

# EFL Readers' Test-taking Processes for Completion vs. Multiple Choice Cloze Tests

Mihyang Han  
(Dong-A University)

**Han, Mihyang. 2007. EFL Readers' Test-taking Processes for Completion vs. Multiple Choice Cloze Tests.** *The Linguistic Association of Korea Journal*, 15(3), 189-208. This study investigates test-taking processes used by skilled and less skilled university seniors in Korea as they performed a completion rational cloze (Ccloze) and its counterpart multiple choice cloze (Mcloze). Data collected from think-aloud protocols were analyzed and seven types of strategies were categorized. The frequency and quality of the test-taking strategies were examined along with their test performance. The results show that most of their strategies used in the two cloze tests were text-based, which means the readers relied heavily on their linguistic knowledge to cope with cloze items. As for separate strategy types, test-specific strategies were the most frequently utilized in both tests but most of the strategies in the Mcloze were matching and selection. Overall, the more difficult the cloze items, the more multiple strategies were employed, obviously by the skilled group. The findings suggest that the Ccloze induces test takers to be more cognitively involved than the Mcloze, and that the more skilled, the more flexible the test takers are in proper and multiple strategy use.

**Key Words:** test-taking strategy, completion cloze, multiple choice cloze, verbal report

## 1. Introduction

In the environment of learning English as a foreign language (EFL), reading is an important skill in succeeding in an academic context because knowledge is mostly acquired by learning from text. As such, it is crucial that learners' reading ability be evaluated in a valid and reliable way. A number of studies have examined the issues of how to

validly test reading ability and what skills are tested by certain reading tests such as multiple choice and cloze tests.

Conventional reading tests assess reading ability based on test scores, that is, the product of test takers' performance. But the outcomes do not fully reflect test takers' actual processes because reading ability cannot be observed and the way to reach correct answers will vary between test takers. In this light, verbal report has often been adopted in the field of reading test research. In particular, the process-oriented method is often applied in validating the cloze test, a reading passage with every  $n^{\text{th}}$  word or specific words deleted, as done in some rigorous studies (Black, 1993; Greene, 2001; Sasaki, 2000; Storey, 1997; Yamashita, 2003).

In fact, there has been intense debate about the construct validity of the cloze as a reading test but many studies claim the usefulness of the rational cloze since it allows to delete words in terms of their functions in the text and therefore measures comprehension of textual relationships validly (Bachman, 1985; Jonz, 1987, 1990; Jonz & Oller, 1994). In spite of its usefulness, however, the actual processes in performing the rational cloze are not yet fully explored. Moreover, few studies attempt to identify differences in strategy use according to two different rational cloze formats: completion and multiple choice.

The present study, therefore, has two purposes: to investigate what strategies test takers use in performing a completion rational cloze (Ccloze) and a multiple-choice rational cloze (Mcloze) and to identify differences between skilled and less skilled readers in performing the two cloze tests. The research questions are as follows:

- 1) How did the readers at the different levels perform the Ccloze and the Mcloze?
- 2) What types of strategies are employed in performing a Ccloze and an Mcloze?
- 3) Is there any difference in strategy use between skilled readers and less skilled readers in the two types of cloze tests?

This comparison will contribute to gaining insights into the validity of the cloze test and usefulness of verbal report as a reading research method.

## 2. Literature Review

### 2.1. The cloze as a reading test

According to Kintsch and van Dijk (1978), a text is organized into 'micro-structure' of local lexical and grammatical information and 'macro-structure' of intersentential and global information, and reading means establishing the hierarchical structure of the text. Recently, the theoretical focus has moved from the text to the reader, and reading is viewed as interactive and constructive processes (Grabe, 1991, 2001; Rumelhart, 1980). The reader is actively involved in constructing text meaning by using his/her linguistic, formal, and content schemata (Carrell, 1983) and good L2 readers are found to use proper strategies, establishing the coherent network of the text meaning (Block, 1986).

Thus, if a reading test is to be valid, the interactive reading process needs to be considered in constructing test items. Yet, the problem is that reading itself is a private and cognitive process and reading ability cannot be observed. Consequently, there is still no consensus on how to validly test the reader's ability and what skills are tested by certain reading tests such as multiple choice and cloze tests.

Regarding the validity of the cloze test, in particular, mixed results have been presented: some studies report that it measures linguistic knowledge and textual comprehension since test-takers are required to fill in the blanks, considering both immediate and wider contexts (Chávez-Oller, Chihara, Weaver, & Oller, 1985; Fotos, 1991); others argue that the random cloze test deletes words mechanically and just measures particular lexical or grammatical knowledge (Alderson, 1979; Bachman, 1985; Markham, 1985). On the other hand, a modified rational cloze allows specific words to be deleted according to test purposes, making it possible to assess different levels of text information

processing (Bachman, 1985; Jonz, 1987, 1990; Jonz & Oller, 1994).

However, its completion format requiring the production of appropriate words for blanks is cognitively demanding for test takers, especially for EFL readers (Storey, 1997). Scoring reliability of the completion cloze test is also problematic (Kobayashi, 2003). Accordingly, the multiple choice rational cloze where two to four options for each blank are provided, is favored to lower test anxiety and make scoring easier. A good example of standardized language tests would be the reading comprehension section of the newly released TOEIC test which includes 12 multiple choice cloze items supplied with a rather lengthy texts.

## **2.2. Test-taking strategies and verbal report**

From strategic processing perspectives, reading is viewed as an interactive-compensatory process, where lack of knowledge at one level could be compensated for by knowledge at a different level. Stanovich (1980) points out that “good readers appear to have superior strategies for comprehending and remembering large units of text. In addition, good readers are superior at context-free word recognition” (p. 64).

Readers use strategies in testing situations to solve problems successfully. Cohen (1998) defines test-taking strategies as “those processes that the respondents have selected and of which they are conscious, at least to some degree” (p. 92). To identify strategies test takers employ, verbal report is claimed to be a direct and valuable tool. Two kinds of verbal reports are available: concurrent and retrospective (Ericsson & Simon, 1980). The data from verbal report help make decisions about selection of reading test items and contribute to validating reading tests (Bachman, 1998).

Although verbal report techniques become prevalent in examining cloze test-taking strategies, there are not yet abundant data on them, especially by EFL readers. A few studies are worthy noting. Regarding traditional cloze tests, Hashkes and Koffman (1982, cited in Lee, 2002) found that grammatical appropriateness and guessing strategies were most frequently used, and poor readers tended to use single strategy

and mostly depend on sentence-level information of the text. But Lee (2002)'s study reports that good readers utilized local information more than the poor readers.

Studies on the rational cloze yield different findings: readers were encouraged to make use of text-level information (Storey, 1997), and good readers employed text-level information more frequently and more correctly than poor readers (Yamashita, 2003). On the other hand, Kletzien (1991)'s research revealed that both good and poor readers used a similar range of strategies but the two groups were different in terms of the quality of strategy use: poor readers were less flexible in their use of strategies, less able to vary their strategy use and more likely to give up and blame themselves. Similar results were found in Black (1993)'s study in which the quality of strategy use was revealed to discriminate better between good and poor readers. Specifically, good readers resorted to L2-based strategies and showed "the clarity and coherence of their thinking, and above all, the organization, focus, and control of their strategies" (p. 430).

To recap, the rational cloze seems to be capable of promoting text-level processes and identifying well between good and poor readers and verbal report provides a valuable source of information on their test-taking use. However, there are still relatively few studies available on test-taking strategies for the rational cloze and even less research is at hand which compares test-taking strategies used in the different types of cloze tests such as completion and multiple-choice.

### **3. Methodology**

#### **3.1. The Context**

Sixteen university seniors, eight skilled and eight less skilled, were at first recruited based on their scores on a TOEIC test, a popular standardized test in Korea. They were all majoring in English at a southern university in Korea. The researcher met the students individually in a quiet office room at their convenient time from May 20

to June 5, 2007. After being told about the research briefly, each student took a 20 item reading comprehension test and a 30 item vocabulary test for 40 minutes. Based on the test scores, twelve students, six skilled and six less skilled were selected for this study while the other four were rejected as their scores ranged near the mean scores.

To construct a cloze passage, five expository texts were chosen at first in consideration of the appropriate content, length, and structure of the text. After measuring their readabilities, the researcher chose a passage entitled "*Health News for Body and Mind*" from a college level ESL/ EFL reading textbook, *Interactions* (Hartmann & Mentel, 2007). It consisted of 613 words in six paragraphs, dealing with the general topic of health. Its readability was a Fog grade level of 8.1 and a Flesch grade level of 6.9, which means that the passage is understandable by the average student of 6 to 8th grade native English speakers. Thus, the original passage might be a little easy for the EFL university seniors to comprehend but it was assumed that word deletions from the text would make it difficult for them to process the cloze passage. At first, a 40-item rational cloze was administered to other 25 seniors and then too easy and too difficult items were eliminated. The final 30-item version contained 10 lexical, 10 grammatical, and 10 textual items and its counterpart Mcloze was constructed with four option items.

### 3.2. Data Collection and Analysis

The researcher proportionally distributed the Ccloze or the Mcloze to the students based on their English level. The selected twelve students verbally reported their performance of the cloze test. The verbal reporting procedure was implemented as suggested by Cohen (1998) and Ericsson and Simon (1980). After a practice session, the students reported their test processes in their native language, Korean. Their verbal reporting was both video-taped and audio-taped and there was no time limit on the session.

The Ccloze was scored according to a semantically-acceptable word scoring method. The researcher and a native speaker of English judged

acceptability of test takers' responses. Each item of the two cloze tests was given one point. Table 1 is the means of the tests taken by the two groups

Table 1. Means of the Tests Taken by the Two Groups

	Ccloze (n=6)		Mcloze (n=6)	
	Skilled (n=3)	Less Skilled (n=3)	Skilled (n=3)	Less Skilled (n=3)
TOEIC	910	713	885	690
Voca. & Reading	44	32	42	30
Cloze	25	16	28	23

The recorded verbal report data were transcribed and analyzed according to a modified framework, referred to models proposed by Bachman (1985) and Yamashita (2003). The coding framework included seven categories: 1) Clause-level, 2) Sentence-level, 3) Adjacent text-level, 4) Wider text-level, 5) Extra-textual, 6) Test-specific and 7) Missing. In case of more than one strategy used to answer an item, it was coded as more than one category. The researcher conducted coding procedures twice with a two week interval.

## 4. Results and Discussion

### 4.1. Performance in the Ccloze and the Mcloze

Table 2 shows the means and standard deviations of the Ccloze and the Mcloze scores. The most noticeable thing is that the Mcloze scores (25 of 30, 76%) were higher than the Ccloze scores (21 of 30, 62%) and there is significant difference in the mean scores between the skilled and less skilled groups in both Ccloze ( $p=.025$ ,  $<0.05$ ) and Mcloze ( $p=.002$ ,  $<0.05$ ). In fact, this is a predicted result because the Ccloze requires more cognitive effort and time in production of appropriate words for blanks than the Mcloze which provides four options and test

takers choose an answer among them.

Table 2. Means and Standard Deviations of the Cloze Scores

Group	Measure	Total (30)	Skilled	Less skilled	p
Ccloze	Mean (%)	21 (62%)	25 (75%)	16 (49%)	.025
	St.D.	5.465	2.000	3.786	
	Test time	18'	19'	17'	
Mcloze	Mean (%)	25 (76%)	28 (83%)	23 (69%)	.002
	St.D.	2.658	0.577	1.000	
	Test time	14' 66"	16'33"	13'	

The results shown in Table 2 also indicate that the Ccloze discriminated test takers' reading proficiency better than the Mcloze. The mean score difference between the skilled and less skilled Ccloze groups is higher than that of the Mcloze groups. The standard deviation of the Ccloze is also higher (5.456) than that of the Mcloze (2.658). It seems that the Ccloze was more difficult for the less skilled group to accomplish since its correct completion requires a proper understanding of the coherent discourse (Cohen, 1998; Greene, 2001).

Worthy noting is that the skilled groups of the two cloze tests spent more time reporting their test taking processes in detail and provided more correct answers than the less skilled groups even though the test time did not reflect the exact time spent to complete the cloze test as the test-taking time included verbal reporting time. Rather, the less skilled group tended to respond automatically to cloze blanks, which was more obvious in performing the Mcloze. These results are quite different from those of Yamashita (2003) where the less readers spent more time decoding the literal meaning rather than thinking about the coherent meaning of the text.

It is explained that the cloze passage used in the present study was relatively easy to the readers to comprehend so most of them showed smooth processing. But a further perusal of the protocols revealed



differences between the two groups: the less skilled readers overall had rapid but inaccurate language processing and failed to check their answers while the skilled readers generally used a variety of strategies and spent much time monitoring their processes after finishing each item or the whole blanks.

#### 4.2. Strategy types in the Ccloze and the Mcloze

To get a more accurate picture of the cloze test performance, it was examined what test-taking strategies were actually used in undertaking the Ccloze and Mcloze tasks. Table 3 shows the frequency of test taking strategies for the Ccloze and Mcloze.

Table 3. Frequency of Test-taking Strategies for the Cloze Tests

Strategies	Ccloze	Mcloze
Clause	91 (24%)	81 (24%)
Sentence	75 (20%)	67 (20%)
Text (Adjacent)	82 (21%)	70 (21%)
Text (Wider)	9 (2%)	8 (2%)
Extra-textual	17 (4%)	9 (3%)
Test-specific	106 (28%)	99 (30%)
Missing	4 (1%)	0 (0%)
Total	384	334

As shown in the bottom line of Table 3, the total number of strategies is 384 for the Ccloze and 334 for the Mcloze respectively. The Ccloze readers tried to employ as much information as possible to produce an appropriate word for the blank while the Mcloze readers used less than two strategies per each blank because the readers moved to the next item as soon as they chose one option that they thought was correct.

Regarding the frequency of each strategy type, the Ccloze and the Mcloze look strikingly similar. The most frequent strategy type is Test-specific (the Ccloze, 28% and the Mcloze, 30%), followed by Clause-level (24%), Adjacent Text-level (21%) and Sentence-level

strategies (20%). Wider-context text-level strategies were rarely employed in both cloze tests. Considering that Clause-level, Sentence-level, and Text-level strategies are all related to text-based strategies, the two cloze tests can be claimed to require the readers to depend on text-based strategies (Ccloze, 67% and Mcloze, 67%).

On the other hand, readers' verbal protocols displayed that they actively engaged in utilizing Test-specific strategies: they guessed, left the blanks, read backward or forward, confirmed or disconfirmed an inference, expressed uncertainty at correctness of an answer, changed the answer after reading the passage, selecting an answer from the options. Test-specific strategies were used slightly more in the Mclose (30%) than in the Ccloze (28%) and the selecting strategy was employed only and quite frequently in performing the Mcloze (53 out of 99 test-specific strategies). The readers scantily resorted to Extra-textual strategies such as relying on background knowledge (Ccloze, 4% and Mcloze, 3%). In case of difficult items, they left blanks unanswered but the missing cases were very few, occurring only in the Ccloze (1%).

Overall, the cloze tests provoked text-based strategies. The readers mostly relied on their lexical, grammatical and textual knowledge to restore appropriate words for the blanks, which contributed to building the coherent structure of the cloze text. But Wider-textual strategies such as referring to the previous and/or following paragraph(s), recognizing the rhetorical structure of the text, and stating the main idea of the text were not frequent. The main reason for it might be the fact that only two of the total 30 items were related to information across paragraphs or of the whole text.

Another insightful observation is that the readers used multiple strategies. This indicates that the cloze tests invited interactive reading processes, through which they were able to build a meaning representation of the cloze passage (Grabe, 1991, 2001; Jonz & Oller, 1994). In addition, when lacking of linguistic knowledge to solve problems, they employed test-specific strategies or sometimes extra-textual knowledge to compensate for the deficiency.

### 4.3. Test-strategy use by skilled and less skilled readers

Table 4. Frequency of Test Taking Strategies by the Groups

Strategies	Ccloze		Mcloze	
	Skilled	Less Skilled	Skilled	Less Skilled
Clause	45 (21%)	46 (27%)	47 (25%)	34 (24%)
Sentence	36 (17%)	39 (23%)	34 (18%)	33 (23%)
Text (Adjacent)	45 (21%)	37 (22%)	35 (18%)	35 (25%)
Text (Wider)	6 (3%)	3 (2%)	6 (3%)	2 (1%)
Extra-textual	11 (5%)	6 (4%)	6 (3%)	3 (2%)
Test-specific	70 (36%)	36 (21%)	63 (33%)	36 (25%)
Missing	0 (0%)	4 (2%)	0 (0%)	0 (0%)
Total	213	171	191	143

In both cloze tests as shown in Table 4, the skilled groups used quite more strategies than the less skilled ones: 213 by the skilled and 171 by the less skilled for the Ccloze; 191 by the skilled and 143 by the less skilled for the Mcloze. This means that the skilled readers used as much information as possible, which contributed to their successful cloze test performance.

When it comes to each strategy type used in the Ccloze, the skilled readers exercised test-specific strategies most frequently (36%) along with clause-level (21%), adjacent text-level (21%) and sentence-level (17%) strategies while the less skilled readers used clause-level strategies most frequently (27%) with almost similar proportions of sentence-level (23%), adjacent text-level (22%), and test-specific (21%) strategies. Both groups commonly focused on using linguistic knowledge but the less skilled group depended more heavily on analyzing grammatical elements and translating phrases including deletions into the L1. On the other side, the skilled group was flexible in using a variety of strategies especially in dealing with some difficult items. The skilled readers in particular, favored test-specific strategies such as

confirming or disconfirming an uncertain inference and changing an answer after rereading previous and/or following sentences, paragraphs or the whole text.

The following example shows well the behaviors of the skilled readers (the words in italics are reported in English by the readers and those in parenthesis are added by the researcher):

Example 1 (a skilled reader, item 18 of the Ccloze)

*According to...half...people in the world may be...(the blank), which means they don't get enough sleep.* Here (the blank) needs a word meaning lack of sleep, lack of sleep, such a word I have heard before. Lack of sleep...*insom*...*insomina* (Korean)...*insom*... It means...it was mentioned in the previous paragraphs (looking back to the Relax paragraph)...*chronic*? ...*chronic* was stated (in the previous paragraph) (goes back to the item 18) *people in the world*...*insomnia* doesn't sound appropriate...over half of the people in the world *may be* uh... cannot sleep well...uh... *sleepless* (writes it down after erasing the word *insomnia* put previously).

Example 1 demonstrates that the skilled student read sentences in English, skipping some easy phrases but he struggled to restore an English word, *insomnia*, from his mental lexicon. He associated the word not only with his previous experience but also with '*chronic*' of the previous paragraph. But he doubted his answer after monitoring its pronunciation. He attempted to translate the related phrases into Korean and finally changed his answer into *sleepless*. Even though he failed to provide the correct answer, *sleep-deprive*, the skilled student employed multiple strategies to cope with the difficult item. In case of easy items, however, the skilled group answered automatically or found clues quickly by checking immediate context. It is illustrated in Example 2.

Example 2 (a skilled reader, item 10 of the Ccloze)

*Relax, too much...* a noun should be inserted (in the blank)? Yes, a noun needs. *Which is worry about problems in life, umm... two much* something is not good for physical health, is not good for health...I don't know about the exact content (of this sentence) yet. (I will deal with this item later) let's check the following content. *For example, it makes your blood*

*pressure go up. This is what makes blood pressure up. Now we know more. Some stress is..Uh (quickly cross-checking with item 10) the answer is stress.*

At first, the skilled reader read the subtitle and phrases in English and checked the grammatical feature of a word suitable for the blank. She decided to leave the blank after monitoring her comprehension. While reading the following sentences, she found the answer to item 10. Such strategies as referring to previous and/or following sentences and monitoring their own processing were frequently used by the skilled readers.

On the other hand, the less skilled group showed individual differences in the frequency and quality of Test-taking strategies. For example, a less skilled reader, Jihae, averaged 1.5 strategies (46 for the 30 items), using 5 Test-specific and 9 Adjacent textual strategies while the other less skilled reader, Gidong averaged about 2.3 strategies (69 for the 30 items), using 20 Test-specific and 15 Adjacent textual strategies. Jihae responded to most items automatically but her total score was the lowest (12/30). Gidong, who often used multiple strategies as the skilled readers did, also did not gain a high score (18/30). Example 3 and 4 show the differences between the two less skilled readers in performing the Ccloze.

Example 3 (a less skilled reader, Jihae, item 24 and 25 of the Ccloze)  
Bilingualism? two languages? people who are bilingual can speak very fluently. *Do question (blank)? Only, do tests better than people who speak only one language? do... do... do test (fills in item 25 with test).* (After finishing the rest items, goes back to item 24) Bilingual people who speak fluently, fluently, (and the answer) is *high*.

Example 4 (a less skilled reader, Gidong, item 24 and 25 of the Ccloze)  
Bilingual, *who can speak?* (automatically inserts *two* into item 24)... *Very well, do?... do?... on test than?... did do better on test than people who speak only one language. Do good? do well? do good? do well?...do nice?...do... well?* (writes down well in Korean and erases it quickly). Well! the word needs to mean doing well.(Leaving the blank and go to the next

sentence)...(After finishing all the items, he checks the answers he is not sure of), lastly, *do*. People who can speak two languages gain good results *on test*. *Do good?*...umm... here a verb may come... *Do broken? do find? Do...* as it means 'gained good scores on test'... *do gain? score?*...It compares with bilingual speakers, so *do...well* (finally decides it as an answer).

Jihae's protocol reveals that she was a mono strategy user and performed unsuccessfully. She left item 24 unanswered and then filled in item 25 automatically with *test* without careful consideration of the immediate context around the blank. She picked the word from the following phrase, *on test*, but did not consider the grammatical structure of the sentence, that is, a comparative form of an adjective or adverb. Gidong was able to respond automatically and correctly to item 24 but spent considerable effort and time to solve item 25, only to produce an incorrect answer even though he inferred the L1 meaning equivalent of the missing word, *better*.

Example 3 and 4 show that the less skilled readers relied heavily on clause-level grammatical information, which did not necessarily lead to successful test performance. In addition, they had difficulty restoring exact words for blanks though they seemed to comprehend the coherent meaning of the cloze passage. If options were provided for each blank as the Mcloze, their test scores would have been much higher.

It is not surprising that options provided for each item induced the high performance in the Mcloze, as shown in Table 2. The readers were able to select a correct answer quickly and successfully by inserting each option into the blank. The matching and selection strategy was the most frequent in performing the Mcloze. In addition, the skilled Mcloze readers also used multiple strategies to solve difficult items or confirm the correctness of their responses. Example 5 below demonstrates effective problem-solving by the skilled reader while Example 6 displays the less skilled reader's improper strategy use.

Example 5 (a skilled reader, item 15 of the Mcloze)

*The lesson from this is clear. We need to learn to...*(looking back at the

previous sentences) '*we need to learn to*' has to be followed by a verb (quickly looking at the options) and what was mentioned right before was '*relax*' so it must be the answer (and selects '*relax*' from the options). (Looking back the first part of the paragraph again) what is important related to health was *relax* and because the theme here is '*relax*'...(the title of the paragraph) '*relax*' appears here again. (She starts to reread in English the last part of the paragraph rapidly and nods her head, indicating her confirmation of the answer).

Example 6 (a less skilled reader, item 15 of the Mcloze)

Uh..what we can learn from this? *we need to learn to*... we need to learn... to learn.. do what? (looking at the options) To be health. Uh... (goes back to the previous sentence) This lesson is clear. What we need to do, what we need to study is learning health. Learning health is necessary. Age? *relax*? Uh, learning health is necessary (selects health from the options).

In solving item 15, the skilled reader chose the answer promptly because she already established the coherent meaning of the text. She remembered the subtitle and key word of the paragraph, *relax*, and was able to restore it without effort. To confirm the answer, she checked and reread quickly the previous part of the paragraph. Her strategies for comprehending and remembering the larger units are commensurate with good reader's reading behaviors as pointed out by Stanovich (1980). On the other hand, the less skilled reader also read repeatedly the phrase including the blank, checked the previous sentence, translated it into Korean, matched each option with the blank but finally associated the blank with the whole text key word, *health*, rather than the paragraph key word, *relax*.

The strategy differences between the skilled and less skilled readers in performing the Mcloze indicate that their English reading proficiency exerted influence on their test-taking strategies. The skilled reader was better at managing the selection and integration of information and monitoring her comprehension processes. Some insightful studies also have identified the higher level of cognitive and metacognitive control as good reader's feature (Black, 1993; Sasaki, 2000; Storey, 1997; Yamashita, 2003).

To sum up, in both Ccloze and Mcloze tests, the skilled readers tended to use multiple strategies and went through smoother and more effective problem-solving processes. They were involved more actively in performing the cloze tests, showing higher control of cognitive and metacognitive strategies than the less skilled readers. Furthermore, the skilled readers used a variety of strategies until they felt confident about an answer.

## 5. Conclusion

This study attempted to identify test-taking strategies used in performing a completion rational cloze and a multiple-choice rational cloze by skilled and less skilled readers. Their verbal protocol provided considerable insight into the research purposes. First, the test performance on the Ccloze and the Mcloze reflected well the test takers' reading proficiency. Each skilled group of the two cloze tests spent more effort and time solving problems and gained the higher scores. Second, regarding test-taking strategy types, both Ccloze and Mcloze promoted test takers to use text-based strategies such as lexical, grammatical and adjacent textual knowledge. Test-specific strategies were also frequently employed to compensate for lack of linguistic knowledge while the matching and selection strategy was most frequently utilized in the Mcloze. Third, the skilled group was more flexible in their strategy use, more able to use multiple strategies, and more patient in problem solving.

These findings suggest some teaching implications. First, different cloze test formats influence test takers' performance and strategy use. Considering the test format effect, teachers can choose appropriate one depending on their teaching or testing purposes. Second, EFL students need to get trained in good reader's reading and test-taking strategies since strategy awareness is considered an important component of communicative language use (Bachman, 1998). Third, verbal report can help get a clear picture of individual student's strengths and weaknesses in the performance of reading tests. It is also a good tool



for raising learner's self-awareness of effective reading and test-taking strategy use.

Further studies need to be conducted to investigate links between specific strategy use and successful performance on a Ccloze and an Mcloze. In addition, data collected from various sources such as retrospective verbal reports and in-depth interviews will provide more valuable information on test-taking strategies and strategic preferences. A larger number of participants at different reading proficiency levels will also help gain more insights into readers' behaviors in performing reading tests.

### References

- Alderson, J. (1979). The cloze procedure and proficiency in English as a foreign language. *TESOL Quarterly* 13, 219-227.
- Bachman, L. F. (1985). Performance on cloze tests with fixed-ratio and rational deletions. *TESOL Quarterly* 19, 535-556.
- Bachman, L. F. (1998). Language testing-SLA research interfaces. In L. F. Bachman & A. D. Cohen (Eds.), *Interfaces between second language acquisition and language testing research* (pp. 177-195). Cambridge: Cambridge University Press.
- Black, J. H. (1993). Learning and reception strategy use and the cloze procedure. *The Canadian Modern Language Review*, 49(3), 418-445.
- Block, E. (1986). The comprehension strategies of second language learners. *TESOL Quarterly*, 20, 463-494.
- Carrell, P. L. (1983). Three components of background knowledge in reading comprehension. *Language Learning* 33(2), 183-207.
- Chávez-Oller, M., Chihara, T., Weaver, K., & Oller, J. W. (1985). When are cloze items sensitive to constraints across sentences? *Language Learning* 35, 181-203.
- Cohen, A. D. (1998). Strategies and processes in test taking and SLA. In L. F. Bachman & A. D. Cohen (Eds.), *Interfaces between second language acquisition and language testing research* (pp. 90-111). Cambridge:

Cambridge University Press.

- Ericsson, K. A. & Simon, H. A. (1980). Verbal reports as data. *Psychological Review*, 87, 215-251.
- Fotos, S. S. (1991). The Cloze Test as an Integrative Measure of EFL Proficiency: A Substitute for Essays on College Entrance Examinations? *Language Learning* 41(3), 313-336.
- Grabe, W. (1991). Current Developments in Second Language Reading Research. *TESOL Quarterly* 25, 375-406.
- \_\_\_\_\_. (2001). Reading-Writing Relations: Theoretical Perspectives and Instructional Practices. In D. Icher & A. Hirvelam (Eds.), *Linking literacies: Perspectives on L2 Reading-Writing Connections* (pp. 15-47). Ann Arbor, MI: Michigan University Press.
- Greene, B. B. (2001). Testing reading comprehension of theoretical discourse with cloze. *Journal of Research in Reading* 24(1), 82-98.
- Hartmann & Mentel, (2007). *Interactions*. New York: McGraw-Hill.
- Jonz, J. (1987). Textual cohesion and second language comprehension. *Language Learning* 37, 409-438.
- \_\_\_\_\_. (1990). Another turn in the conversation: What does cloze measure? *TESOL Quarterly* 24, 61-83.
- Jonz, J. & Oller, J. W. (1994). A critical appraisal of related cloze research. In J. W. Oller & J. Jonz (Eds.), *Cloze and Coherence* (pp. 371-407). London: Associated University Press.
- Kintsch, W. & van Dijk, T. (1978). Towards a model of text comprehension and production. *Psychological Review* 85, 363-394.
- Kletzien, S. B. (1991). Strategy use by good and poor comprehenders reading expository text at differing levels. *Reading Research Quarterly*, 26(1), 67-86.
- Kobayashi, M. (2003). Cloze tests revisited: Exploring item characteristics with special attention to scoring methods. *The Modern Language Journal*, 86(4), 571-586.
- Lee, J. (2002). An analysis of test-taking strategies for the cloze. *English Teaching*, 57(1), 213-237.
- Markham, P. L. (1985). The rational deletion cloze and global comprehension in German. *Language Learning* 23, 105-118.

- Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. E. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 33-58). Hillsdale, NJ: Lawrence Erlbaum.
- Sasaki, M. (2000). Effects of cultural schemata on students' test-taking processes for cloze tests: A multiple data source approach. *Language Testing* 17(1), 85-114.
- Stanovich, K. E. (1980). Interactive-compensatory model of reading. *Reading Research Quarterly*, 16(1), 33-77.
- Storey, P. (1997). Examining the test-taking process: A cognitive perspective on the discourse cloze test. *Language Testing* 14(2), 214-231.
- Yamashita, J. (2003). Processes of taking a gap-filling test: Comparison of skilled and less skilled EFL readers. *Language Testing* 20(3), 267-293.

## Appendix

### Health News for Body and Mind

Nobody wants to be sick. Everyone wants to be healthy, and most people want to have a long life, too. But a healthy body is not enough. We all want both physical and mental health. What can we do to stay well? Most of us know some things to do. It's a good idea to **1)**\_\_\_\_\_ in a gym, eat fruit, vegetables, and fish, and drink lots of water. We also know things bad to do: it's a **2)**\_\_\_\_\_ idea to eat a lot of junk food, such as chips, ice cream, candy, doughnuts, and other foods with sugar or fat. It's a bad idea to **3)**\_\_\_\_\_ a couch potato, a person who watches a lot of TV and doesn't exercise. It's a terrible idea to smoke. But scientists now have new information about other ways to stay **4)**\_\_\_\_\_. Some of it is surprising.

#### Drink Cocoa

Several beverages are good **5)**\_\_\_\_\_ health. Orange juice has vitamin C. Milk has calcium. Black tea and green tea are good for health, **6)**\_\_\_\_\_. They have antioxidants; these fight **7)**\_\_\_\_\_ such as cancer and heart disease. Most people know this. But most people don't know about cocoa, hot chocolate. **8)**\_\_\_\_\_ enjoy the sweet, chocolaty beverage, but they don't know about its **9)**\_\_\_\_\_. It has more antioxidants than tea!

#### Relax

Too much **10)**\_\_\_\_\_, which is worry about problems in life, is not good for physical health. For example, it makes your blood pressure go up. Now we know more. Some stress is chronic, **11)**\_\_\_\_\_ means that it lasts a long time. Chronic

stress can make people old. 12)\_\_\_\_\_ people get older, they get gray hair and wrinkles in their skin, and their eyesight and hearing become 13)\_\_\_\_\_. This is normal. But chronic stress makes people age faster. A scientist at the University of California, San Francisco, studies stress. She can now identify that stress makes people age. It can 14)\_\_\_\_\_ the body's DNA. The lesson from this is clear. We need to learn to 15)\_\_\_\_\_.

### **Sleep**

One easy and cheap way to help both your physical and 16)\_\_\_\_\_ health is just to sleep eight hours or more every night, but more and more people are 17)\_\_\_\_\_ sleeping enough. According to the World Health Organization, over half the people in the world may be 18)\_\_\_\_\_, which means they don't get enough sleep. Sleep-deprived people often have medical problems, 19)\_\_\_\_\_ as high blood pressure, diabetes, and heart problems. It is also more difficult for them to make decisions. Clearly, we need to find way to get more 20)\_\_\_\_\_. But there is another reason. A new study from Germany found that sleep makes people smarter. 21)\_\_\_\_\_ study shows that the brain continues to work during sleep and helps the sleeper to work on problems. You didn't do your homework last night? Maybe you can tell your teacher 22)\_\_\_\_\_ you were working hard in your sleep!

### **Learn Languages**

How many languages do you 23)\_\_\_\_\_? There might be good news for you. A study from a university in Canada found something interesting. Bilingual people, who speak 24)\_\_\_\_\_ languages very well, do 25)\_\_\_\_\_ on tests than people who speak only one language. 26)\_\_\_\_\_ seems to be mental "exercise" to hold two languages in your 27)\_\_\_\_\_. Ellen Bialystock of York University says it's like "going to a brain gym."

### **Conclusion**

28)\_\_\_\_\_ have good physical and mental health, we need to eat right, relax, sleep enough, and exercise both the body and the 29)\_\_\_\_\_. There is a lot of new information about 30)\_\_\_\_\_. Some of it is surprising. We need to know about it.

Mihyang Han

683-3 Hansin Second Apt. 205-1301,

Eumgung-dong, Sasang-gu,

Busan 617-767, Korea

Phone: 010-2574-1008

Email: [mghan108@hanmail.net](mailto:mghan108@hanmail.net)

Received: 30 Jun, 2007

Revised: 1 Sept, 2007

Accepted: 7 Sept, 2007