A Relationship between Reading and Reading-to-Write Ability of Korean L2 Learners

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Cho, Juyeon. 2015. A Relationship between Reading and Reading-to-Write Ability of Korean L2 Learners. SNU Working Papers in English Linguistics and Language 13, 1-22. The large number of writing tasks and assessment require the ability to integrating writing tasks with other language skills. From this constructivist perspective, this study was designed to see whether the reading-to-write performance can be the independent construct or dependent on the reading ability. The analysis of the study included the descriptions of the reading and integrated writing tasks, and the relationship between reading-to-write construct and reading ability. A group of undergraduate students performed the reading task and the reading-to-write tasks (a summary essay) based on the same text. The results showed that reading ability can play a role in predicting the reading-to-write ability with a high correlated relationship, although this relation was slightly affected by different types of the reading questions. Based on the results, the advocated view by constructivists was proved that the reading ability is required to perform reading-to-write tasks well. (Seoul National University)

Keywords: reading task, reading-to-write task, constructivist, integrated writing, summary essay

1. Introduction

In communicative language learning situation, the integrated language tasks have been emphasized. The integrated tasks are to measure the students’ ability to integrate what they read or listen with their writing. Among them, the reading-to-write tasks are widely used in academic writing settings. The integration of the writing with the reading makes students to view the language as holistic and to complete the tasks with interaction among the language skills. Many previous studies focused on the reading-to-write performance, reading, and writing to identify the relationship between them. They have yielded important findings but it has been difficult to generalize them since every study selected
distinct participants, different test tasks and different rating rubrics. Therefore, this study would like to adopt the qualitative method to investigate how the independent reading ability can be a predictor for the reading-to-write performance. The relationship between reading-to-write and reading construct would be studied based on the constructivist view, which mentioned that reading-to-write construct can be explained as interplay between language skills.

2. Literature Review

2.1 Reading-to-write construct

The reading-to-write construct has been examined as the sum of the reading and writing abilities or an independent ability. This construct theoretically can be seen from the reading, writing, or constructivist perspective. Among them, the constructivist perspective considers reading comprehension and writing as processes of building (Kucer, 1985; Nelson & Calfee, 1998 as cited in Delaney, 2008). It means that the reader or writer develops the new meanings based on what he or she reads and writes about it. Hence, the constructivists advocated that reading-to-write involves the interaction between reading and writing processes. Moreover, it is insufficient to perform reading-to-write tests only with reading and writing abilities respectively.

Delaney (2008) summarized that the reading-to-write construct can be viewed as a reciprocal interplay of literacy skills. In addition, the processes and strategies for reading and writing are modified for reading-to-write tasks by test takers’ abilities and goals or some

1 From the reading perspective, reading-to-write was considered to involve reading to learn (Carver, 1997; Enright et al, 2000; Kintsch, 1998 as in Delaney, 2008) or to integrate information (Grabe & Stoller, 2002 as in Delaney, 2008); while from the writing perspective, Hayes’s (1996) cognitive-affective model of writing explain the role of reading in writing.
external factors. This concept of reading-to-write construct was shared with Plakans and Gebril (2012) as they mentioned that the integration of writing with other skills makes a holistic view of language, rather than componential. They also emphasized that authenticity can be encouraged through integration since the integrated tasks replicate the specific language domains. Based on this constructivist view, Knoch and Sitajalabhorn (2013) introduced the important elements for completing integrated writing tasks. The prominent elements for test takers are to select the input text for ideas to be used, to synthesize ideas from the sources, to transform the language used in the source, to choose the organizational structure for the writing, and to connect the ideas in the source with their own ideas.

2.2 The role of source texts in reading-to-write tasks

As Weigle (2004) pointed out, reading-based writing tasks are often done in response to the source texts. In the situation of academic writing, students are expected to read, discuss and critically think about the topic mentioned in the reading source before they write on a given topic. When using the reading passage as a basis for writing tasks, it provides information for test takers to activate their schema and background knowledge regarding the topic. Grabe (2003) also explained the decisions for writers when they perform integrated writing tasks:

1. How much information should be taken from the text; which information should be taken?
2. How the information taken will fit with task and writer goals?
3. How accurately the information should be represented when going from text source to student writing?
4. What formal mechanisms should be used for transforming or using the textual information?
In addition, it was widely asserted that determining how to use reading texts is essential factor in completing reading-to-write tasks. In Plakans and Gebril (2012), they noted that there are two kinds of source use: verbatim source use, which refers to plagiarism and integration style, which contains the use of paraphrasing, summarizing or quoting. It was proved by some studies that how writers use reading texts depends on the students’ proficiency. Cumming et al (2005), for example, showed that students with higher proficiency selected summarizing as a common method of integrating source texts.

2.3 The relationship between reading and reading-to-write performance

Several studies investigated how the reading ability is related to the reading-to-write task scores. Watanabe (2001) looked into the students’ reading-to-write performances and correlated those scores with independent reading and writing scores. He found that the independent reading scores cannot be a predictor of scores on reading-to-write task since the predictive power of the reading task relied on general language proficiency. However, the independent writing scores strongly predicted the performances on integrated writing task. Delaney (2008) also analyzed the relation between reading ability and scores on reading-to-write tasks. In her study, low correlation between them revealed that reading-to-write scores were weekly related to reading comprehension. These results implied that the reading-to-write ability cannot be predicted from reading ability.

However, qualitative research examined that reading ability has an impact on integrated writing. Esmaeili (2002) investigated writing process through a questionnaire and focused on the role of reading in a reading-to-write task. By analyzing the survey results, he showed that reading played a critical role. He concluded that how writing involves reading was revealed while examining test takers’ writing strategies.
Hence, one can say reading and writing cannot be stand-alone skills. Similarly, Plakans (2009) studies reading strategies through think-aloud verbal protocols. She found that although reading hindered the test taker’s comprehension on the topic, it can facilitate writing by providing information as a basis for writing. Motivated by related studies, this paper is designed to examine the relationship between reading and reading-to-write performance in a quantitative way. Even though there has been much of the research to study on this topic, it is hard to generalize the findings whether reading ability influences the scores of integrated writing. Therefore, this study attempts to clarify the influence of the reading comprehension by answering the following research questions:

RQ 1. How well do L2 students understand the reading text and perform the reading-to-write task?
RQ 2. How are the scores of the reading-to-write task related to the reading comprehension of the source text?

3. Methods
3.1 Participants

18 undergraduate students were participated in this study. They were all native Korean students who never lived abroad or lived less than three years. They were classified into three groups based on general English proficiency. Four students with the score between 501 and 700 in TEPS (and corresponding TOEIC or TOEFL iBT score\(^2\)) were classified as low level; five with the score between 701 and 800 as intermediate level; and nine with the score above 801 as higher level. The age of

\(^2\) The conversion table between TEPS, TOEIC and TOEFL was obtained from the official TEPS website (http://www.teps.or.kr/).
participants, 13 males and 5 females, was in the range of 18 to 27 (mean = 23.2).

3.2 Tasks

The reading passage was on the topics of Bantu explosion, adapted from TOEFL iBT Quick Prep, which is a free practice tool with real TOEFL iBT questions from past tests. The topic was chosen because it was believed to be general and most students might not have much background information about this topic, to make equal to everyone. The reading task was piloted on three readers, who are similar to those who were selected for the actual study, and revised before actual data began to be collected. It was modified to make students understand easily by shortening the texts, but not to change the overall context and organization of the original passage. The basic readability measures of the reading passage are described in Table 1. Reading tasks consists of ten multiple-choice questions: five for reading comprehension and five for vocabulary. The following reading-to-write task was a form of writing a summary. The participants were asked to read the reading passage and summarize the main ideas of the text. Appendix A contains the reading and reading-to-write task used for this study.

Table 1. Descriptive data of the reading passage

<table>
<thead>
<tr>
<th>Flesch-Kincaid Grade Level</th>
<th>Flesch Reading Ease</th>
<th>Words</th>
<th>Sentences</th>
<th>Words per sentence</th>
<th>Characters per word</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.70</td>
<td>40.60</td>
<td>558.00</td>
<td>27.00</td>
<td>20.60</td>
<td>5.10</td>
</tr>
</tbody>
</table>

3 Flesch Reading Ease score ranges from 0 (unreadable; very difficult to read) to 100 (very easy to read).
3.3 Procedure

Students completed both the reading and reading-to-write measure. They were scheduled for groups with three to five people each time. The same instructions for the test were given for all students. Since this study aims to see the students’ performance in academic setting, two different ways of testing were used to reflect the authentic academic domain. Paper-and-pencil test was used for the reading task, while word processor was used for summarizing the reading-to-write task. The reading session was performed first and both the reading and the following reading-to-write session were timed for 15 minutes, respectively.

3.4 Scoring

As the reading tasks consisted of multiple-choice questions, the rating was conducted in a dichotomous way, one point for correct answers and no point for wrong answers. For rating the summarizing essays, Gebril (2006) and Gebril and Plakans’ (2009) scoring rubric was used. The rubric was the adapted from the holistic scoring of the TOEFL iBT integrated task, and incorporated use of sources, language use, development and organization. It is shown in Appendix B. Scoring was performed by two Korean-native raters. The Pearson inter-rater reliability coefficient for this measure was $r = .67$ (p < 0.01).

4. Results and Discussion
4.1 Comprehension of reading text

The reading ability in this study was based on the reading task, which involves reading comprehension questions and vocabulary questions. The descriptive statistics for the reading scores are shown in Table 2.
Table 2. Descriptive statistics for the reading scores

<table>
<thead>
<tr>
<th>Participant</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>18</td>
<td>5</td>
<td>10</td>
<td>8.50</td>
<td>3.09</td>
</tr>
<tr>
<td>Low Level</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>6.25</td>
<td>0.92</td>
</tr>
<tr>
<td>Intermediate Level</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>8.40</td>
<td>3.80</td>
</tr>
<tr>
<td>High Level</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>9.56</td>
<td>0.53</td>
</tr>
</tbody>
</table>

Overall, higher proficiency group performed better than lower proficiency group students when the average scores for each group were considered. Students with low and intermediate proficiency in general English achieved below the mean for the reading scores for all students. The minimum score of low level was identical to that of intermediate level. This meant that all the students got at least the half of the questions. Nevertheless, score differences in reading task distinguished students with different language proficiency by the average scores. Since the reading task can be divided into two parts, the scores for each type of reading task were summarized in Table 3 and 4.

Table 3. Descriptive statistics for the reading comprehension questions

<table>
<thead>
<tr>
<th>Participant</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample</td>
<td>18</td>
<td>1</td>
<td>5</td>
<td>4.11</td>
<td>1.75</td>
</tr>
<tr>
<td>Low Level</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>2.75</td>
<td>1.58</td>
</tr>
<tr>
<td>Intermediate Level</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>High Level</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>4.78</td>
<td>0.19</td>
</tr>
</tbody>
</table>
Table 4. Descriptive statistics for the vocabulary questions

<table>
<thead>
<tr>
<th>Participant</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample</td>
<td>18</td>
<td>3</td>
<td>5</td>
<td>4.39</td>
<td>0.49</td>
</tr>
<tr>
<td>Low Level</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3.50</td>
<td>0.33</td>
</tr>
<tr>
<td>Intermediate Level</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4.40</td>
<td>0.30</td>
</tr>
<tr>
<td>High Level</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>4.78</td>
<td>0.19</td>
</tr>
</tbody>
</table>

For the reading comprehension questions, the differences of average score between intermediate level and high level students were not significant. Moreover, some of students with low proficiency level scored 4 and some of students with intermediate proficiency level scored. These results suggested that the reading comprehension questions themselves cannot be used for discriminating the level of students. However, the average scores of each proficiency level showed the distinction between groups, although variance within the intermediate level students was higher than other groups.

As for the vocabulary questions, the scores were observed as higher related to the comprehension questions. It indicated that the differences between groups were small. All the students who participated in this study got the score between three and five, and the standard deviation within the groups were small. Hence, the vocabulary item cannot be considered to discriminate the students’ English proficiency.

With the scores for reading tasks, students mostly understood the vocabulary used in the reading passage but some students with low and intermediate proficiency rarely comprehend the content conveyed by the texts. Based on the observation of reading scores, the following reading-to-write score and the relationship between reading and integrated writing would be examined in the next section.

To determine the total reliability of the reading task, Cronbach’s alpha reliability coefficient was calculated as .66. In addition, the each item
was observed to see the item discriminability in the reading tasks. Item discriminability value was obtained by calculating Pearson correlation coefficient between each item and total reading scores. The value for the items and the types of reading questions are displayed in Table 5.

<table>
<thead>
<tr>
<th>Type/Item</th>
<th>Discriminability</th>
<th>Type/Item</th>
<th>Discriminability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading comprehension</td>
<td>0.65</td>
<td>Vocabulary average</td>
<td>0.34</td>
</tr>
<tr>
<td>average</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 1</td>
<td>0.83</td>
<td>Question 2</td>
<td>0.18</td>
</tr>
<tr>
<td>Question 3</td>
<td>0.50</td>
<td>Question 4</td>
<td>0.62</td>
</tr>
<tr>
<td>Question 5</td>
<td>0.69</td>
<td>Question 6</td>
<td>0.21</td>
</tr>
<tr>
<td>Question 8</td>
<td>0.52</td>
<td>Question 7</td>
<td>0.21</td>
</tr>
<tr>
<td>Question 10</td>
<td>0.70</td>
<td>Question 9</td>
<td>0.50</td>
</tr>
</tbody>
</table>

4.2 Relationship between reading and reading-to-write ability

The descriptive scores for the reading-to-write task are summarized in Table 6. Similar to the performances of the reading task, students with higher proficiency outperformed those with lower proficiency. The average of writing scores in this study was low compared to the average score of the reading tasks. The minimum and maximum scores for each proficiency group showed that some students in high proficiency level did not perform better than the students in lower proficiency level. Although the ranges of the scores between groups overlapped, the scores can discriminate the students’ proficiency as the differences between the groups were significant.
Table 6. Descriptive statistics for the reading-to-write task

<table>
<thead>
<tr>
<th>Participant</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>18</td>
<td>1</td>
<td>4.5</td>
<td>2.89</td>
<td>0.87</td>
</tr>
<tr>
<td>Low Level</td>
<td>4</td>
<td>1</td>
<td>2.5</td>
<td>1.75</td>
<td>0.42</td>
</tr>
<tr>
<td>Intermediate</td>
<td>5</td>
<td>2</td>
<td>3.5</td>
<td>2.90</td>
<td>0.43</td>
</tr>
<tr>
<td>High Level</td>
<td>9</td>
<td>2</td>
<td>4.5</td>
<td>3.39</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Based on the reading and writing scores of the participants, the relationship between the reading type and the reading total score and between the reading and reading-to-write task can be measured with a Pearson correlation coefficient value in Table 7. For the relationship within the reading task, both the reading comprehension type and vocabulary type positively correlated with the total scores of the reading task. Moreover, reading comprehension items \( (r = .94) \) was more related to the reading scores than vocabulary items \( (r = .74) \), reflecting that those items had the high discriminability value. In addition, there were high positive correlation coefficients \( (r = .86) \) between the reading measure and the reading-to-write tasks. High positive correlation coefficients were also detected between the specified types of the reading task and the reading-to-write task. Contrary to the reading score, the integrated writing score is slightly more related to the vocabulary scores \( (r = .79) \) rather than the reading comprehension scores \( (r = .73) \). In short, reading ability can predict reading-to-write performance. When the disattenuated correlation between reading and reading-to-write was calculated, the value was greater than 1 \( (r = 1.18) \), which indicated that measurement error is not randomly distributed. In this case, the disattenuated correlation coefficient would be reported as \( r = 1.0 \).
When students’ general proficiency in English was considered, there was also the positive correlation between reading or reading-to-write tasks and L2 proficiency level. The results calculated with a Pearson correlation coefficient are shown in Table 8, which suggested that reading scores were more related to L2 proficiency level. However, all coefficient values were in the adequate ranges. This meant that the tasks used in this study were fit to discriminate the students with different L2 ability.

**Table 8. Relationship between tasks and L2 proficiency level ($p < 0.01$)**

<table>
<thead>
<tr>
<th>Task</th>
<th>Proficiency level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading total</td>
<td>0.75</td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>0.62</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>0.72</td>
</tr>
<tr>
<td>Reading-to-Write</td>
<td>0.69</td>
</tr>
</tbody>
</table>

### 4.3 Discussion

This study was designed to answer to the two research questions. First one was to examine how well L2 students perform the reading and
A relationship between reading and reading-to-write ability of Korean L2 learners

reading-to-write task based on what they read. The second question was about the relationship between the reading ability and the reading-to-write ability. The descriptive data for the tasks showed that students generally understand well about the reading texts, and the degree of score differences was due to their general English ability. Participants showed that they got the better average scores in vocabulary questions than in reading comprehension items. Their vocabulary scores had the low standard deviation compared to the reading comprehension scores. The score range within the same proficiency group was the narrowest in high level students for both types of the reading tasks. However, it would be due to the disproportionate number of participants. Half of eighteen students had the high proficiency in English based on their general English scores. However, the items involved in the reading task and the reading task itself showed the high reliability and discriminability over L2 students.

The results of this study also revealed the relationship between the reading and reading-to-write construct. The summary task, which was used for integrated writing, required students to identify main point of the source text and to condense the content into one paragraph containing the important information. Many research from the constructive perspective on reading-to-write emphasized that reading and writing interact each other to construct the meaningful ideas. Accordingly, the reading-to-write construct should correlate with the independent reading and writing construct. However, the investigations on this topic cannot be generalized into a single conclusion. Researchers such as Watanabe (2001) and Delaney (2008) noted that only the low correlation was detected and concluded that reading score cannot be a strong predictor of the reading-to-write score. In contrast to them, there existed the studies (Esmaeili, 2002; Plakans, 2009) to show the positive relationship. It seemed that the results of this study can be used for the same idea. The reading-to-write ability was detected to have a high correlation between the reading ability. This can be
interpreted as L2 students perform the integrated writing task with the interaction between the comprehension of the reading source and the writing itself. Hence, their reading-to-write construct would be developed by fostering their understanding for reading. In particular, this study investigated that vocabulary ability was highly related to the reading-to-write scores. Therefore, students’ vocabulary knowledge can predict the integrated writing performance.

Reading ability is indeed related to reading-to-write ability according to the results of this study. However, there remain some limitations of this study. The first one is about the measures of reading and reading-to-write ability. Previous studies such as Delaney (2008) attempted to examine the reading, writing, and reading-to-write measure separately. It was because the ability of each skill can be affected one another within the same task. However, the participants of this study only performed one task containing both the reading and reading-to-write task based on the same reading passage. The high correlation between the scores of the task can be influenced by the shared texts. Moreover, the integrated writing task involved writing a summary essay. When the students summarize the reading passage, they should refer to it. Thus, the performance on the summary task was supposed to be close to the reading ability. The second limitation was caused by the fact that reading tasks consisted of multiple-choice items. The results of the reading tasks in this study cannot make a distinction as to the degree of understanding. There would be the possibilities that students did not comprehend the reading passage completely but answered the reading questions correctly or got the correct answers by chance. If the items were designed as open-ended questions, the results would differ from those of this study. The last issue about this study is associated with the way of scoring. The scoring rubric used in the current study was the adapted form of the holistic TOEFL iBT rubric. The holistic rubric incorporated the subcategories for the reading-to-write evaluation, such as accuracy, expression, organization and content. Also the rating scales
ranged from 0 to 5, which did not show the high variance in scores. The relationship between the reading construct and the reading-to-write construct can be detected in more sophisticated way when the analytic scoring rubric is applied to the same tasks.

5. Conclusion

This study has been examined the reading-to-write based on the constructive perspective. Reading-to-write ability requires students to construct the meaning from the reading, organize the information and create the essay. In this study, summary task was used to analyze the relationship between reading and reading-to-write ability. As a result, it reflected the reading-to-write ability and showed the high positive correlation in the academic task. Hence, this study can suggest that integrated writing skills cannot be separated from the independent reading skills in parallel with the constructive perspective. How well students comprehend the reading passage can affect how well they perform in integrated writing task. This implied that the integrated framework for reading and writing was proved with the results of the current study. Moreover, the general proficiency in English can influence the overall performance in the reading and reading-to-write task, since the positive correlation was also observed.

Although these findings do not generalize the controversial opinions about the reading-to-write construct, the results of this study conform to some of the previous research on the relationships between reading-to-write performance and reading. Still, there is a need for further studies to examine the other measures such as the different types of reading questions and different scoring rubrics. Second language learners can show the different results from the current study if these comparisons would be evaluated, in the connections with reading and reading-to-write construct.
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Appendix A
Reading and reading-to-write task

College English Education
Pilot Study
Name:
Date:

Reading Section

Directions: These questions in the Reading section measure your ability to understand academic passages in English. You will have 15 minutes to read one passage and answer questions about it.

Agriculture, Iron, and the Bantu People

There is evidence of agriculture in Africa prior to 3000 B.C. It may have developed independently, but many scholars believe that the spread of agriculture and iron throughout Africa linked it to the major centers of the Near East and Mediterranean world. The drying up of what is now the Sahara desert had pushed many peoples to the south into sub-Saharan Africa. These peoples settled at first in scattered hunting-and-gathering bands, although people who fished lived in larger population concentrations with a more secure food supply in some places near lakes and rivers. Agriculture seems to have reached these people from the Near East, since the first domesticated crops were millets and sorghums whose origins are not African but West Asian. The proposed areas of the domestication of African crops lie in a band that extends from Ethiopia across southern Sudan to West Africa. Subsequently, other crops, such as bananas, were introduced from Southeast Asia.

Livestock also came from outside Africa. Cattle such as domestic sheep and goats were introduced from Asia, and horses were apparently introduced by the invaders of Egypt and then spread across the Sudan to West Africa. Rock paintings in the Sahara indicate that horses and chariots were used to traverse the desert and that by 300 to 200 B.C., there were trade routes across the Sahara. Horses were adopted by peoples of the West African savannah, and later their powerful cavalry forces allowed them to carve out large empires. Finally, the camel was introduced around the first century A.D. This was an important innovation, because the camel’s ability to thrive in harsh desert conditions and to carry large loads cheaply made it an effective and efficient means of transportation. The camel transformed the desert from a barrier into a still difficult, but more accessible, route of trade and communication.

Iron came from West Asia, although its routes of diffusion were somewhat different than those of agriculture. Most of Africa presents a curious case in which societies moved directly from a technology of stone to iron without passing through the intermediate stage of copper or bronze metallurgy.
This technological shift caused profound changes in the complexity of African societies. Iron represented power. In West Africa the blacksmith who made tools and weapons had an important place in society, often with special religious powers and functions. Iron hoes, which made the land more productive, and iron weapons, which made the warrior more powerful, had symbolic meaning in a number of West African societies. Those who knew the secrets of making iron gained ritual and sometimes political power.

The diffusion of agriculture and later of iron was accompanied by a great movement of people who may have carried these innovations. These people probably originated in eastern Nigeria, and spread out into central and southern Africa. Their migration may have been set in motion by an increase in population caused by a movement of peoples fleeing the drying up of the Sahara. They spoke a language, proto-Bantu (“bantu” means “the people”), which is the parent tongue of a large number of Bantu languages still spoken throughout sub Saharan Africa. Archaeologists believe that their iron weapons allowed them to conquer their hunting-gathering opponents, who still used stone implements. Still, the process is uncertain, and peaceful migration — or simply rapid demographic growth — may have also caused the Bantu explosion. (558 words)

1. In paragraph 1, what does the author imply about changes in the African environment during this time period?
   a. The climate was becoming milder, allowing for a greater variety of crops to be grown.
   b. Although periods of drying forced people south, they returned once their food supply was secure.
   c. Population growth along rivers and lakes was dramatically decreasing the availability of fish.
   d. A region that had once supported many people was becoming a desert where few could survive.

2. The word cavalry in the passage is closest in meaning to
   a. cruel
   b. navy
   c. trooper
   d. aviation

3. According to paragraph 2, camels were important because they
   a. were the first domesticated animal to be introduced to Africa
   b. allowed the people of the West African savannahs to carve out large empires
   c. helped African peoples defend themselves against Egyptian invaders
   d. made it cheaper and easier to cross the Sahara

4. The word diffusion in the passage is closest in meaning to
   a. emergence
   b. understanding
   c. spreading
   d. development
5. What function does paragraph 3 serve in the organization of the passage as a whole?

a. It contrasts the development of iron technology in West Asia and West Africa.

b. It discusses a non-agricultural contribution to Africa from Asia.

c. It introduces evidence that a knowledge of copper working reached Africa and Europe at the same time.

d. It compares the rates at which iron technology developed in different parts of Africa.

c. Iron tools helped increase the food supply.

d. Technical knowledge gave religious power to its holders.

6. The word **profound** in the passage is closest in meaning to

a. fascinating

b. far-reaching

c. necessary

d. temporary

9. The word **fleeing** in the passage is closest in meaning to

a. afraid of

b. displaced by

c. running away from

d. responding to

7. The word **ritual** in the passage is closest in meaning to

a. military

b. physical

c. ceremonial

d. permanent

10. Paragraph 5 mentions all of the following as possible causes of the Bantu explosion EXCEPT

a. superior weapons

b. better hunting skills

c. peaceful migration

d. increased population

8. According to paragraph 4, all of the following were social effects of the new metal technology in Africa EXCEPT:

a. Access to metal tools and weapons created greater social equality.

b. Metal weapons increased the power of warriors.
Writing Section

Directions: Summarize the points made in the reading passage above. You will have 15 minutes to write a short essay using information from the reading passage. Your response will be judged on the quality of your writing and on how well your response presents the points in the reading passage.

You may plan your essay before you start writing. Make some notes in the box below if needed.

planning notes (No scores are given for these planning notes)

Write your essay of 100-200 words in the box below. Try to use your own words – do not copy sentences from the reading texts.
Appendix B
Reading-to-write scoring rubric (Gebril, 2006; Gebril & Plakans, 2009)

<table>
<thead>
<tr>
<th>Score</th>
<th>Task Description</th>
</tr>
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</table>
| 5     | A response at this level:  

- successfully presents their ideas in relation to the relevant information presented in the reading sources.  
- is well organized with well-developed content  
- occasional language errors that are present do not result in inaccurate or imprecise presentation of content or connections. |
| 4     | A response at this level:  

- is generally good in coherently and accurately presenting their ideas in relation to the relevant information in the reading texts, although may have inaccuracy, vagueness, or imprecision in connection to points made in the readings.  
- has clear organization and logical development.  
- more frequent or noticeable minor language errors; such errors do not result in anything more than an occasional lapse of clarity or in the connection of ideas. |
| 3     | A response at this level  

- conveys some relevant connection to the reading, but only vague, global, unclear, or somewhat imprecise connection to points made in the reading.  
- development is somewhat limited, but some specific support for their argument is provided.  
- occasionally lacks cohesion but has a basic organizational structure.  
- includes errors of usage and/or grammar that are more frequent or may result in noticeably vague expressions or obscured meanings in conveying ideas and connections. |
| 2     | A response at this level  

- contains some relevant information from the readings, but is marked by significant language difficulties or by significant omission or inaccuracy of important ideas from the readings  
- lacks logical organizational coherence and development. Ideas are very general and lack specific details in support.  
- contains language errors or expressions that largely obscure connections or meaning at key junctures, or that would likely obscure understanding of key ideas for a reader not already familiar with the topic. |
| 1     | A response at this level  

- provides little or no meaningful or relevant coherent content from the readings and does not follow an organization pattern or develop content.  
- includes language that is so low and it is difficult to derive meaning. |