to the previous finding from the Indonesian context, the present finding is contradictory to Lutviana et al. (2015). She examines the correlation between vocabulary knowledge in terms of lexical richness (lexical frequency profile) and quality of argumentative writing and finds no significant correlation between advanced vocabulary possessed by EFL undergraduate students and overall writing score. Her study, focusing on diction, found a small or no significant contribution of the diction to the quality of writing.

In line with Esmaeili (2000) and Berry (2001), the third aspect of writing knowledge, i.e., content knowledge, shows a positive correlation with writing quality. The prompt test developed based on the syllabus required the students to write about their reasons for attending a university. The content was familiar to the students as they were in their second year; how well they understand the topic influences their writing quality. The finding shows that the students' content knowledge and other aspects positively contribute to the students' writing quality. In other words, students' writing quality can be predicted from their content knowledge. Furthermore, knowing the content helps the students plan what to write and present it in a coherent idea. Dealing with genre knowledge, similar to other aspects of writing knowledge is also found as a contributor to the writing quality. This finding supports Beers and Nagy (2011) and Gillespie et al. (2013) reporting that knowledge about genres positively influenced writing quality.

Both content and genre knowledge are developed at the beginning of the writing process phase. The teaching of the content knowledge is incorporated with the teaching of the genre knowledge. The students already know the purpose of the text, type of text, and audiences before making an outline and writing a draft. In producing a certain kind of text, the students need to learn knowledge about particular grammatical features, vocabulary, mechanics, and rhetorical structure used in the text. They also need knowledge about how to organize ideas, develop unified paragraphs, and revise

the particular text type. These activities are carried out by implementing the process and genre approaches called a process genre approach.

The pedagogical implication of the moderate relation of writing knowledge and writing quality ($r = .466, p < .01$) found in the present study is that writing knowledge needs to be taught to EFL students both explicitly and implicitly. Referring to the current finding, it is the process knowledge found significantly contributes to the writing quality. Thus, this knowledge should be prioritized to be taught and introduced to the students at the first lesson. In line with Mojica's (2010, p. 36) study, the present study suggests that students' metacognitive skills need to be concerned to help them become more aware of their processing strategies. Based on the finding pertaining to the contribution of the knowledge about writing as a unit, all of the aspects are considered important to be taught explicitly as they simultaneously contribute to writing quality. The teaching of the aspects can be integrated; some approaches can be used such as a synthesis approach of product, process, and genre approaches. Regarding the time allotment for each course's writing instruction, the portion of teaching each aspect and sub-aspect of writing knowledge is not the same. It depends on the writing instruction's priority – what aspects or sub-aspects of the writing knowledge become the primary materials, and the others become the complementary materials.

6. CONCLUSION

Writing knowledge can positively predict writing quality. In regard to how much contribution the writing knowledge put on the writing quality, the present study evidenced that the process, system, content, and genre knowledge as a unit significantly contribute to the quality of writing. The degree of the contribution of each aspect to the writing quality varies from one aspect to another.

Educational policymakers and teachers, considering the findings, need to present knowledge of writing explicitly in the curriculum and syllabus to enhance EFL students' writing quality, particularly those with low-level proficiency in writing. Moreover, writing instruction should allow the students to write frequently to make the students more skillful in writing. However, administering the test only once becomes one of the limitations of the present study. The scores obtained from the measure of writing knowledge have not reflected the students' real knowledge yet. Although the reliability of the tests is good, a single test only measures their short-term knowledge. If the test is carried out more than once, the reliability of the instruments will be accurate, and the scores will be more definite. Besides, such data collection might allow the extraneous variable to interfere. Future researchers can carefully design a method in which more reliable data can be obtained to void this.

Furthermore, the present study limited the investigation to one predictor of writing quality. In contrast, literature comes with other than writing knowledge as predictors of writing quality, such as motivation, interests, needs, limitations, and opportunities (Scarcella and Oxford, 1992), and L2 proficiency (Cumming, 1989; Yanyan, 2010). Thus, future researchers can study several variables as predictors of writing quality.

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