

**Differences in Less Proficient and More Proficient ESL College Writing
in the Philippine Setting**

Leah E. Gustilo

De La Salle University, Manila

Differences in Less Proficient and More Proficient ESL College Writing in the Philippine Setting

Leah E. Gustilo

De La Salle University, Manila

Abstract

The present study aimed at characterizing what skilled or more proficient ESL college writing is in the Philippine setting through a contrastive analysis of three groups of variables identified from previous studies: resources, processes, and performance of ESL writers. Based on Chenoweth and Hayes' (2001; 2003) framework, the resource level variables are represented by linguistic and content knowledge, writing experience, and writing approach; the process variables are represented by *proposer* (idea generation), *translator* (idea encoding), *transcriber* (idea transcription), and *reviser* (idea revision/evaluation). Writing performance was represented by length of essay and writing fluency. Essay score, also a measure of writing performance, was used to group the writers into less proficient and more proficient writers. Means and standard deviations of the items were obtained. The internal consistencies for tests using scales were obtained using Cronbach's Alpha; for tests with right and wrong answers, Kuder Richardson #21 was used. Inter-rater agreement for essay scores was tested using Kendall's Tau coefficient of concordance. To compare the mean scores between the less proficient and more proficient writers, independent samples t-test was used. Results indicated that there are significant differences between the two proficiency groups in content knowledge, vocabulary, elaborative writing approach, school writing experience and confidence in writing, and in all the measures of text production processes. Due to methodological limitations, conclusions made in the present study are restricted to the sample under study and to the genre of writing selected (viz., argumentative essay).

Keywords: proficiency; cognitive process; ESL writing; writing performance; text production processes; writer's resources

Introduction

Writing is often viewed by many as the most difficult task compared to the three macro skills (listening, speaking, reading) because it relies on complex interrelated skills and (meta) cognitive abilities (DeGross, 1987; Devine, 1993; Devine, Railey, & Boshoff, 1993; Gustilo, 2010; Johnson, Mercado, & Acevedo, 2012; McCutchen, 2011; Schoonen et al., 2003; Zhang, 2008; Zhai, 2008). This is why the identification and description of the different factors that underlie L2 writing which characterize good or proficient writing have riveted the

Author's Affiliation: De La Salle University
2401 Taft Avenue, Manila, Philippines 1004
Email Address: leah.gustilo@dlsu.edu.ph

attention of scholars from different disciplines such as second language acquisition (McCune, 2000; Wagner & Stanovich, 1996), writing instruction (Ferrari, Bouffard, & Rainville, 1998; McCormick, Busching, & Potter, 1992), writing assessment (Bacha, 2001; Gustilo & Magno, 2015; Kroll, 1998), cognitive psychology (Flower & Hayes, 1981; Galbraith, 2009), computational linguistics (Grant & Ginther, 2000; Gustilo, 2011; Reid, 1997), and discourse analysis (Aktas & Cortes, 2008; Loudermilk, 2007; Mei, 2007). The present study has identified three groups of variables for contrastive analysis: writers' resources, text production processes, and writing performance.

Many scholars have documented that the writers' resources and text production processes relate to their writing performance (Chenoweth & Hayes, 2001, 2003; Tillema, van den Bergh, Rijlaarsdam, & Sanders, 2011). This interplay has been embodied in the writing model underpinned by the cognitive process framework (Becker, 2006; Flower & Hayes, 1983; Perl, 1978; Pianko, 1979). According to Galbraith (2009), psychological theories focusing on cognitive processes in writing center around two themes: (1) Writing is more than just expressing ideas into text; it is a process of discovering the thought and expressing it appropriately; and (2) Writers need to develop effective writing strategies as the convoluted interacting processes in the writers' mind put high demands on the writers' limited working memory (p. 2).

An important feature of the cognitive process framework (Flower & Hayes, 1980) is the view that writing is recursive and multilayered by nature. It debunked the traditional writing paradigm that views the different processes during writing as linearly sequenced. Planning, translating, and reviewing occur anytime during the composing process through a monitor which facilitates interplay among these processes and allows access to long-term memory and task environment. Long-term memory stores all the relevant knowledge pertaining to the task: linguistic knowledge, topic knowledge, audience expectations, and writing plans; while the task environment represents the writing assignment and the text written so far.

Another feature of the cognitive process model is its characterization of the clear divide between poor or novice writers and good or skilled writers. Research underpinned by cognitive process model was able to establish that good writers have an edge over poor writers when it comes to their knowledge resources. First, good writers have more topic knowledge. They know more about the content of the topic and can easily generate ideas as a product of their prior knowledge (Graham & Perry, 1993). Second, they know more about the different discourse conventions associated with different genres (McCormick et al., 1992). For example, they have a deeper grasp of the comparative organizational structures and more sophisticated aspects of text organization (Ferrari et al., 1998). Lastly, they have more linguistic knowledge (grammar, spelling, vocabulary, etc.). They are not interrupted by language-related problems (Gustilo, 2010; Zamel, 1982), and their increased linguistic experience enables them to be more fluent writers (Chenoweth & Hayes, 2001).

In addition, as regards text production processes, unlike the poor writers, good writers have a rich network of goals (Flower & Hayes, 1981); they produce texts that meet reader expectations and employ a knowledge-transforming strategy (Bereiter & Scardamalia, 1987); they benefit from a complex metacognitive model of writing which enables them to be more aware of their audience and to write with a sense of communication; they have more global

planning strategies compared to novice writers (Humes, 1983); they view revising as a way to refine their compositions (Becker, 2006); they have more ideas generated, more organizational strategies, more ideas retrieved, and more evaluative strategies before transcribing their ideas (Castro, 2005). Writers who are more familiar with the topic generated more content during planning (Bereiter & Scardamalia, 1987).

As regards the good writers' quality of text, it has been documented that they produced highly-rated essays. Gustilo (2010) found that good writers produced highly-rated essays whether or not they employ global planning during the pre-writing stage. As for poor or novice writers, some studies have documented that they produced significantly shorter essays with more writing errors (Ferrari et al., 1998; He, 2010; He & Shi, 2012), while the good writers produced significantly longer and better essays on tasks in which they have more general or topic knowledge (He, 2010). In addition, proficient writers wrote more coherent texts than did the less proficient writers (McCutchen, 1986). They also produced quality first drafts and revisions (DeGross, 1987).

The cognitive process model has several versions (Becker, 2006; Galbraith, 2009; Kellogg, 1994; Kellogg, 2001). The model which is more relevant to the present study is the text production model, developed by Chenoweth and Hayes in 2001, which they further perfected in 2003. It represents the interactions among the resource level—the knowledge stored in the memory; the process level—the processes that are at work in accessing knowledge in the resource level; and the control level—the intentions of the writer that serve as bases for accessing and activating the resources and processes. Within the process level are two components: the external component (audience, the written text, materials used to draft the text) and the internal component, which has four processes: the *proposer*, which is responsible for generating ideas; the *translator*, which encodes ideas into strings of words and sentence structures; the *transcriber*, which translates linguistic strings into text; and the *reviser*, which evaluates and revises both the pre-linguistic ideas and written text (p. 15). The resources and processes in the internal component are accessed and activated according to the purposes and aims of the writer in the control level. The present study used Chenoweth and Hayes' model (2001; 2003) to identify variables representing the writers' resources and text production process, which were analyzed in order to shed light on the differences that distinguish good writers from bad writers.

Although the previous studies discussed above have already given us the characteristics of good and bad writers, other variables such as the factors of writing approaches and writing experience have not been well researched. In addition, there has not been much research on this area in the local university setting involving Filipino undergraduate students writing argumentative essays.

Research Questions

The present study aimed at investigating the differences between good and bad writing of college students by analyzing three groups of variables that have been identified from previous studies. Specifically, it sought to answer whether there are significant differences between the good and bad writers' resources (viz., linguistic knowledge, topic knowledge, writing approach,

and writing background), text production processes (viz., idea generation, idea encoding, idea transcription, and idea revision), and writing performance (viz., length of essay and writing fluency).

Methods

Participants

The present study recruited 112 ESL college freshmen students from four English classes in a private institution in the Philippines. The sample is composed of Filipino students, 66 males and 46 females. The majority of students has been schooled since their preschool years in the Philippine schools whose medium of instruction in most subjects is English. The average number of years of English language learning of the students is 11 years.

Instruments and Data Sets

Writing proficiency diagnostic essay task. The students' writing ability was tested by asking them to write an argumentative essay regarding a controversial issue in the Philippines. They were asked to discuss three reasons in favor of their stand. Using Gustilo's (2013) six-point essay scoring guide, the essays were holistically rated by two raters who have doctoral degrees in Applied Linguistics and who have taught English for more than 10 years. The raters had a consensus that the selected scoring guide captures the elements usually focused on by evaluators in assessing essays written in English as a second language, namely: (1) Content—sound information, adequate and appropriate details; (2) Organization—skillfully arranged ideas in introduction, body, and conclusion; these ideas get their direction from the thesis statement in the introduction; (3) Effective and varied syntactic structures—making use of different sentence patterns; (4) Language use—appropriate choice of vocabulary and correct usage of the English grammar; and (5) Punctuation and mechanics—correct usage of capitalization, spelling, and punctuation rules. The rubric has a minimum score of 1 and a maximum score of 6. A trial rating was held for the raters to ensure that the ratings were not disparate. No essays were rated with 1 and 2; 24 essays were assigned a score of 5, and only 7 was given a score of 6; the majority of essays were assigned either a score of 3 or 4. The computed inter-rater reliability between raters was $\omega = .62$ ($p < .05$). The coefficient of concordance was positive and significant.

The 112 essays were divided into two groups. Those which scored 1–3 (described in the rubric as writing with very little proficiency, little proficiency, and developing proficiency) were considered less proficient (N=81); those which scored 4–6 (described in the rubric as writing with adequate proficiency, advanced proficiency, and highly advanced proficiency) were considered more proficient or good writers (N=31).

Topic knowledge test. A 15-item test with a multiple-choice format was constructed to measure students' background knowledge about the topic of the writing test. The computed Kuder Richardson #21 measuring internal consistency is .83.

Writing production processes scale. After the essay writing, students accomplished a survey regarding the different composing processes they had utilized while writing their essay. Gustilo and Magno's (2015) text production processes scale was adopted for the present study.

The scale has 24 items which aimed at measuring text production processes of writers. The items were based on Chenoweth and Hayes' (2001; 2003) description of the process level of writing, which includes four factors: (1) idea generation, which measures students' strategies and sources of ideas and corresponds to Chenoweth and Hayes' *proposer*; (2) idea encoding, which corresponds to Chenoweth and Hayes' *translator*, and refers to students' strategies in representing their ideas into English words and structures; (3) idea transcription, which represents Chenoweth and Hayes' *transcriber* and tells at what point the writers transcribe their ideas; (4) idea/text revision, which corresponds to Chenoweth and Hayes' *reviser*; it inquires as to whether writers evaluate or revise their texts while writing. The questionnaire has a four-point scale with the following responses: Not at All (1); Very Little (2); Somewhat (3); and To a Great Extent (4). The generated internal consistencies of four subscales ranged from .60 to .70 (see Table 1).

Writing experience survey. Using Gustilo's (2013) writing experience scale, the students accomplished a 12-item structured response format background questionnaire covering three subsets of items. The first subset covers questions that asked students to report about genre or rhetorical conventions they were exposed to in high school; the second subset asks their writing experience in high school; and the third subset their confidence level based on their writing experience. Using data from the present study, internal consistencies ranged from .59 to .89 (see Table 1).

Linguistic knowledge test. Gustilo and Magno's (2015) linguistic tests (grammar, vocabulary, and spelling), which were based on Schoonen et al.'s (2003), were administered to measure linguistic knowledge. Some students aced the tests in 20–30 minutes; others finished them in 40 minutes. First, the students answered a 72-item test that measured their productive grammar skills. Students had to supply the correct forms of the different parts of speech in the English Language and write the correct sentence structures. Using data from the present study, the internal consistency of the test items is .87.

Next, students were tested in their vocabulary knowledge using a 60-item test. The vocabulary items were drawn from freshmen college textbooks. Students had to choose from three or four options. Using data from the present study, the reliability score for vocabulary test is .87.

Lastly, the spelling test consists of 85 items in multiple choice format which measures the students' receptive knowledge in L2 spelling. The students ticked the correct spelling from four choices. Based on the present data, the internal reliability alpha for spelling test is .88.

Writing approach survey. The present study adopted Lavelle and Zuercher's (2001) 74-item scale that measures college writing approaches comprising five subscales: Elaborative, Low Self-efficacy, Reflective-Revision, Spontaneous-Impulsive, and Procedural. The students had to respond to a four-point Likert scale by ticking one of the columns which are labelled Strongly Agree (4), Agree (3), Disagree (3), and Strongly Disagree (1). Its reliability estimates ranged from 0.66 to 0.85.

Overall, the measures of linguistic knowledge, content knowledge, writing experience, and writing approach were grouped under writer's resources (e.g., resource level in Chenoweth and Hayes' 2001, 2003 models). Idea generation, idea encoding, idea transcription, and idea/text revision compose the text production processes (e.g., process level in Chenoweth and Hayes' 2001, 2003 model). Length of essay (total number of written words) and fluency rate (words written per minute) were grouped as measures of writing performance. Essay score was another measure of writing performance. In the present study, following McNamara, Crossley, and McCarthy's (2010) approach, it was used to divide the group into groups of writers: the less proficient (bad writers) and the more proficient (good) writers.

Procedure

The tests were administered during the English classes by participating teachers within a period of two weeks. First, the diagnostic essay writing test was administered on the first week of the 13-week English course. This is a required test prescribed in the course's syllabus, which is aimed at assessing students' weaknesses and areas to improve on in writing academic essays. The students were informed that their diagnostic writing test result would determine whether or not they would be sent to the English Language Laboratory tutorial sessions aimed at helping them improve on their weak areas. Since most students were unwilling to spend additional hours in the writing laboratory, they did not treat this task lightly. The topic familiarity test that measures content knowledge was administered prior to the essay writing test. Then after the diagnostic essay writing, a retrospective survey on the students' text production processes was administered. The linguistic tests, writing background survey, and writing approach survey were administered on the second week of the course.

Data Analyses

The means and standard deviations were obtained for fluency rate, length of essay, linguistic tests, content knowledge test, and measures of writing approach and writing background. The internal consistencies for tests using scales were obtained using Cronbach's Alpha; for tests with right and wrong answers, Kuder Richardson #21 was used. Inter-rater agreement for essay scores was tested using Kendall's Tau coefficient of concordance. To compare the mean scores between the less proficient and more proficient writers, independent samples t-test was used.

Results

Descriptive statistics of the variables under study indicate that, on the whole, the participants of the study are familiar with the topic of the essay and have a fairly good linguistic knowledge stored in their long-term memory as indicated by considerably high mean values in the aforementioned measures (i.e., for vocabulary, $M=41.12$; for spelling, $M=76.04$; for grammar, $M=44.31$; for content knowledge, $M=31.00$; see Table 1). However, there is a large variation among the scores obtained for the knowledge tests ($SD=3.95$ to 7.25). Acceptable internal consistencies were obtained for the tests and scales except for some of the subscales of writing approach, writing background, and text production scales. The low reliability results of some

subscales (see right panel of Table 1) may be explained by the low mean scores (Sasaki & Hirose, 1996) and fewer items of the subscales (Wells & Wollack, 2003).

Table 1

Mean, Standard Deviation, and Reliability of Measures of Variables under Study

	Valid N	M	SD	Reliability
<i>Writer's Performance</i>				
Length of essay	112	306.42	99.23	
Fluency rate	112	10.88	3.77	
<i>Writer's Resources</i>				
Content Knowledge: (40 items)	112	31.00	3.95	.61
Linguistic Knowledge				
Vocabulary (60 items)	112	41.12	5.23	.87
Spelling (85 items)	112	76.04	7.25	.88
Grammar (72 items)	112	44.31	7.15	.87
Writing Approach				
Elaborative	112	2.93	0.32	.85
Low self-efficacy	112	2.84	0.26	.47
Reflective-revision	112	2.82	0.24	.47
Spontaneous-impulsive	112	2.67	0.29	.63
Procedural	112	2.96	0.34	.68
Writing Background				
School writing	112	2.91	0.44	.69
Personal writing	112	1.95	0.69	.59
Confidence	112	2.56	0.70	.89
<i>Writer's Text Production Process</i>				
Idea generation	112	3.22	0.38	.60
Idea encoding	112	3.11	0.49	.70
Idea transcription	112	2.73	0.47	.63
Idea/text revision	112	3.07	0.55	.70

In order to determine whether there are significant differences in the mean scores of students from less proficient and more proficient groups, an independent samples t-test was used. The homogeneity of variances and the normality assumptions that warranted the use of T-Test are satisfied. Results showed that the mean scores of more proficient writers were significantly ($p < 0.005$) higher than the mean scores of less proficient groups in length of essay, fluency rate, vocabulary, content knowledge, elaborative writing approach, school writing, confidence in writing, and in all measures of text production processes as represented in Table 2.

Table 2

Means and sig (2-tailed) of T-Test for equality of means of variables across two groups

Variables Group	Proficiency	N	Mean	<i>p</i>
Length of Essay	highly proficient	31	387.65	0.00*
	less proficient	81	275.33	
Fluency Rate	highly proficient	31	12.78	0.00*
	less proficient	81	10.16	
Vocabulary	highly proficient	31	44.61	0.00*
	less proficient	81	39.78	
Content Knowledge	highly proficient	31	35.13	0.00*
	less proficient	81	29.42	
Spelling	highly proficient	31	77.32	0.24
	less proficient	81	75.54	
Grammar	highly proficient	31	46.16	0.09
	less proficient	81	43.60	
Elaborative Approach	highly proficient	31	71.23	0.01*
	less proficient	81	66.02	
Low Self Efficacy Approach	highly proficient	31	39.94	0.75
	less proficient	81	39.69	
Reflective Approach	highly proficient	31	37.48	0.09

	less proficient	81	36.31	
Spontaneous Approach				0.06
	highly proficient	31	38.84	
	less proficient	81	40.53	
Procedural Approach				0.71
	highly proficient	31	29.81	
	less proficient	81	29.54	
School writing				0.01*
	highly proficient	31	18.42	
	less proficient	81	17.07	
Personal Writing				0.35
	highly proficient	31	2.05	
	less proficient	81	1.91	
Confidence in Writing				0.00*
	highly proficient	31	8.65	
	less proficient	81	7.30	
Idea Generation				0.00*
	highly proficient	31	13.29	
	less proficient	81	12.01	
Idea Encoding				0.03*
	highly proficient	31	13.10	
	less proficient	81	12.21	
Idea Revision/Evaluation				0.04*
	highly proficient	31	13.26	
	less proficient	81	12.30	
Idea Transcription				0.03*
	highly proficient	31	4.81	
	less proficient	81	5.28	

In almost all writing contexts, good writing is appreciated and bad writing is despised. Good writers are rewarded by the success they get in acing written examinations, while bad writers seem to be penalized by their getting low evaluations and failing marks. The present study focused on characterizing good/more proficient ESL student writers vis-a-vis less proficient/bad ESL student writers who wrote an argumentative essay in their English class by identifying

variables in which they significantly differ. The present investigation is motivated by the importance of understanding what skilled or proficient college writing is in the Philippine setting. Results show that there is a significant difference between the two groups of writers, extending previous research findings underpinned by the cognitive process framework that there are differences between less and more proficient writers (Castro, 2005; Ferrari et al., 1998; McCutchen, Francis, & Kerr, 1997). These differences are in terms of knowledge stored in their memory, the production processes they activate, and performance in writing.

Differences in resource level variables. The resource variables (Chenoweth & Hayes, 2001, 2003) identified in the present study are content knowledge, linguistic knowledge, writing approach, and writing experience. The present findings affirm that good or more proficient writers hold extensive vocabulary and topic knowledge. It can be implied that lack of topic familiarity and insufficient vocabulary may have constrained the less proficient writers and made it difficult for them to construct quality texts. A plethora of research has already documented the role of content knowledge in writing (Deane et al., 2008; McCutchen, 2011). Tedick (1988) and He (2010) linked topic knowledge to the quality of essays written by adult ESL writers. Abundant evidence also attested to the centrality of linguistic knowledge in the development of writing skills (McCutchen, 1996; Tedick, 1988). Linguistic knowledge involves mastery of spelling, grammar, genre conventions, and other linguistic aspects. In the present study, of the three linguistic knowledge measures, only vocabulary has a significant difference in the mean scores. This implies that both good and bad writers under study were not constrained by spelling and grammar issues—a finding which is a logical one since the students who were recruited in the present study are college students and the length of their language instruction in Philippine schools has already given them considerable mastery of spelling and grammar of the English language.

In addition to linguistic and content knowledge, an interesting finding in the present study is that good writers possess an elaborative writing approach. They consider writing as a deep personal investment and a tool for one's learning, employing visualization, and thinking outside the box (Lavelle, 1997). This finding confirms Bereiter and Scardamalia's (1987) knowledge-transforming strategy, which is associated with more expert writers who develop elaborate representations that guide the writers during the production of text.

Moreover, unlike the less proficient writers, good writers report more experiences in school writing and confidence in their perceived skills in writing. Sasaki and Hirose (1996) have documented that writing experience is one of the explanatory variables that predict essay scores. Gustilo (2013) has noted that there is a significant correlation between writing experience and essay scores. Although these two studies have indicated that writing experience relates to essay scores, it has not been established that more experiences and confidence in writing are characteristics of good writers. The present study has provided a novel empirical evidence that writing background, indeed, demarcates less proficient and more proficient writers.

Differences in process level variables. Process level variables are represented by idea generation, idea encoding, idea transcription, and idea revision/evaluation (Chenoweth & Hayes, 2001, 2003; Gustilo, 2013). Results of the present study indicated that there are significant differences between the mean scores of less proficient and more proficient writers in all the text

production processes. Idea generation involves production of linguistic message or ideas which are translated into written text by the *translator* facility in the writers' memory. Previous findings have established that these processes are influenced by knowledge resources of the writers (Chenoweth & Hayes, 2001, 2003). Those who have greater familiarity with the topic and those who have a good command of the language showcase fluency in idea generation and in idea encoding. Such finding was confirmed by the more proficient writers in the present study. In addition, the more proficient writers report more revising activities and fluency in transcribing the translated ideas into written text. It follows, therefore, that the less proficient writers lack fluency in the four text production processes.

Differences in writing performance. Following previous studies that identified fluency rate and length of essay as measures of writing performance in addition to essay scores (Ferrari et al., 1998; Chenoweth & Hayes, 2001, 2003; McNamara et al., 2010), the present study compared the length of text and fluency rate of less proficient and more proficient ESL writers. Significant differences in the two measures were found. More proficient writers have longer essays as attested to by the number of words they have written. On the average, their essays have over 100 words more than the essays of the less proficient writers. They wrote 13 words per minute, while the less proficient wrote 10 words per minute. Once again, their writing fluency in terms of production time and produced words may be linked to the great store of knowledge resources and fluency in text production processes previously discussed (McCutchen, 2011; Chenoweth & Hayes, 2013).

Based on the present and previous findings discussed in this study, a profile of more proficient writing by undergraduate students in a Filipino university setting under study, which is underpinned by the cognitive process model framework, can be theorized and summarized. More proficient writers have a good store of resources, which lend support to their production of better and longer essays. First, they possess topic familiarity and a wide reservoir of linguistic knowledge in the resource level, which enable the internal mechanisms in the process level to retrieve information more easily that fulfills their purposes (in the control level) from long-term memory and organize these retrieved information into effective structures. The generation of ideas by the *proposer*, the encoding of these ideas into lexical and syntactical structures by the *translator*, and the evaluation of the acceptability of these structures based on the writer's goals by the *reviser* may be more automatic because of their wide store of knowledge in the long-term memory (Kellogg, 1988; Chenoweth & Hayes, 2001). In addition, more proficient writers are indebted to their writing experiences. Their writing background provides them familiarity to discourse and genre conventions, enabling them to structure tasks that adhere to the conventions of academic writing. As an expected result of their writing experience, they have gained higher confidence level, which may facilitate smooth processing of relevant ideas in their memory. Lastly, embedded in their resource level is an elaborative approach—a deep writing approach—which views writing as a deep personal investment and a tool for one's learning.

Research should investigate the relative contribution of the different variables which characterize skilled or proficient writing by adding psychological factors (e.g., motivation, anxiety) and social factors (e.g., language exposure) in order to arrive at a full-construct representation of writing performance and a more comprehensive inventory of factors that characterize good writing. This entails enlarging the theoretical underpinning of writing

framework to weave a model for writing that is informed by research in cognitive literature, instruction, language assessment, educational psychology, and other related disciplines.

While there is so much to rejoice on these findings regarding Filipino college writing in the genre of argumentative essay, writing instruction has other things to reckon with. Implementing an integrative teaching model that enriches students' resources and text production processes is one. Writing instruction could benefit from not only teaching effective composing strategies (e.g., planning, evaluating, revising) but also from enlarging the different types of knowledge needed in composing (Victori, 2002) the content, structure, and organization of texts. Students should be made aware that their prior knowledge on the topic can facilitate smooth production of quality essays and that they should take serious effort in enhancing their linguistic knowledge. In addition, they should not underestimate the role of writing background experience—a resource that enables students to gain expertise as a result of more practice and exposure to genre and rhetorical conventions. Finally, students would benefit from adopting a deep approach to writing which views it as a tool for one's own learning; such approach enables students to have a more reflective and elaborate engagement during the writing process.

References

- Aktas, R. N., & Cortes, V. (2008). Shell nouns as cohesive devices in published and ESL student writing. *Journal of English for Academic Purposes*, 7, 3-14.
- Bacha, N. (2001). Writing evaluation: What can analytic versus holistic essay scoring tell us? *System*, 29(3), 371-383.
- Castro, C. D. (2005). A protocol analysis of the planning processes of Japanese writers writing in English. *Tanglaw*. Manila, Philippines: De La Salle University Press.
- Becker, A. (2006). A review of writing model research based on cognitive processes. In A. Horning & A. Becker (Eds.), *Revision: History, theory, and Practice* (pp. 25-49). West Lafayette, IN: Parlor Press.
- Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum.
- Chenoweth, N. A., & Hayes, J. R. (2001). Fluency in writing. Generating text in L1 and L2. *Written Communication*, 18(1), 80-98.
- Chenoweth, N. A., & Hayes, J. R. (2003). The inner voice in writing. *Written Communication*, 20, 99-118.
- Deane, P., Odendahl, N., Quinlan, T., Fowles, M., Welsh, C., & Bivens-Tatum, J. (2008). *Cognitive models of writing: Writing proficiency as a complex integrated skill*. Retrieved from <http://www.ets.org/research/contact.html>
- DeGross, L. J. C. (1987). The influence of prior knowledge on writing, conferencing, and revising. *Elementary School Journal*, 88(2), 105-118.
- Devine, J., Railey, K., & Boshoff, P. (1993). The implications of cognitive models in L1 and L2 writing. *Journal of Second Language Writing*, 2(3), 203-225.
- Devine, J. (1993). The role of metacognition in second language reading and writing. In J. G. Carson & I. Leki (Eds.), *Reading in the Composition Classroom: Second language perspectives* (pp. 105-127). Boston: Heinle and Heinle.

- Ferrari, M., Bouffard, T., & Rainville, L. (1998). What makes a good writer? Differences in good and poor writers' self regulation of writing. *Instructional Science*, 26, 473-488.
- Flower, L., & Hayes, J. R. (1980). The cognition of discovery: Defining a rhetorical problem. *College Composition and Communication*, 30, 21-31.
- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Flower, L. S., & Hayes, J. R. (1983). *A cognitive model of the writing process in adults*. ERIC Document Reproduction Service No. ED 240608.
- Galbraith, D. (2009). Cognitive models of writing. *German Foreign Language Journal*, (3), 1-23.
- Grant, L., & Ginther, A. (2000). Using computer-tagged linguistic features to describe L2 writing differences. *Journal of Second Language Writing*, 9(2), 123-145.
- Graham, S., & Perry, M. (1993). Indexing transitional knowledge. *Developmental Psychology*, 29, 779-788.
- Gustilo, L. (2010). What you think, feel, and experience shape your writing: Cognitive, affective, and contextual processes in ESL writing. *The Asia-Pacific Education Researcher*, 19(2), 271-285.
- Espada-Gustilo, L. (2011). Linguistic features that impact essay scores: A corpus-linguistic analysis of ESL writing in three proficiency levels. *3L: Language, Literature, and Linguistics The Southeast Asian Journal of English Language Studies*, 17(1), 55-64.
- Gustilo, L. (2013). An analysis of writer's performance, resources, and idea generation process: The case of Filipino Engineering students. *Language Testing in Asia*, 3(2), 1-14, doi:10.1186/2229-0443-3-2.
- Gustilo, L., & Magno, C. (2015). Explaining L2 performance through a chain of predictors: A SEM approach. *3L: Language, Literature, and Linguistics The Southeast Asian Journal of English Language Studies*, 21(2), 115-130.
- He, L. (2010). The effect of topical knowledge on L2 writing. *Electronic Theses and Dissertations*. Retrieved from <http://hdl.handle.net/2429/27919>
- He, L., & Shi, L. (2012). Topical knowledge in ESL writing. *Language Testing*, 29(3), 443- 464.
- Humes, A. (1983). Research on the composing process. *Review of Educational Research*, 53(2) 201-216.
- Johnson, M., Mercado, L., & Acevedo, A. (2012). The effect of planning sub-processes on L2 writing fluency, grammatical complexity, and lexical complexity. *Journal of Second Language Writing*. Retrieved from <http://dx.doi.org/101016/>
- Kroll, B. (1998). Assessing writing ability. *Annual Review of Applied Linguistics*, 18, 219-240.
- Kellogg, R. T. (1988). Attentional overload and writing performance: Effects of rough draft and outline strategies. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 14, 355-365.
- Kellogg, R. T. (1994). *The psychology of writing*. New York: Oxford University Press.
- Kellogg, R. T. (2001). Long-term working memory in text production. *Memory & Cognition*, 29, 43-52.
- Lavelle, E. (1997). Writing style and the narrative essay. *British Journal of Educational Psychology*, 67, 475-482.
- Lavelle, E., & Zuercher, N. (2001). The writing approaches of university students.

- Higher Education*, 42, 373-391.
- Loudermilk, B. C. (2007). Occluded academic genres: An analysis of the MBA thought essay. *Journal of English for Academic Purposes*, 6, 190-205.
- McCune, V. (2000). *The development of first-year university students' approaches to studying* (Unpublished doctoral thesis), University of Edinburgh, Scotland.
- McCormick, C. B., Busching, B. A., & Potter, E. F. (1992). Children's knowledge about writing: The development and use of narrative criteria. In M. Pressley, K. R. Harris & J.T. Guthrie (Eds.), *Promoting Academic Competence and Literacy in School* (pp. 91-129). San Diego: Academic Press.
- McCutchen, D. (1986). Domain knowledge and linguistic knowledge in the development of writing ability. *Journal of Memory and Language*, 25(4), 431-444.
- McCutchen, D., Francis, M., & Kerr, S. (1997). Revising for meaning: Effects of knowledge and strategy. *Journal of Educational Psychology*, 89(4), 667-676.
- McCutchen, D. (2011). From novice to expert: Implications of language skills and writing-related knowledge for memory during the development of writing skills. *Journal of Writing Research*, 3(1), 51-68.
- McNamara, D., Crossley, S., & McCarthy, P. (2010). Linguistic features of writing Quality. *Written Communication*, 27(1), 57-86.
- Mei, W. S. (2007). The use of engagement resources in high- and low-rated undergraduate geography essays. *Journal of English for Academic Purposes*, 6, 254-271.
- Perl, S. (1978). *Five writers writing: Case studies of the composing processes of unskilled college writers* (Unpublished doctoral thesis), New York University, New York.
- Pianko, S. (1979). A description of the composing processes of college freshmen writers. *Research in the Teaching of English*, 13, 5-22.
- Reid, J. (1997). A computer text analysis of four cohesion devices in English discourse by native and non-native writers. *Journal of Second Language Writing*, 2(2), 79-107.
- Sasaki, M., & Hirose, K. (1996). Explanatory variables for EFL students' expository writing. *Language Learning*, 46(1), 137-174.
- Schoonen, R., van Gelderen, A., de Glopper, K., Hulstijn, J., Simis, A., Snellings, P., & Stevenson, M. (2003). First language and second language writing: The role of linguistic knowledge, speed of processing, and metacognitive knowledge. *Language Learning*, 53(1) 165-202.
- Tedick, D. (1988). *The effects of topic familiarity on the writing performance of non-native writers of English at the graduate level* (Unpublished dissertation), The Ohio State University, Ohio.
- Tillema, M., van den Bergh, H., Rijlaarsdam, G., & Sanders, T. (2011). Relating self-reports of writing behavior and online task execution using a temporal model. *Metacognition Learning*, 6, 229-253. doi: 10.1007/s11409-011-9072-x
- Victori, M. (2002). An analysis of writing knowledge in EFL composing: A case study of two effective and two less effective writers. *System*, 27, 537-555.
- Wagner, R., & Stanovich, K. (1996). Expertise in reading. In K. A. Ericsson (Ed.), *The Road to Excellence: The Acquisition of Expert Performance in the Arts and Sciences, Sports and Games* (pp. 189-225). Mahwah, NJ: Erlbaum.
- Wells, C., & Wollack, J. (2003). An instructor's guide to understanding test reliability.

Retrieved from <http://testing.wisc.edu/Reliability.pdf>

Zamel, V. (1982). Writing: the process of discovering meaning. *TESOL Quarterly*, 16(2), 195-209.

Zhang, J. (2008). A comprehensive review of studies on second language writing. *HKBU Papers in Applied Language Studies*, 12, 1-35.

Zhai, L. (2008). Research methods in the study of influencing factors on L2 writing performance. *Canadian Social Science*, 4(6), 66-74.