The Effects of an Extensive Reading Program on Reading and Listening Comprehension Among Senior High School Students

FUJIMORI Chihiro
Tokyo Metropolitan Kurumenishi Senior High School

Abstract

The present study aims to examine the effects of a ten-month extensive reading program on reading and listening comprehension. We also discuss whether there exists a relationship between reading and listening comprehension skills. The extensive reading program was implemented for all the first-year students of a senior high school in Tokyo. The data obtained from 114 students who attended the program were statistically analyzed and compared with the data obtained from 102 students who did not attend the program. It was observed that the group of the extensive reading program made gains in reading and listening comprehension on the posttest and outperformed the comparative group, second-year students, who had studied English for an additional year. A close examination of the reading scores revealed that the extensive readers made gains only on the easier texts (junior high school level) and not on the more difficult ones (intermediate senior high school level). In addition, with regard to the easier texts, correlations ranging from weak to moderate were observed between the listening and reading comprehension scores. However, with regard to the more difficult texts, no correlations were observed between the two scores. The improvement in reading and listening skills through the extensive reading program will be discussed in terms of cognitive language processing.

Key Words: Extensive Reading Program Reading Comprehension Listening Comprehension

1. Introduction

Extensive reading has been receiving increasing attention in English language classrooms. The concept of extensive reading is usually defined in contrast with that of intensive reading. Since intensive reading in language classrooms is primarily intended to train in strategies that can be applied to other texts, it aims for the student to arrive at an understanding of not only what the text means but also how the meaning is produced (Nuttall 1996, p. 38). On the other hand, extensive reading essentially involves understanding the meaning of the text for the purposes of pleasure or for gaining information. Nuttall (1996) claims that intensive and extensive reading are complementary and they are both necessary for language learning. Noro (2001), introducing a table of the comparison between the concept of extensive reading and that of intensive reading by Welch (1997), summarizes the concept of extensive reading as follows: “In short, extensive reading is a method of reading a large number of easy texts, such as graded readers, rapidly and fluently for grasping the main idea or outline without delving into the details or for enjoying the content of the text” (p. 340) (translated by the author). The ten-month extensive reading program addressed here is based on these concepts. Our concern is not to
study whether extensive reading is more effective than intensive reading in the development of over all language proficiency but to determine what language skills are affected by the extensive reading approach. The purpose of this study is to observe the effects of the program, particularly on reading and listening comprehension skills among senior high school students and to interpret the results of the research in terms of cognitive language processing.

2. Previous Studies

2.1 Previous Research on Extensive Reading and Reading Comprehension

2.1.1 Automaticity and Reading Comprehension

First, we need to refer to the concept of “automaticity” when we discuss some benefits of extensive reading. According to Grabe (1991), automaticity is defined as “occurring when the reader is unaware of the process, not consciously controlling the process, and using little processing capacity” (pp. 379-380). Stressing the importance of automatic lower-level processing particularly for less proficient readers, Grabe states that “automatic lexical access is necessary for fluent readers and many less-skilled readers lack automaticity in lower-level processing” (p. 380). As one of the seven conclusive guidelines for reading instructions, Grabe points out that students need to read extensively. He claims that “longer concentrated periods of silent reading build vocabulary and structural awareness, develop automaticity, enhance background knowledge, improve comprehension skills, and promote confidence and motivation” (p. 396). Day and Bamford (1998) also discuss the importance of sight vocabulary, which they define as “words that readers are able to recognize automatically” (p. 13). They conclude that it is necessary that second language students develop a large sight vocabulary as well as a large general vocabulary for reading comprehension and that “an extensive reading approach makes it possible for students to develop into fluent readers” (p. 19).

At this point, we need to narrow the focus of our discussion because reading comprehension skills comprise highly complex conceptions. Grabe and Stoller (2002) discuss reading processing by dividing it into two parts: the lower-level processes and higher-level processes. They state that “the lower-level processes represent the more automatic linguistic processes and are typically viewed as more skills orientated”; on the other hand, “the higher-level processes generally represent comprehension processes that make much more use of the reader’s background knowledge and inferencing skills” (p. 20). According to Grabe and Stoller, the lower-level processes comprise the following fundamental requirements: lexical access, syntactic parsing, semantic proposition formation, and working memory activation. In this paper, reading comprehension mainly refers to the lower-level reading processing, not the higher-level one.

2.1.2 Extensive Reading Procedures and Skill-based Reading Procedures

Here are two studies on the comparison between the effects of extensive reading procedures and those of skill-based procedures on the development of language proficiency. Robb and Susser (1989) examined reading comprehension among first-year college students in Japan; they compared the improvement in reading comprehension achieved by the group for which the extensive reading procedure was adopted with the improvement achieved by the group for which skill-building
instruction was adopted. The results revealed that the group for which extensive reading was adopted scored higher on two test items of reading comprehension, whereas no differences were observed on the other items. They also reported that the reading speed of the group for which extensive reading was adopted was faster than that of the other group.

Mason and Krashen (1997) provided the findings of three experiments on the comparison between a skill-based reading procedure and an extensive reading procedure for college and university students. They reported that students who were given an extensive reading procedure made better gains on a cloze test than those who attended skill-based reading classes and also showed some improvement in writing. They suggest that the extensive reading procedure is an effective and pleasurable technique and can serve as an alternative to courses on translation or reading skills.

In this way, some previous studies show extensive reading procedures exceed skill-based reading procedures in cloze tests, reading comprehension, and writing skills. However, it appears that further examinations are required in order to clarify which factors in the extensive reading procedure influence reading comprehension skills, reading speed, overall English proficiency, or writing skills.

2.1.3 Other Previous Studies and the Present Study

Here are two studies on extensive reading programs implemented for college and university students. Hayashi (1999) examined the effects of a one-month extensive reading program on reading comprehension among 100 university students. From the results of TOEFL tests, she suggested that extensive reading contributes to the improvement of reading comprehension to a greater extent than the instruction of reading strategies. She also reported that the total number of pages read by the students and their reading scores were significantly correlated with their vocabulary scores. Chida (2000) discussed how the difference in the amount that was read in an extensive reading program affected cloze test scores. He divided 78 junior college students into six groups: first, on the basis of the results of a cloze test, into two levels (upper and lower levels) and then further, based on the amount they read, into three groups (minimal, intermediate, and maximal). According to the results of his study, in the case of the lower-level groups, the maximal group showed significant gains on the cloze tests. However, no significant difference existed among the upper-level groups.

Now we have two studies on extensive reading programs carried out for high school students. Kanatani et al. (1991, 1992, 1994, 1995) presented the findings of a four-week extensive reading program for senior high school students and those of a three-week program for junior high school students. The series of their studies suggested that extensive reading programs for senior high school students might definitely affect the English proficiency test scores; on the other hand, such programs for junior high school students might not be effective in the long term. Their leading studies stimulated and inspired subsequent research on extensive reading. Hashimoto's study (1997) also reported the effects of an extensive reading program on reading comprehension; the reading program was carried out for an entire batch of first-year senior high school students. In his study, the 100 students were provided with reading skills instructions six times during the reading classes and were required to read as many pages as possible after class. The students were divided into three groups based on the scores obtained on a pretest, and they were then further divided into three groups based on the number of pages they had read. The results of the posttest indicated that the reading speed and reading
comprehension of the lower-level students improved in accordance with the number of pages they read. The reading comprehension of the upper-level students also improved; however, this was not highly evident since they had obtained high scores on the pretest as well.

The results of these previous studies suggest that the amount that students read contributes to the improvement of overall English proficiency, reading comprehension, reading speed, or the development of vocabulary. Furthermore, lower-level students particularly appear to make greater gains than upper-level students after the extensive reading procedure. As some researchers pointed out, the studies on extensive reading programs are liable to experimental contamination because it is difficult to control experimental conditions strictly in long-term programs. Thus, we will need to continue to accumulate additional data under various situations through further research so that we can arrive at a persuasive conclusion in the future.

As far as we can see, previous studies on extensive reading appear to have been conducted on college students rather than high school students because curriculums may be more flexible in colleges. Further, extensive reading programs tend to be carried out as extracurricular activities, elective courses, or short-time programs rather than as long-term, regular course programs. This is because a number of issues need to be resolved prior to the implementation of these programs. Some of such factors that need to be taken into consideration are related to the preparation of reading materials, the allocation of time for the program in the school curriculums, and cooperation with other teachers. Thus, it should be noted that the present study deals with the data of a ten-month extensive reading program carried out in the school curriculum for the entire batch of first-year senior high school students who were considered to be less-proficient readers.

2.2 Previous Research on Reading and Listening Comprehension

Canale (1984) proposes that reading and listening proficiency areas may resemble each other as receptive language proficiencies at a deeper level and to a greater extent than is apparent on the surface. He points out that this involves word recognition, conceptual knowledge, and comprehension strategies. In order to explain the nature of receptive language proficiency, he emphasized the distinctions within reading processing in terms of a reading acquisition stage and further reading achievement stages, in reference to Singer (1977).

Hirai (1999), referring to O'Mally and Chamot (1990), states that “the cognitive processes involved in listening and reading comprehension seem to be quite similar” (p. 367). She claims that the early reading processes gave a strong bottom-up orientation and good readers can read fluently because they can automatically recognize a large number of words, whereas listening processing requires very rapid and automatic bottom-up processes because of the limited capacity of the short-term memory. She examined the relationship between optimal reading and listening rates with regard to second language among 56 university students based on the work of Hausfeld (1981), which suggests that the speeds of both reading and listening with regard to the first language are correlated if the materials are sufficiently easy. The results of her experiment revealed that the optimal reading and listening speeds were similar. Therefore, she concludes that listening and reading comprehension processes share a common route in the achievement of comprehension and both the linguistic processes are highly correlated.
If lower-level reading comprehension processes and listening comprehension processes are primarily similar in decoding sufficiently easy texts, extensive reading procedures may affect listening comprehension as well as reading comprehension.

3. Method

3.1 Extensive Reading Program

A ten-month English extensive reading program was implemented for 240 first-year senior high school students in Tokyo. Each homeroom class (comprising 40 students) was divided into two equal groups. Each group had both an extensive reading class and a drama performance class every week. Further, they attended three intensive reading classes per week where skill-based chunk reading and reading aloud from a textbook were emphasized in addition to learning important words, phrases, and structures. In the extensive reading class, the students read an elementary-level graded reader that contained illustrations; the reader comprised approximately 900 words on an average. The students read the reader at their own pace without using a dictionary. During the class, all of them read the same story and answered simple questions pertaining to the content of the text. Then, they wrote down their impressions of the story or sentences that they found impressive in Japanese on their work sheets, which were filed in their folders. At the end of the program, it was found that the students read a total of approximately 25,000 words. On the other hand, during the intensive reading class, they read a total of 3,274 words from 10 lessons of the textbook. The students in the program were told to read the story at their own pace and for their own pleasure. They were not forced to be involved in rapid reading training or drills, although they tended to read the text more quickly than they did in the intensive skill-based reading class. The texts read in the program were stories with simple text structures to enable the unskilled learners to follow the content of the text easily without special background knowledge and to enjoy reading with less assistance from the teacher. One of the primary aims of the program was to nurture independent, motivated, and autonomous learners of English.

3.2 Research Questions

The present study addresses the following research questions:

1. What will be the effects of an extensive reading program on reading and listening comprehension?
2. Are there any relationships between listening and reading comprehension skills?

3.3 Participants

The participants of this study were 240 first-year senior high school students who attended an extensive reading class. According to the English scores of a nation-wide trial examination held by Kawajuku in April 2004, their overall English proficiency was considered to be below the national average (the national mean score was 110.8, while the participants’ mean score was 87.7). They attended English classes for five hours a week, which comprised a three-hour intensive reading class, a one-hour drama performance class, and a one-hour extensive reading class. In order to observe the effects of the extensive reading program on language skills, we required a comparative group who did not have an experience of an extensive reading class. Since the program was conducted for all the
first-year students, the second-year students at the same high school were chosen as the comparative group because their learning experiences were similar to those of the experimental group. In their first year, the comparative group had attended the same classes and used the same textbooks as the experimental group except for the extensive reading class; they had attended a Graded Direct Method (GDM) class instead. Since they were second-year students, in addition to having attended such English classes for a year in senior high school, they attended a four-hour intensive reading class per week.

3.4 Experimental Materials

Two versions of reading and listening comprehension tests were created for a pretest and a posttest by extracting items from the Eiken STEP tests in order to examine the progress in the reading and listening comprehension of the participants belonging to the experimental group. For the comprehension tests, 10 questions from a third-grade test and 6 questions from a pre-second-grade test were selected. For the listening comprehension tests, 10 questions were selected from the third part of a third-grade test. This part of the Eiken listening tests comprises longer passages (between 30 and 40 words) and one multiple-choice question pertaining to each passage.

3.5 Procedures and Data Analyses

The students who attended the extensive reading program took the pretest in April 2004 and the posttest in March 2005. The second-year students did not have a chance to take a pretest. Three classes of the second-year students took the same test taken by the first-year students as the posttest at the same time in the year. This data of the second-year students was used as a comparative group. Therefore, the data of the first-year students for three classes were chosen at random in order to form an experimental group; both the groups had a nearly equal number of the students.

The data of the students who missed either of the tests (the pretest, posttest, or the listening and reading tests) were omitted from the statistical analyses. Further, the data of the students who obtained a total score below five were removed because such students were considered to be reluctant to participate in the tests and we were likely to obtain scores that were not representative of each group. The final data of this experiment comprised 114 first-year students as the experimental group and 102 second-year students as the comparative group. The mean scores of the results of these tests were analyzed using ANOVAs.

4. Results

Table 1 presents the mean scores ($M$) and the standard deviations ($SD$s) of the pre- and post-listening and reading comprehension tests. The table indicates that the first-year students made gains in listening comprehension ($F = 7.53, p < .01$). With regard to reading comprehension, they showed progress in third-grade reading comprehension ($F = 69.13, p < .01$), whereas they did not show any gains in pre-second-grade reading comprehension. As a result, there was a significant difference between the mean scores of the pretest and posttest with regard to the overall reading comprehension ($F = 31.45, p < .01$). Thus, from these results, we can infer that the first-year students made overall
progress in reading comprehension after the ten-month extensive reading program.

Table 1. Comparison of Means and SDs of the Pretest and Posttest (N = 114)

<table>
<thead>
<tr>
<th>first-year students (n = 114)</th>
<th>full score</th>
<th>pretest M (SD)</th>
<th>posttest M (SD)</th>
<th>F (1, 113)</th>
</tr>
</thead>
<tbody>
<tr>
<td>third-grade listening</td>
<td>10</td>
<td>5.56 (1.83)</td>
<td>6.11 (1.81)</td>
<td>7.53**</td>
</tr>
<tr>
<td>third-grade reading</td>
<td>10</td>
<td>5.81 (2.18)</td>
<td>7.54 (2.15)</td>
<td>69.13**</td>
</tr>
<tr>
<td>pre-second-grade reading</td>
<td>6</td>
<td>1.84 (1.23)</td>
<td>1.55 (1.05)</td>
<td>3.81</td>
</tr>
<tr>
<td>reading total</td>
<td>16</td>
<td>7.65 (2.54)</td>
<td>9.10 (2.47)</td>
<td>31.45**</td>
</tr>
<tr>
<td>total</td>
<td>26</td>
<td>13.21 (3.46)</td>
<td>15.21 (3.72)</td>
<td>32.99**</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

The scores of the first- and second-year students were compared in order to identify the progress achieved with regard to listening and reading comprehension through the extensive reading program. Table 2 indicates that the performance of the students who attended the extensive reading class was superior to that of the students who did not attend this class with regard to listening comprehension (F = 9.39, p < .01) and third-grade reading comprehension (F = 4.24, p < .05). However, there were no statistical differences between the experimental and comparative groups with regard to the pre-second-grade reading comprehension and the overall reading comprehension scores.

Table 2. Comparison of the Means and SDs of First- and Second-year Students (N = 216)

<table>
<thead>
<tr>
<th>first-year students (n = 114)</th>
<th>second-year students (n = 102)</th>
<th>F(1, 214)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
</tr>
<tr>
<td>third-grade listening</td>
<td>6.11 (1.81)</td>
<td>5.30 (2.05)</td>
</tr>
<tr>
<td>third-grade reading</td>
<td>7.54 (2.15)</td>
<td>6.92 (2.27)</td>
</tr>
<tr>
<td>pre-second-grade reading</td>
<td>1.55 (1.05)</td>
<td>1.63 (1.19)</td>
</tr>
<tr>
<td>reading total</td>
<td>9.10 (2.47)</td>
<td>8.55 (2.64)</td>
</tr>
<tr>
<td>total</td>
<td>15.21 (3.72)</td>
<td>13.85 (3.88)</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

The correlations between the mean scores of reading comprehension and listening comprehension were statistically analyzed in order to interpret the progress in third-grade reading and listening comprehension that was achieved through the extensive reading program. Table 3 presents the correlations between listening and reading comprehension. The analysis revealed that the third-grade reading comprehension scores were correlated with the listening comprehension scores; with regard to the pretest for first-year students (r = .216, F = 5.50, p < .05), with regard to the posttest for the first-year students (r = .553, F = 49.39, p < .01), and with regard to the second-year students (r = .379, F = 16.86, p < .01). On the other hand, pre-second-grade reading and listening did not show a significant correlation. The most highly correlated scores were the third-grade reading and listening scores of the posttest (r = .553, F = 49.39, p < .01).
Table 3. Correlations between Listening and Reading

<table>
<thead>
<tr>
<th></th>
<th>listening × third-grade reading</th>
<th>listening × pre-second-grade reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>first-year students</td>
<td>.216 (5.50)*</td>
<td>.094 (1.01)</td>
</tr>
<tr>
<td>(pretest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>first-year students</td>
<td>.553 (49.39)**</td>
<td>.035 (.14)</td>
</tr>
<tr>
<td>(posttest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>second-year students</td>
<td>.379 (16.86)**</td>
<td>.074 (.55)</td>
</tr>
<tr>
<td>(posttest)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

5. Discussion

5.1 Extensive Reading Program and Reading Comprehension

We will discuss two points from the findings of the present study. First, we will address the effects of the extensive reading program on reading comprehension skills. The students who attended the extensive reading class made gains with regard to reading comprehension in the posttest, which was in accordance with the findings of previous studies. On examining the results of the present study, the gains can be observed only with regard to reading comprehension for the third-grade level (junior high school level) texts but not for the pre-second-grade level (senior high school intermediate level) texts. The students who attended the extensive reading class obtained higher scores on the third-grade texts as compared with those who did not attend the extensive reading class but had an additional year of intensive reading classes. On the other hand, with regard to the pre-second-grade texts, the students who attended the extensive reading class did not show any gains and there was no significant difference observed in the scores compared with the group who did not attend the extensive reading class. Thus, based on the results of the two types of level reading tests, we can arrive at a tentative conclusion that an extensive reading program leads to the improvement of reading comprehension skills for fairly easy texts but not for more difficult texts.

We can now interpret this conclusion in terms of automatic lexical access or lower-level reading processing. One possible interpretation is that the reading of easy graded readers may have affected automatic lexical access. Less-skilled readers such as the participants of the present study can be considered to lack automaticity in lower-level reading processing. As previously stated, according to Grabe (1991) and Day and Bamford (1998), automatic lexical access or buildup of sight vocabulary is necessary for fluent readers and an extensive reading program enables less-skilled readers to develop into fluent readers. The present study can be regarded as being supportive of part of their arguments.

With regard to the finding of no gains in more difficult texts, one possible reason is that fairly easy graded readers were used as reading materials in this program. Most of the graded readers that the students read ranged from 200- to 300-word levels. We were required to use *1 minus 1 level materials for the extensive reading approach. Day and Bamford (1998) define this *1 minus 1 in contrast to *1 plus 1 in Krashen’s comprehensible input hypothesis, where “*1” is the student’s current level of acquisition. As Samuel (1994) claims, we need to implement “automaticity training,” which includes “reading easy, interesting, and meaningful material,” (p. 834) in order that the reading skills of students can develop beyond the level of mere accuracy. However, *1 minus 1 level materials will not contain sufficient vocabulary for less-proficient students to develop their reading comprehension skills with respect to

— 20 —
more challenging texts. Rather, such skills might be acquired through intensive reading by using more difficult texts. In the present study, the first-year students, who attended both extensive and intensive reading classes, could outperform the second-year students, who attended another extensive reading class for one year, with regard to easier texts but not more difficult ones. In fact, the second-year students obtained higher scores in the more difficult texts than the first-year students, although this was not statistically confirmed. Thus, from the findings of the present study, we can infer that it might be difficult to achieve the buildup of both sight vocabulary and general vocabulary solely through the extensive reading approach, particularly for less-proficient learners. Nuttall (1996) also suggests that we may need to use different types of texts, which make different demands on the reader, because it is not always possible to teach in order to achieve different purposes such as reading for meaning and reading for skill practice, at the same time or with the same text. It can be said that the results of this study support the abovementioned suggestions.

5.2 Correlations Between Reading and Listening Comprehension

We will discuss the correlations between the reading and listening comprehension scores. The listening and third-grade reading scores were correlated with each other on all three tests. On the other hand, there were no significant correlations between the listening and pre-second-grade reading scores. The correlation conducted on the posttest for the students who attended the extensive reading class had a higher value \( r = .553 \) than that conducted on the pretest for the same group \( r = .216 \) as well as that conducted on the test for the group that did not attend the extensive reading class \( r = .379 \). The first-year students outperformed the second-year students in the third-grade level reading comprehension test and the listening test. Based on these results, we can tentatively infer that the students who attended the extensive reading class made progress simultaneously with regard to reading comprehension skills and listening comprehension skills.

It can be stated that the present study supports the arguments of Canale (1984) and Hirai (1999) mentioned earlier, according to which reading comprehension in lower-level processing and listening comprehension have a common linguistic process. In other words, one possible interpretation of these results is that the students who attended the extensive reading program made progress in automatic bottom-up language processing and that the reading comprehension skills developed in this manner can transfer to listening comprehension skills, which involve a similar process.

This does not imply that all of the improvements with regard to reading comprehension skills transfer to the improvement of listening comprehension skills. Hirai (1999) claims that the less proficient learners’ listening rate was slightly slower than their reading rate because of the consequent time pressure and the appropriate phonological knowledge for listening; this suggests that until a certain level of proficiency has been attained, listening to speech beyond the sentence level is a more difficult skill to acquire than reading. Hirai’s suggestion of the relationship between reading and listening skills is discussed in terms of receptive language processing speed. On the other hand, the present study is suggestive in terms of the accuracy of comprehension. However, we may infer that automaticity training through extensive reading can help learners build sight vocabulary or speed up lexical access and can lead to the development of lower-level language processing in the early stages of reading comprehension and listening comprehension.

-21-
6. Conclusion and Suggestions for Further Research

In conclusion, we suggest that a ten-month extensive reading program should lead to the improvement of reading comprehension skills for fairly easy texts but not for more difficult texts. That may be because we have to use i minus I level materials in the extensive reading program so that the students can develop their automatic bottom-up reading processing to be fluent readers. It may be difficult to achieve reading comprehension skills for different-level texts, at the same time or with the same text. Also, the students who attended the extensive reading class made progress simultaneously with regard to reading comprehension skills for easier texts and listening comprehension skills. We can infer that the development of reading comprehension skills through an extensive reading program may transfer to that of listening comprehension skills, which involve a similar automatic bottom-up language process.

This research presents only one case study for less-proficient senior high school students. In order to gauge the effectiveness of extensive reading programs on language skills, observation over a long period of time is required. This kind of long-term observation is liable to suffer from contamination by other factors or variables. Thus, we need to accumulate studies similar to the present one. To provide suggestions for further research, we will first address the problem of experimental materials. In the present study, two-level reading materials, third-grade texts, and pre-second-grade texts were used to observe the improvement of reading comprehension. The third-grade texts were found to be appropriate for the students of the present study. However, the pre-second-grade texts might have been too difficult for the students to comprehend. Thus, in order to clarify the effects of the extensive reading approach on different texts, we will need to use appropriate levels of experimental materials, namely, the i minus I level and i level.

Second, further research is required to examine how learners acquire sight vocabulary and general vocabulary through extensive reading. Based on the present study, we can infer that extensive reading might affect sight vocabulary. Thus, for an individual involved in planning language learning, it will be useful to know how learners can improve their sight vocabulary and general vocabulary through extensive and intensive reading. These studies will lead to the examination of whether there exists a relationship between the development of reading comprehension skills and that of listening comprehension skills through extensive reading.

Acknowledgements

This is a revised version of the handout presented at the 29th Annual Convention of the Kanto-Koshinetsu Association of Teachers of English held in Niigata on August 21, 2005. I am very grateful to anonymous reviewers for their valuable comments and suggestions.

Notes

1. One of the teachers in charge of the extensive reading classes gave marks of the reading comprehension tests without separating two level (third-grade and pre-second-grade) scores. Therefore, we had to remove the data of such classes for the research. Then we formed an experimental group so
that it could be the counterpart of the comparative group in number.

References


平井 明代 (2001)。「VI－1 リスニングとの関係：視覚・聴覚入力の統合」『英語リーディングの認知メカニズム』門田修平・野呂 忠司 編著. 東京: くろしお出版.