

Full Length Research Paper

Students' first language writing skills and their English language proficiency as predictors of their English language writing performance

Abiy Yigzaw

Department of English Language and Literature, Faculty of Humanities, Bahir Dar University, Ethiopia.

Accepted 18 July, 2013

This study endeavored to find out whether or not grade 11 students' L₁ (Amharic, in this case) writing and their L₂ (English) proficiency could significantly predict their L₂ writing. It also investigated whether or not the students' L₂ reading, grammar and vocabulary knowledge could significantly determine their L₂ writing. To this end, students' first semester final English examination, and teacher-made writing (both in L₁ and L₂), English reading, grammar and vocabulary tests were given. Pearson's Correlation Coefficient and multiple regressions were used for analyses. The results indicated that all the predicting (independent) variables significantly correlated with the dependent variable (L₂ writing); however, only students' L₁ writing, first semester overall English and reading test scores were significant predictors of their L₂ writing. Finally, it was recommended that special attention be paid for the students' grammar and vocabulary teaching approach so that they will be able to apply them in their L₂ writing.

Key words: Linguistic interdependence, threshold level, transfer, prediction.

INTRODUCTION

One of the major problems Ethiopian students exhibit at different levels is writing in English (L₂) (Solomon, 2001); and the situation is worse in secondary schools. The problem is acute even at post-secondary levels in which students fail to cope with the writing requirements in the courses they take. What are the causes for students' failure in writing? Is it a problem of using appropriate strategy or lack of adequate threshold L₂ proficiency? In response to these questions, scholars fall back on Cummins' (1976) linguistic interdependence and threshold level proficiency theories. These theories have been issues of contention; so, there is still a felt-need of investigating their impact on students' L₂ writing. This study, therefore, aims at investigating which of these factors significantly contribute to the students L₂ writing competence. Learner factors and the teaching/learning

environment are not included in this study.

Transfer of L₁ writing skills or L₂ threshold level?

The transfer of L₁ skills to L₂ has been viewed differently by experts. On the one hand, the transfer is assumed as inhibitive to the development of learners' L₂ competence. This view is related to L₁ interference with L₂ learning 'resulting learner errors' (Witalisz, 2006:169). Xiao-xia (2008:50), in his review has also indicated that 'former studies... on the L₂ writing production...found that the negative transfer of L₁ was much more powerful than the positive transfer in L₂ writing.' For Xiao-xia, this was based on contrastive analysis. In line with the harmful effect of L₁ transfer to L₂ writing, Bennui (2008) found

that the chronic writing problem exhibited in students' writing was caused by the interference of the L₁ (Thai, in this case). On the other hand, the L₁ writing skills are considered as relevant to enhance L₂ writing. Xiao-xia (2008) has reported that current studies on L₂ writing proved positive transfer of L₁ writing skills because of the dependency of the deep structures of the two languages. As cited in Bennui (2008), Cummins (1976) has provided explanations for the inconsistent findings on the issue. According to Cummins, there may be a threshold level of L₂ linguistic proficiency that learners should attain to gain advantages in their L₂ writing skills.

There still exists a strong argument concerning the impact of transfer of L₁ language learning strategies to L₂ learning. The contention mainly revolves around whether or not the transfer of the learning strategies in L₁ to develop L₂ skills' competence is adequate by itself or also requires a minimum level of competence in the L₂. This pertains to Cummins' (1979) linguistic interdependence and threshold hypotheses. The former hypothesis argues that learners' knowledge and skills of the L₁ can be instrumental and be positively transferred to the development of corresponding abilities in the L₂; while the latter emphasizes the need for threshold level proficiency in the L₂. A lot of researches (such as Bernhardt and Kamil, 1995) have been conducted in reading and writing since Alderson (1984) posed a controversial question of whether second language reading problem is a problem of linguistic interdependence or a problem of linguistic threshold, and others studied to respond to this question, and found varying results; some favoring either of the theories, and some others supporting both.

Linguistic interdependence between L₁ and L₂ writing skills

The Linguistic Interdependence Hypothesis [LIH] (also called the iceberg hypothesis), developed by Cummins (1976), emphasizes the relationship (or influence) between L₁ and L₂ writing skills. The theory maintains the view that what appears to be different in the languages is superficial, but actually the skills in the two languages are interdependent. The LIH developed from Cummins' Common Underlying Proficiency (CUP) theory— which is also called 'One Balloon Theory'— that purports cognitively demanding tasks, such as literacy, content learning, abstract thinking and problem-solving, are common across languages; and they are transferrable. Reading and writing as cognitive skills are deemed to transfer from L₁ to L₂ (Fitzgerald and Shanahan, 2000); and this parallels Cummins (1994) linguistic interdependence theory. However, the transferability of writing skills across languages is inconclusive (Grabe, 2001). Some researchers (for instance, Okabe, 2004) have indicated that there was a weak or no correlation between L₁ and L₂ writing skills.

The threshold hypothesis and transfer of writing skills from L₁ to L₂

Exponents of the threshold hypothesis for a transfer of writing skills from L₁ to L₂ skills contend that a minimum (threshold) level of linguistic competence is compulsory for effective transfer of writing skills from L₁ to L₂ skills. Ito (2009) evinced that the transfer from L₁ to L₂ writing skills was short-circuited by limited L₂ (English) proficiency. In contrast, the study revealed the better the L₂ proficiency level of the writing students, the higher transferability of the L₁ writing skills to L₂ writing could be. As Ito unveiled "...writers of intermediate and advanced proficiency may be able to transfer more L₁ writing skills to L₂ due to their better command of English than ... EFL writers with lower L₂ knowledge" (p.8). Similarly, Berman (1994) also showed that proficient learners could transfer the skill of writing from L₁ to L₂. Both Ito's and Berman's findings, however, do not contradict with the concept of linguistic interdependence theory, but they indicated the need to boost up threshold L₂ competence. A similar result was arrived at by Sasaki and Hirose (1996). Sasaki and Hirose studied the L₁ and EFL writing performance of Japanese students modelling the interplay between EFL proficiency, L₁ writing ability and strategic knowledge and writing experience. The result showed that the students' foreign language (L₂) proficiency was the major predictor of their EFL writing performance.

The roles of students' English language grammatical and vocabulary knowledge and reading ability in developing their writing skills

Students' writing skills in an L₂ can be influenced by their reading experience in the L₂ (Krashen, 1984). Students gain a wider exposure to the L₂ if they are reading various types of reading texts; and, as a result, they expand their vocabulary knowledge, implicitly learning grammar and the organizations of texts, and enrich their ideas in various walks of life. In order to write quality paragraphs (or essays), students' lexical knowledge or vocabulary is also vitally important. Words carry meanings and help students communicate with their readers effectively. Lack of words usually creates a breakdown in communication. Researchers such as Laufer and Nation (1995) and Putra (unpublished MA Thesis at Universtat Pelita Harapan, 2009) asserted that students' vocabulary knowledge and writing performance correlate significantly. As many agree, vocabulary knowledge alone, however, cannot end in accurate and effective writing. Communication demands the use of words in sentences; that is, the need for grammatical knowledge is also unquestionable.

This study attempted to investigate which of the variables- students' English language proficiency or their L₁ writing ability- can predict their L₂ writing ability. It also tried to find out whether or not students' English grammar

and vocabulary knowledge as well as their reading ability could significantly predict their writing in English. As indicated in the introductory section of this paper, Ethiopian high school students have difficulties in English language writing, and therefore different methods should be devised to alleviate their deficiencies. One method might be having recourse to their L₁ writing strategy use; and the other could be developing their L₂ proficiency, or focusing on both. Which of these factors does predict students' L₂ writing significantly? Such a study was not conducted in Ethiopia to date. Therefore, this study endeavors to respond to the following research questions.

1. Is there a relationship between students' L₁ and L₂ writing scores?
2. Is there a correlation between students' overall first semester English language scores and their English writing scores?
3. Is there a relationship between students' English grammar, reading and vocabulary scores and their English writing scores?
4. Which of the variables- students' L₁ writing or overall first semester English language scores- significantly predict students' English language writing scores?
5. Which of the variables- students' L₁ reading, vocabulary or grammar scores- significantly predict students' English language writing scores?

METHODOLOGY

Design of the study

This study aimed to investigate whether or not students' Amharic (L₁) writing ability and their overall English language (L₂) performance could significantly predict their L₂ writing. Besides, it also looks into whether or not their English grammar knowledge, their reading ability and vocabulary knowledge significantly predict the development of their L₂ writing performance. Therefore, a regression design was employed using students' L₂ writing as dependent variable and students' L₁ writing ability, their overall L₂ examination results, their L₂ vocabulary, reading and grammar knowledge as independent variables.

Participants of the study

The participants of the study were the 2011/12 academic year grade 11 students at Bichena Secondary School, East Gojjam, Ethiopia. Two sections were selected based on simple random sampling from the total 10 grade eleven sections; and 94 (47 from each section) students were randomly selected from the two sections.

Instruments used

In order to look into whether or not the predicting variables (students' L₁ writing competence, L₂ proficiency, L₂ grammar knowledge, reading ability and vocabulary knowledge) impact on students' L₂ writing, their first semester English examination scores, their Amharic writing, English grammar, vocabulary and reading

tests scores were used for the purpose. The tests used for data gathering were teacher-made tests in all cases because there were no standard tests as such in the Ethiopian schools, on one hand; and the teachers were well-experienced and deemed to be familiar with the curriculum objectives and the students' level of learning, on the other. Thus, it was thought that the teachers could prepare tests to the students' level based on the curriculum objectives and level descriptors in general, and lessons objectives in particular.

Students' first semester English language scores

The first semester English (L₂) scores, which included results of the continuous assessments and the final examination, were taken to assess the students' proficiency level. The examination constituted items in Reading Comprehension, Vocabulary, and Grammar sections; and it was assumed to be free of bias in evaluating students' overall achievement in English. The examination, besides evaluating students' achievement in the semester curriculum content, is assumed to indicate the students' proficiency in the language. As stated above, there were no standard tests to gauge grade 11 students' proficiency. Application of international standard proficiency tests such as TOEFL were considered implausible because of the English language learning environment in Ethiopia, the general nature of TOEFL and IELTS and their inapplicability as specific at grade 11 level. Therefore, teacher-made tests were taken as measurements for students' L₂ proficiency (and, of course, achievement). Such examinations (tests) in Ethiopia also serve as diagnostic proficiency tests for employment. The overall scores students achieved in the examination were taken out of 50.

The writing, grammar, vocabulary and reading tests

Teacher-made Amharic and English writing tests were given to the participants. This was preferred because the teachers, who were well-experienced and were familiar with the curriculum objectives, were assumed to prepare 'standard' tests to the level based on the learning objectives and the level expected of the students. The tests were developed by Amharic and English teachers, the same teachers who taught the same groups of students who participated in this study. Both the Amharic and the English teachers selected topics which were familiar to the students; and the students were ordered to write freely on a 150 words level. The tests were given within a week time gap: the Amharic in the first week, then the English. The participants' Amharic and English writing scores were taken out of 50 each. Each of the writing tests was corrected by two teachers (raters) for validity of scores; thus the average scores of the raters were considered as students' writing scores.

Students were also given teacher-made English grammar, vocabulary and reading tests; and the reason for choosing teacher-made tests was teacher's experience and familiarity with the curriculum objectives. The tests were also evaluated by two other English teachers in the same school for validity. The tests items were similar to the items given in the final English examination. These tests were given on different days two weeks before their final examination. The grammar and vocabulary tests also included items from their previous grade levels; and this made them different from the items included in the first semester final examination. The reading test was prepared based on the grade level of the students. The grammar, vocabulary and reading tests were developed by the English teacher separately who taught the groups of students selected for the study. This was done because the teacher had the experience and the knowledge about his students' level, the lesson objectives and the contents included in the textbook meant for the level. Each of the students' grammar, vocabulary and reading scores was taken out of 50.

Table 1. Correlations among students' EW, AW and their OEL test scores and results from the regression analysis

Variables	Mean	SD	Correlation with EW	Multiple regression weights		
				Beta	t	Sig.
EW scores	22.9175	8.44303				
AW scores	29.1340	7.00837	.629*	.498	5.664	.000
OEL scores	25.4691	5.76484	.512*	.267	3.042	.003 R ² =.450*

*Significant at p<0.05

Key: EW=English Writing; OEL=Overall English Language semester scores; AW=Amharic Writing.

Table 2. Correlations and regression analyses among students' EW, English language grammar, reading and vocabulary results.

Variables	Mean	SD	Correlation with EW	Multiple regression weights		
				Beta	t	Sig.
EW results	22.9175	8.44303	.285*	.089	.823	.410
Grammar results	25.0155	8.54353				
Reading results	25.8866	7.37800	.427*	.294	2.448	.016
Vocabulary results	23.2423	6.64545	.383*	.153	1.211	.229 R ² =.210*

*significant at p< 0.05

Methods of data analysis

Descriptive statistics such as means and standard deviation as well as inferential statistics particularly Pearson's correlation and multiple regression were used to analyze data. Pearson's correlation was used to see the relationships between the independent variables (students' L₁ writing ability, their overall L₂ examination results, their vocabulary, reading and grammar knowledge) and the dependent variable (L₂ writing results). The independent variables which significantly correlated with the dependent variable were further analyzed using multiple regression statistics to see which of the independent variables significantly predict the dependent variable. The findings are summarized in Tables 1 and 2.

RESULTS

Table 1 indicates that the students' Amharic test result was greater than their overall English language examination result; and their English writing test result was less than their Amharic test result and overall English language semester result. The students' overall English language semester result was almost equal to half of the total score (50); their Amharic test result was their best result, but their English language writing test score was below average. All the scores have high standard deviations which show that the students' responses varied among individuals.

Pearson's correlation coefficient was computed to see whether or not there were significant relationships between the students' OEL, AW, and EW test results. As can be seen from Table 1, there was a significant positive correlation between students' EW and their AW test

results (.63), and their EW and their OEL test results (.51) as well as their AW and their OEL test results (.49). In order to determine the significant predictors of the students' writing in English, a regression analysis was carried out. The results are summarized in Table 1.

As the R² result indicate, both the students' AW writing skills and overall English language examination scores together determine (predict) their English writing scores by 45%; and this was significant at p<0.05. As the multiple regression result for individual predicting variables indicated, both AW and OEL skills predict students' writing skills significantly at p<0.05, the Beta for AW results being .498 and for OEL being .267, with t-values of 5.664 and 3.042, respectively.

As indicated in Table 2, the descriptive statistics shows that students' English language grammar and reading results were almost half of the total score in each case (50), while their vocabulary result was a little below half. The standard deviations in all cases show that the students' responses have high deviations from mean scores. Pearson's correlation coefficient results indicate that students' English grammar test scores significantly correlated with their English writing scores (r²=0.29). Similarly, their English language reading and writing (r²=0.43) as well as their vocabulary and writing (r²=0.38) results significantly correlated.

These results were further investigated using regression analysis to see the significant predictors of students' English language writing performance. The students' English language grammar, reading and vocabulary results together predicted their English language writing

results by 21%; and this was significant at $p < 0.05$. The regression analysis for individual predicting variables, however, indicated that only the students' reading results could significantly predict their EW at $p < 0.05$.

DISCUSSION

The results of the study indicated that the students' L_1 writing results and their overall English language semester results were significantly positively correlated with their L_2 writing scores. This may mean the increase in their L_1 writing scores and their overall English language scores may increase their L_2 writing scores. Conversely, it may mean the less the students' L_1 writing test scores and their overall English language semester scores indicate the less their L_2 writing scores would be. This result implies that students' writing skill in their L_1 and their overall English language semester scores have an impact on their L_2 writing skill development. This can possibly be interpreted as the strategy transfer from L_1 to L_2 writing is preordained; and a threshold level of proficiency is crucial. The finding concerning L_1 skill transfer to L_2 writing is inconsistent with Okabe's (2004) finding which disclosed that there was a weak or no correlation between L_1 and L_2 writing skills, on one hand; and consistent with Fitzgerald and Shanahan's (2000) finding that revealed writing skills transfer from L_1 to L_2 , on the other. The finding in this study testifies (parallels) Cummins (1994) linguistic interdependence theory. The fact that students' overall L_2 semester score influences their L_2 writing skill development can be taken as a proof for Cummins' (1978) hypothesis of the need for L_2 threshold level proficiency (See also Grabe, 2001) so as to compose in an L_2 effectively (and also fluently).

Similarly, the students' English grammar, reading and vocabulary scores were significantly positively correlated with their L_2 writing scores. This may mean the higher the students' scores in English reading, grammar and vocabulary tests, the higher their scores in their L_2 writing tests would be. On the contrary, the less the scores in the independent variables, the less their scores in their L_2 writing scores could be. This finding partly agrees with the assertion Laufer and Nation (1995) made that students' writing performance and vocabulary knowledge correlate significantly.

The regression analysis has disclosed that the students' L_1 writing score has significantly predicted their L_2 writing score ($p < 0.05$). This result suggests that students should be trained in their L_1 to apply the skill (strategy) in composing their L_2 . Likewise, their overall first semester English language scores also predicted their L_2 writing significantly ($p < 0.05$). This also indicates the need for minimum level proficiency in the L_2 to effectively compose in the L_2 . Both results show that L_1 reading skill and L_2 proficiency are crucial for students in the process of their L_2 writing skills development. These findings comply with Grabe's (2001) idea that both

L_1 reading skill and L_2 proficiency are important; and these also prove Cummins' (1994) linguistic interdependence and linguistic threshold theories.

The regression analysis also divulged that students' reading scores were significant predictors of their writing scores. This result is in line with the view of Krashen (1984). As Krashen noted, students' reading experience can influence their L_2 writing ability. This sounds true because students in a foreign language environment get language input from their readings, and this input helps them develop their overall language ability, and particularly writing since they learn organization, structure and other elements of composition implicitly. On the other hand, students' grammar and vocabulary scores were not significant predictors of their writing scores. This result is unexpected because as Laufer and Nation (1995) has pointed out, students' vocabulary knowledge and their writing performance significantly correlate. In this study, despite the significant correlation they possess, vocabulary knowledge was not a significant predictor of students' writing. Kim (2008) also reported that students' with a good deal of knowledge of L_2 vocabulary had difficulties writing essays in the L_2 . The cause for this might be the vocabulary knowledge students have is knowledge of distinct terms alienated from contextual use. And, this assumption is likely to happen because the conception of learning most Ethiopian students have is memorization (of words and even phrases) as some studies indicate (Abiy, 2005). They usually fail to apply what is learned (studied) into practice (in this case, failure to use their vocabulary knowledge in their writing).

The same is true with the grammar knowledge. Despite the tendency to apply communicative approaches, students in Ethiopia study the rules of grammar, rather than its application in oral or written communication; and this affects their use of the grammar knowledge in their L_2 writing. This was clearly indicated by Solomon (2001) that high school students' low achievement in English was caused by the 'grammar focused teaching approach' teachers employed. It also goes consistent with what Kim (2008:1) remarked as many L_2 writers with adequate sentence-level knowledge of grammar fail to compose well-organized essays.

Conclusion and Recommendations

Based on the findings, it may be possible to conclude that students' L_1 experience in writing and their threshold L_2 proficiency are significant predictors of their L_2 writing. Similarly, students' reading skill in an L_2 also impacts on students' effective L_2 writing. However, students' vocabulary and grammar knowledge is not significant predictor of their L_2 writing. Therefore, it is recommended that teachers teach vocabulary and grammar through contexts so that students can learn how to apply their knowledge into practice; that is, in their L_2 compositions.

REFERENCES

- Abiy Y (2005). Effects of Teacher Mediation on Student Conceptions and Approaches to Reading, PhD Dissertation (Unpublished), Addis Ababa University.
- Alderson JC (1984). Reading in a Foreign language: A Reading Problem or a Language Problem? In: Alderson JC & Urquhart AH (Eds.), Reading in a foreign language. London: Longman.
- Bennui P (2008). 'A Study of L1 Interference in the Writing of Thai EFL Students.' *Malaysian J. ELT Res.* 4:72-102.
- Berman R (1994). 'Learners' Transfer of Writing Skills between Languages.' *Tesl Canada Journaurevue Tesl Du Canada* 12(1):29-46.
- Bernhardt EB, Kamil ML (1995). 'Interpreting Relationships between L1 and L2 Reading: Consolidating the Linguistic Threshold and the Linguistic Interdependence Hypotheses.' *Appl. Linguist.* 16(1):15-34.
- Cummins J (1976). 'The Influence of Bilingualism on Cognitive Growth: A Synthesis of Research Findings and Explanatory Hypotheses.' *Working Papers on Bilingualism* 9:1-43.
- Cummins J (1979). 'Linguistic Interdependence and the Educational Development of Bilingual Children.' *Rev. Educ. Res.* 49(2):222-251.
- Cummins J (1994). 'The Acquisition of English As a Second Language. In: Spangenberg-Urbschat K & Pritchard R (Eds.), Kids come in all languages: Reading Instruction for ESL Students, Newark, DE: International Reading Association pp.36-62.
- Fitzgerald J, Shanahan T (2000). 'Reading and Writing Relations and their Development.' *Educ. Psychol.* 35:39-50.
- Grabe W (2001). 'Reading-Writing Relations: Theoretical Perspectives and Instructional Practices,' In: Belcher D and Hirvela A (eds.), *Linking Literacies: Perspectives on L2 Reading-Writing Connections* pp.15-47.
- Ito F (2009). 'Threshold to Transfer Writing Skills From L1 to L2.' Online Submission, Revised version of paper presented at the Symposium on Second Language Writing, Nagoya, Japan, 2007.
- Kim T (2008). Korean L₂ Writers' Previous Writing Experience: L₁ Literacy Development.' *Second Lang. Stud.* 27(1):103-154.
- Krashen S (1984). *Writing. Research, Theory and Applications.* New York: Prentice-Hall.
- Laufer B, Nation P (1995). 'Vocabulary Size and Use: Lexical Richness in L2 Written Production.' *Appl. Linguist.* 16(3):307-322.
- Okabe J (2004). 'The nature of L2 writing by Japanese learners of English.' In V Makarova, & T Rodgers, *English language teaching: The case of Japan* (pp. 181-201). Munich: Lincom Europa.
- Sasaki M, Hirose K (1996). 'Explanatory Variables for EFL Students' Expository Writing.' *Language Learn.* 46(1):137-174.
- Xiao-xia L (2008). 'Literature Review on the Use and Effect of L1 in L2 Writing.' *US-China Foreign Language* 6(5):50-53.
- Witalisz E (2006). 'Transfer in L2 Writing: Linguistic Competence Vs. Composing Skills.' *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 123:169-179.
- Solomon M (2001). "Assesment of Relavance of Business English Course at CommercialCollege of Addis Ababa to the Needs of Employing Organizations" (anunpublished MA thesis). Addis Ababa: AAU.