

# **Threshold to Transfer Writing Skills From L1 to L2**

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## Abstract

Over the past three decades, many researchers have been investigating the presence of a threshold level of linguistic competence, below which low L2 reading proficiency hampers transfer of L1 reading skills to L2. However, less emphasis has been placed on the threshold level in L2 writing, below which low L2 proficiency is an obstacle to transfer of L1 writing skills to the writing of L2 texts. Therefore, this study investigates the existence of the threshold level in L2 writing. Based on 317 Japanese (L1) and English (L2) essays, and English proficiency scores gathered in a four-year Japanese university, it is tentatively concluded that EFL university students in Japan need to establish some knowledge of L2 proficiency before they can successfully draw on their L1 writing skills to help with L2 writing.

**Keywords:** Threshold Transfer L2 Writing L1 Writing Writing Skills

## 1. Introduction

It has been hypothesized that L2 (second language) readers are not able to draw on their L1 (first language) reading skills for the successful development of L2 reading skills until they develop a certain proficiency in L2 because a lack of proficiency blocks transfer of L1 reading skills to the reading of L2 texts. This minimum degree of language proficiency in a target language is called a *threshold level of linguistic competence*. Over the past three decades, the existence of the reading threshold level has been investigated in a number of relevant studies, and this research has contributed to the overall growth of L1-L2 reading relationship research. In contrast, L2 writing researchers have not adequately examined a writing threshold level hypothesis to propose that interlanguage transfer of writing skills, in the same way as reading skills, is possible only when writers attain L2 proficiency over the “threshold level.” There is a need to more fully explore this threshold level; therefore, the objective of this study is to explore the threshold level to transfer writing skills from L1 to L2.

## 2. Literature Review

The relationship between L1 and L2 reading skills has been widely confirmed in relevant investigations that imply the transferability of reading skills across languages (e.g., Bossers, 1991; Carrell, 1991; Hulstijn & Bossers, 1992). However, some ESL (English as a Second Language)/EFL (English as a Foreign Language) reading researchers claim that a restricted level of L2 proficiency indicates little connection between L1 and L2 reading skills, and that L2 reading is fundamentally a function of both L1 reading skills and L2 proficiency (e.g., Lee & Schallert, 1997, Shokrpour & Gibbons, 2000). This certain level is referred to as a *threshold level of linguistic competence* first proposed by Cummins (1979). The central idea underlying this concept is that direct transfer of L1 reading skills to L2 occurs only when a

sufficient control over a target language is acquired. In short, an interest in the relationship between reading skills in L1 and L2 has prompted some relevant examinations relating L2 reading skills to both L1 reading skills and the level of linguistic knowledge.

In contrast, the relationship between L1 and L2 writing skills has been investigated by some studies (Carson, Carrell, Silberstein, Kroll, & Kuehn, 1990; Hirose & Sasaki, 1994; Ito, 2004; Sasaki & Hirose, 1996), and this research has contributed to the development of the study of the L1-L2 writing connection. However, different from reading, no researchers have examined a writing threshold hypothesis which postulates that the attainment of minimum foreign language proficiency is necessary for ESL/EFL learners to transfer their L1 writing skills to L2. In other words, since there have been no successful studies that examine the hypothesis, a real need exists to identify the threshold level in L2 writing. Thus, the purpose of this study is to examine whether low L2 proficiency produces a short-circuit effect on the relationship between L1 and L2 writing skills. Specifically, the present investigation will test the following hypothesis:

The statistically significant correlation between Japanese (L1) and English (L2) writing skills is short-circuited by limited English proficiency, while the correlation between L1 and L2 writing skills is statistically significant among writers with relatively advanced levels of L2 proficiency.

### **3. Method**

#### **3.1 Participants**

Data from 317 Japanese EFL university students enrolled in general English courses were used in the analysis of the present study. All of them were native speakers of Japanese, and they had graduated from junior and high schools in Japan before they entered the university. That is to say, prior to this experiment, they had received at least six years of academic English education in secondary school, the curriculum of which was tightly controlled by the Ministry of Education, Culture, Sports, Science and Technology.

The proficiency level of the 317 participants was assessed by the TOEIC (Test of English as International Communication) IP (Institutional Program), with an average of 405.30 ( $SD = 103.27$ ), which was 9.84 points lower than the average score of the TOEIC IP (415.00) administered in Japanese four-year universities in the 2001 school year (see Kokusai Bijinesu Komyunication Kyokai, 2002). English proficiency levels varied from a low of 155 to a high of 805, the majority at the intermediate level. Subjects' ages ranged from 18 to 23, with an average of 19.99 ( $SD = 1.12$ ).

#### **3.2 Instruments**

The instruments consisted of the following three tests: an objective standardized English proficiency test and argumentative writing tasks in English and Japanese. The language proficiency test selected in this study was the TOEIC. It covered listening (100 multiple-choice questions) and reading (100 multiple-choice questions) performance, with a perfect score of 990. The dependent variable of L2 writing skills was examined by means of the TWE (Test of Written English). The writing prompt

(Educational Testing Service, 1996, p. 54) seen below was utilized as the data-gathering instrument of L2 texts to examine the participants' argumentative compositional proficiency.

Do you agree or disagree with the following statement:

*Teachers should make learning enjoyable and fun for their students.*

Use reasons and specific examples to support your opinion.

The participants wrote their L1 essays, the independent variable, from the same prompt of the TWE following the same procedure.

### 3.3 Procedures

There were three test sessions, separated by one-week intervals. Figure 1 illustrates the experimental design. During the first session in January 2002, the TOEIC was administered. It was followed by the second session (the first writing tests, in which 167 students wrote L1 essays; 150 students L2 essays) and the third session (the second writing tests, in which 167 students wrote L2 essays; 150 students L1 essays).

The research methodology regarding the use of the same prompt and the counterbalance of a possible order effect of L1/L2 writing was adapted from the recent studies of the relationship between L1 and L2 text quality (Hirose & Sasaki, 1994; Sasaki & Hirose, 1996; Kubota, 1998). Two writing tasks of the same prompt both in Japanese and English were given to the participants. The same prompt was used in order to reduce not only the variability of the raters' evaluation (Kobayashi & Rinnert, 1996) but also the writers' performance from topic to topic, as pointed out in some studies (Friedlander, 1990; Jacob, Zinkgraf, Wormuth, Hartfiel, & Hughey, 1981; Reid, 1990). In addition, to neutralize a possible order effect of Japanese and English writing tasks, 167 participants composed essays in Japanese, and the remaining 150 did so in English in the second session. After a one-week interval, the participants who had written in Japanese first wrote in English next (L1 → L2); those who had written in English in the second session wrote in Japanese on the same topic in the third session (L2 → L1). In the second session, the participants were not informed that they would be writing on the same topic in Japanese and English the

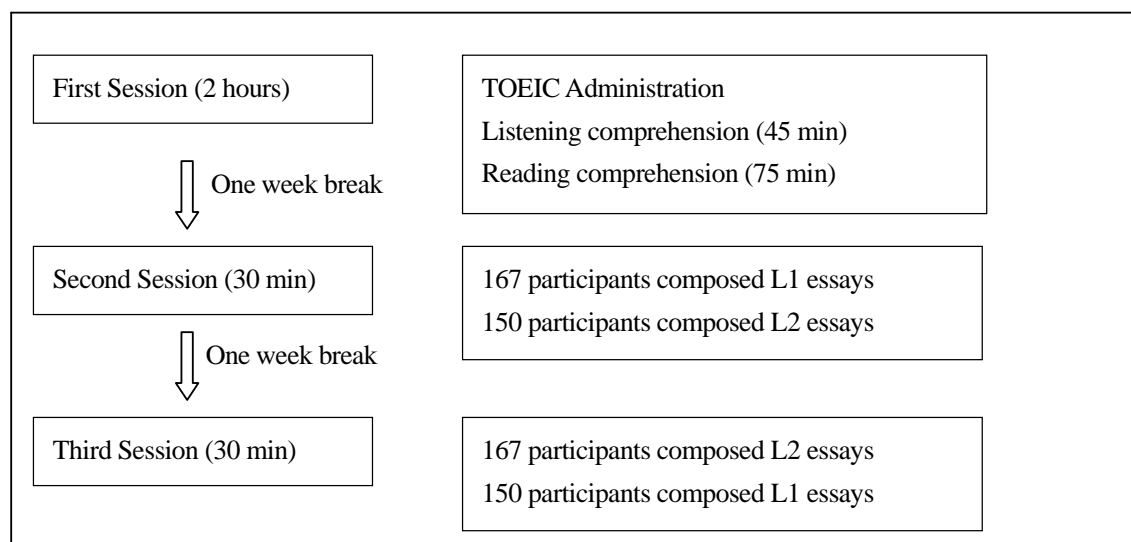


Figure 1. Experimental design.

following week. Following the TWE procedure for administration, dictionaries were not allowed. The same time limit (30 minutes) was set for both L1 and L2 writing sessions.

### 3.4 Evaluation of Essays

The evaluation of L1 argumentative essays was expressed on a 6-point scale for Japanese essays developed by Carson et al. (1990) (see Appendix A). The selected raters were instructors at a four-year university specializing in Japanese literature. The evaluation of L2 essays was based on TWE scoring guidelines (see Appendix B). The selected raters of L2 texts were Japanese EFL instructors who held Ph.D. degrees in TESOL. The score for each essay was the average of the two independent ratings, which was consistent with the TWE evaluation procedure.

## 4. Results and Discussion

### 4.1 Descriptive Statistics and Reliability

Table 1 presents descriptive statistics for the three primary variables of L1 essay quality, L2 essay quality, and L2 proficiency (TOEIC) scores. The mean score of the L1 composition was 2.06; that of the L2 composition was 1.75. Both were considered low. Moreover, the mean score of L2 proficiency was 405.30.

Two measures of interrater reliability for the two raters, the Pearson product-moment correlation and the coefficient alpha (Cronbach's alpha), are reported in Table 2, along with rater means and standard deviations. The interrater reliabilities measured by the Pearson correlation and coefficient alpha for

Table 1  
*Descriptive Statistics of Three Variables (N = 317)*

| Variable       | M (%)         | SD     | MPS    | Obtained Range (%)              |
|----------------|---------------|--------|--------|---------------------------------|
| L1 Essay       | 2.06 (34.3)   | .81    | 6.00   | 1.00 (0.0) --- 4.50 (75.0)      |
| L2 Essay       | 1.75 (29.2)   | .77    | 6.00   | 1.00 (0.0) --- 4.00 (66.7)      |
| L2 Proficiency | 405.30 (40.9) | 103.27 | 990.00 | 155.00 (15.7) --- 890.00 (89.9) |

Note. MPS = maximum possible score.

Table 2  
*Essay Rater Means, Standard Deviations, Pearson Product-Moment Correlation, and Coefficient Alphas (N = 317)*

|                 | Rater |      | Pearson | Coefficient Alphas |
|-----------------|-------|------|---------|--------------------|
|                 | 1     | 2    |         |                    |
| <b>Japanese</b> |       |      |         |                    |
| M               | 2.04  | 2.08 | .76     | .86                |
| SD              | .88   | .86  |         |                    |
| <b>English</b>  |       |      |         |                    |
| M               | 1.72  | 1.78 | .85     | .92                |
| SD              | .77   | .83  |         |                    |

Table 3

*Correlation between L1 and L2 Writing Skills, and its Confidence Interval (N = 317)*

|  |               |
|--|---------------|
| <b>L1 Writing Skills×L2 Writing Skills</b> | .474**        |
| <b>Confidence Interval</b>                 | .384 --- .555 |

\*\* $p < .01$ .

Japanese essays were .76 and .86; those for English essays were .85 and .92, all of which were considered acceptable.

#### 4.2 Data Analysis and Discussion

First, the Pearson product-moment correlation was performed between L1 and L2 writing skills. The correlation between the two writing scores in L1 and L2 was .474 with a 95 % confidence interval of .384 to .555, shown in Table 3. At the .01 level, the observed correlational value of .474 was significant between Japanese composition and English composition scores. The results suggest that the participants' essays in L1 and L2 tended to be similar in quality, and this was consistent with previous findings of various comparative analyses of composition skills in L1 and L2 (e.g., Cook, 1988; Cumming, 1989; Hirose & Sasaki, 1994; Kamimura, 2001; Sasaki & Hirose, 1996).

Next, the hypothesis of this study was tested. Proficiency-levels were formed by dividing scores into equal proficiency strata (45-point intervals) to provide statistical insight into the effects of different aspects of linguistic proficiency on each correlation between L1 and L2 composition scores. Table 4 presents frequency distribution of L2 writing quality for TOEIC scaled scores. Those students who scored in the 250-295 TOEIC interval were placed in Level I (N = 34), scores 300-345 in Level II (N = 43), 350-395 in Level III (N = 81), 400-445 in Level IV (N = 51), 450-495 in Level V (N = 42), and those scoring 500-545 in Level VI (N = 27). The number of students in the other six proficiency groups of 150 to 195 (N = 2), 200 to 245 (N = 10), 550-595 (N = 13), 600-645 (N = 6), 650-695 (N = 5), 700-745 (N = 1), 750-795 (N = 0), 800-845 (N = 1), and 850-895 (N = 1) were too small to calculate correlations; therefore, they were eliminated from the current analysis.

Six correlations of Level I, II, III, IV, V, and VI were performed in Table 5, as illustrated in Figure 2. It is important to note that there is a large gap between Level I and Level II, and that Level I showed non-significant correlation (.125), whereas the other five levels revealed low or moderate significant correlations (.330, .295, .564, .512, .497). The significant L1-L2 writing connection appears to be short-circuited by a limited English proficiency. The results imply that a threshold level of English proficiency could be posited between the two proficiency groups of Level I and Level II. In other words, English proficiency below Level II may have a detrimental effect on the development of English writing skills. After the students' proficiency reaches this level, however, L1 writing skills seem to help the progress in L2 writing. This is congruent with previous studies implying the existence of the low L2 proficiency "short-circuit" effect (Ito, 2004; Kamimura, 1996; Sasaki & Hirose, 1996).

It is also noteworthy that there is another large gap between Level III and Level IV. It is

Table 4

*Frequency Distribution of L2 Writing Quality for TOEIC Scaled Scores (N = 317)*

| TOEIC      | 150<br>-195 | 200<br>-245 | 250<br>-295 | 300<br>-345 | 350<br>-395 | 400<br>-445 | 450<br>-495 | 500<br>-545 | 550<br>-595 | 600<br>-645 | 650<br>-695 | 700<br>-745 | 750<br>-795 | 800<br>-845 | 850<br>-895 | Sub-total |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| L2 Writing |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |           |
| 6.0        |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | 0         |
| 5.5        |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | 0         |
| 5.0        |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | 0         |
| 4.5        |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             | 0         |
| 4.0        |             |             |             |             |             |             | 2           |             |             | 1           | 1           | 1           |             | 1           | 1           | 7         |
| 3.5        |             |             |             |             |             | 1           | 1           |             |             |             |             |             |             |             |             | 2         |
| 3.0        |             | 1           |             | 1           | 8           | 6           | 4           | 7           | 3           | 1           | 2           |             |             |             |             | 33        |
| 2.5        |             | 1           | 2           | 3           | 3           | 3           | 5           | 6           | 1           | 2           | 1           |             |             |             |             | 27        |
| 2.0        | 1           | 3           | 6           | 9           | 27          | 15          | 12          | 7           | 5           | 2           |             |             |             |             |             | 87        |
| 1.5        |             | 1           | 1           | 4           | 13          | 6           | 6           | 2           | 2           |             |             |             |             |             |             | 35        |
| 1.0        | 1           | 4           | 25          | 26          | 30          | 20          | 12          | 5           | 2           |             | 1           |             |             |             |             | 126       |
| Sub-total  | 2           | 10          | 34          | 43          | 81          | 51          | 42          | 27          | 13          | 6           | 5           | 1           | 0           | 1           | 1           | 317       |

Table 5

*Six Levels of Correlations between L1 and L2 Writing Scores (N = 278)*

|         | I (N=34) | II (N=43) | III (N=81) | IV (N=51) | V (N=42) | VI (N=27) |
|---------|----------|-----------|------------|-----------|----------|-----------|
| TOEIC   | 250-295  | 300-345   | 350-395    | 400-445   | 450-495  | 500-545   |
| L1W×L2W | .125     | .330*     | .295**     | .564**    | .512**   | .497**    |
| Sig.    | .481     | .031      | .007       | .000      | .001     | .008      |

\* $p < .05$ . \*\* $p < .01$ .

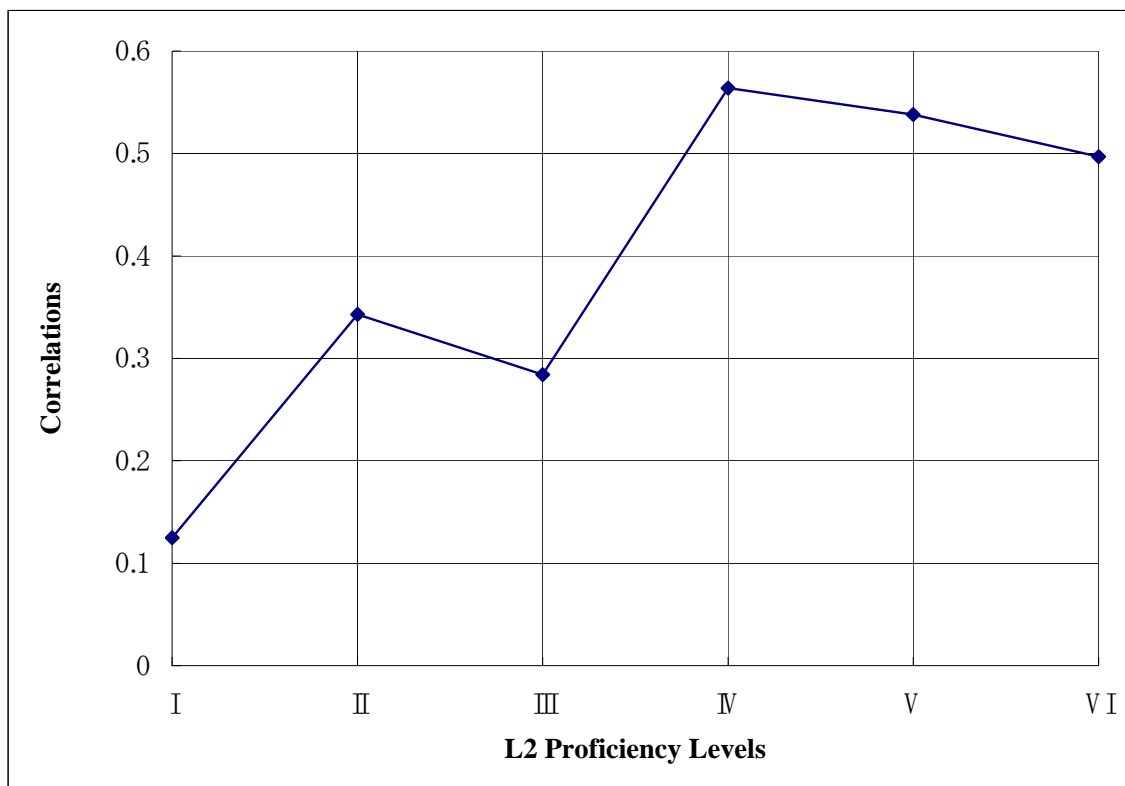


Figure 2. Six correlations at different proficiency levels.

apparently more difficult to interpret the reason for this second abrupt rise than the first rise, but it is nevertheless important. The second sudden rise between Level III and Level IV suggests that further progress in L2 writing correlating to L1 writing skills may be possible after the students reach the intermediate proficiency level. In short, Japanese EFL 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 Japanese EFL writers with lower L2 knowledge.

## 5. Conclusions and Pedagogical Implications

This present study examined whether low L2 proficiency produced a short-circuit effect on the relationship between L1 and L2 writing skills. The results of the data analysis provided tentative support for the hypothesis in this investigation. It appears that EFL Japanese university students who received at least six years of academic English education in secondary school need to establish some knowledge of L2 proficiency before they can successfully draw on their L1 writing skills to help with L2 writing skills. The preliminary findings of this research offer EFL writing instructors general implications for writing classes, though any teaching implication based on the findings should be carefully treated. That is to say, they should be aware of the importance of L1 composition skills for the development of its L2 counterpart; L1 composition skills, however, might not influence L2 writing of students with only elementary L2 proficiency.



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## Appendix A

### Evaluation Scale Descriptors: Japanese Essay

6. The argument presented is very clear.  
The sequencing of words and sentences is consistent and smooth.  
The topic is addressed well.  
The overall presentation is well organized.  
The vocabulary is abundant.
5. The argument is clear.  
The persuasion is a little weaker than the level 6.  
The fluency of the language is good.  
The vocabulary used is not as elaborate as that in the papers of the level 6.
4. The overall control of the language is more than the average, but not completely satisfactory.  
The argument mostly follows the topic.  
The variety and the type of sentence construction used need more consideration.
3. The argumentation, sequencing of the sentences, expression and vocabulary are acceptable.  
The level is average.
2. The logical development is missing.

- The argument is not clear.
  - Some papers are too casual for an essay.
  - The vocabulary used in papers is limited.
  - The overall length of the papers is too short to develop the argument.
1. The topic is not addressed well.
- The statements are off the point.
  - Some of the students misunderstand the question.
  - The papers lack the clear arguments about the topic.

## Appendix B

### Evaluation Scale Descriptors: English Essay

6. **Demonstrates clear competence in writing on both the rhetorical and syntactic levels, though it may have occasional errors.**
- A paper in this category
- effectively addresses the writing task
  - is well organized and well developed
  - uses clearly appropriate details to support a thesis or illustrate ideas
  - displays consistent facility in the use of language
  - demonstrates syntactic variety and appropriate word choice
5. **Demonstrates competence in writing on both the rhetorical and syntactic levels, though it will probably have occasional errors.**
- A paper in this category
- may address some parts of the task more effectively than others
  - is generally well organized and developed
  - uses details to support a thesis or illustrate an idea
  - displays facility in the use of language
  - demonstrates some syntactic variety and range of vocabulary
4. **Demonstrates minimal competence in writing on both the rhetorical and syntactic levels.**
- A paper in this category
- addresses the writing topic adequately but may slight parts of the task
  - is adequately organized and developed
  - uses some details to support a thesis or illustrate an idea
  - demonstrates adequate but possibly inconsistent facility with syntax and usage
  - may contain some errors that occasionally obscure meaning
3. **Demonstrates some developing competence in writing, but it remains flawed on either the rhetorical or syntactic level, or both.**
- A paper in this category may reveal one or more of the following weaknesses:

- inadequate organization or development
- inappropriate or insufficient details to support or illustrate generalizations
- a noticeably inappropriate choice of words or word forms
- an accumulation of errors in sentence structure and/or usage

2. **Suggests incompetence in writing.**

A paper in this category is seriously flawed by one or more of the following weaknesses:

- serious disorganization or underdevelopment
- little or no detail, or irrelevant specifics
- serious and frequent errors in sentence structure or usage
- serious problems with focus

1. **Demonstrates incompetence in writing.**

A paper in this category

- may be incoherent
- may be undeveloped
- may contain severe and persistent writing errors