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Effects of Chunking on Reading Comprehension of EFL Learners: Silent vs. Oral Reading

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This study investigates how EFL learners' chunking ability both in oral and silent reading affects reading comprehension, and how the chunking ability in silent reading relates to that of oral reading. The participants of this study consisted of 30 Korean university students taking a required 'English Reading' course. Chunking is a technique of grouping words into meaningful syntactic units for better understanding. Chunking was measured from pauses in oral reading. Results of this study suggest that the participants who can chunk properly both orally and silently display better comprehension of texts in general. However, chunking in silent reading was found to be a stronger indicator of improved reading comprehension. Also, the chunking skills in silent reading showed a statistically strong correlation with those observed in oral reading, suggesting that the chunking ability in silent reading may develop in parallel with that of oral reading. Oral as well as silent reading should be continuously practiced to improve reading comprehension of all levels of EFL learners, including low levels of learners. There is also a need to encourage students to read aloud with appropriate prosodic cues to help them read in meaningful units of words, therefore increasing EFL learners' comprehension not only in reading but also in listening.

[chunking/silent reading/oral reading/reading comprehension]

I. INTRODUCTION

The present research investigates the relationship between reading comprehension and chunking in oral reading and silent reading. Chunking is a technique of grouping words into meaningful clause or phrase units for better understanding (Lems, Miller & Soro, 2010). The focus of chunking is, thus, on understanding the meaning of the whole text within and across meaningful syntactic units rather than by decoding individual words.

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The ability to chunk has been said to contribute to improving reading comprehension for both the first language (L1) and the second (L2) or foreign language (Casteel, 1990; Grabe, 2004; Irwin, 2007; Kim, 2007; Kuhn & Stahl, 2003, Lems et al., 2010; Rasinski, 1990; 2003). Readers engaging in chunking are led to identify phrase or clause boundaries so that they can focus their attention on more important grammatical units suited to their reading goals, giving other less important units less attention (Johnson & Moore, 1997).

However, despite the alleged benefits chunking has on reading comprehension, there have been few studies on this relationship, especially in English as a foreign language (EFL) settings. One possible cause for this lack of research could be that chunking is often regarded as a formulaic grammar skill detached from constructing meaning, whereas word-level decoding or background schema activating, which have received relatively more attention in terms of improving reading comprehension, are considered meaning-related activities. In fact, the grammar skills needed for chunking contribute greatly to understanding the meaning of sentences (Koda, 2005). Also, chunking requires not only grammatical knowledge but other abilities such as word recognition and uses of prosodic features, as will be discussed in the next section in detail.

In addition, research on how the effects of chunking on written language can work for spoken language has also received scant attention in EFL settings, to my knowledge[1]. The ability to chunk well is usually represented as intonation patterns and properly placed pauses in spoken language, such as in oral reading. For most EFL learners, who are more likely to struggle with orthographical and phonological identification of words (Al-Jarf, 2005), interest in such prosodic features as pausing and intonation dealing with phrases or clauses beyond a word level could be considered a little premature from both researchers and instructors. Or chunking practice in reading classes could have been considered solely a receptive skill, the instructor not necessarily having in mind the possibility of transfer effects on production. However, prosody as a feature closely related to chunking crucial for improving reading comprehension cannot be disregarded even in EFL reading classes. Measuring learners' readiness to learn such prosodic features is regarded as necessary before designing instructional practice for chunking. Accordingly, learners' level of English becomes a matter of concern in dealing with this issue.

Thus, this study attempts to figure out how learners' chunking ability in silent reading

[1] However, there have been studies on the relationship between written and spoken language in L2 (second language) contexts, although a particular focus was not on chunking. For example, Park (2010), in her study on the relationship between reading and listening comprehension by Korean ESL (English as a second language)college students, suggests the development of reading comprehension correlates with that of listening comprehension, and grammar plays a pivotal role in accounting for this correlation. Considering that chunking is based on grammar knowledge, the results may support that chunking skills can also be key to bridging the gap between written and spoken language if there exists any difference in the development between the two areas.

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relates to that of oral reading, and how the chunking ability in both reading conditions affects reading comprehension. The findings obtained in this study are expected to give implications on whether the chunking practice is adequate for EFL reading classes intended for a low level of Korean learners of English, and if so, how effectively a practice such as chunking could be adopted in EFL classes for reading orally as well as silently.

II. CHUNKING AND READING COMPREHENSION

1. Processes Involved in Chunking

Chunking refers to dividing sentences or text into meaningful units that can be placed in short-term memory. Successful chunking involves word identification as a basis for further processing of syntactic parsing. Necessary steps in identifying words are understanding sound and spelling, and form and meaning relationships. Rapid and automatic identification of words is prerequisite for improved comprehension because if word recognition does not occur automatically, our working memory is consumed with consciously decoding words, delaying opportunities to engage in higher level cognitive processes such as chunking (Anderson, 1999; Segalowitz, Poulson, & Komeda, 1991). Even though a learner knows the meaning of a certain word, he or she may not know how to pronounce it because knowing the word by sight and pronouncing it are different. Or the opposite case can be also possible; a learner may have no problem pronouncing the word, without knowing its meaning. This appears especially true for EFL readers who are likely to have more difficulty identifying words in both semantic and phonetic ways (Grabe & Stoller, 2002; Kuhn & Stahl, 2003). Therefore, automaticity of word recognition tends to be emphasized in the literature of reading in EFL, but it is only a process that leads to chunking.

Most fundamental in chunking is the ability to recognize grammatical structures in sentences. For example, without competence in grammatical knowledge on the use of the verb *'leave'*, the following sentence "*Because the boy left the room seemed empty*" (Koda, 2005, p. 100) can make it difficult for learners to interpret the meaning of the sentence correctly. If a learner is not aware that the verb 'left' here can be used both as a transitive and intransitive verb, '*the room'* may be linked with the verb *'left'* as a direct object, not with the second verb '*seemed'* as a subject, leaving the rest of sentence unresolved. This kind of insufficient grammatical knowledge on the ambiguous use of the verb 'leave' can cause misunderstanding, possibly reducing motivation to read further on the part of the learner. As shown in this example, knowledge of grammar plays an important role in chunking essential for understanding sentences and a text further.

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Prosodic features such as pausing, intonation and stress are also of high importance in successful chunking. Competence in using prosodic features is known to help guide learners to read a text in "thought groups" (Johnson & Moore, 1997)- chunked units- based on the auditory memory of the sound of words, intonation units, or pausing (Dowhauer, 1991; Johnson & Moore, 1997; Lems et al., 2010). For example, pausing at periods or changing intonation patterns for questions are both evidence of chunking in oral reading. Learners who are trained for these prosodic features tend to have a developed ability to predict possible syntactic patterns of English to follow and thus read fluently with "expressive rhythmic and melodic patterns" (Johnson & Moore, 1997, p. 27).

2. The Effects of Chunking on Reading Comprehension

The beneficial effects of chunking on reading comprehension are well documented especially in L1 English studies (Casteel, 1990; Grabe, 2004; Irwin, 2007; Kuhn & Stahl, 2003, Lems et al., 2010; Rasinski, 1990; 2003). For instance, Casteel (1990) found that chunked-text material presented to L1 eighth-graders significantly improved their reading comprehension, and the improvement was more distinct with low-ability readers. Rasinski (1990) found a similar result that organizing texts into smaller units facilitated memory recall as well as reading comprehension of struggling readers in particular.

Unlike English language learners, native speakers of English develop chunking skills naturally as they learn the language structures through listening to it and speaking it (Lems et al., 2010). Accordingly, there has been a large volume of a more indirect line of research on the effects of reading practices that can reinforce chunking skills on reading fluency in the L1 instead. Such widely used practices include modeling, reading aloud, choral and repeated readings. Reading fluency is an ability to read fast and accurately with appropriate expression in reading text silently and orally (Grabe, 2004). Measures of reading fluency are reading rate, accuracy, and comprehension. As discussed in the previous section, chunking, which can be facilitated by the accurate decoding of words and appropriate use of syntactic cues such as punctuation, is an important part of reading fluency, although the weighting of chunking in enhancing reading fluency can vary according to the learner and context.

According to Lems et al. (2010), in addition to accuracy and speed in decoding words and improved comprehension, English language learners could benefit more from reading aloud. That is, they can develop two important competencies, chunking and prosody. By reading aloud, learners can get accustomed to English intonation and stress patterns and get a feel for how meaning can be embedded in such prosodic features beyond the words. Furthermore, with practice through modeling from the teacher or accompanying audio materials, learners can finally read in the same expressive and meaningful manner as the

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native-speaking model (Rasinski, 2003). Repeated reading was designed by Samuels (1979) to help develop reading fluency for L1 English readers. This method requires learners to read the same text three or four times. By repeated reading, learners are offered opportunities for more automatic and unconscious word recognition, which in turn allows them to direct their attention to higher cognitive processes. As a result, chunking and more phonological phrasing can emerge, but not necessarily with comprehension improvement to the EFL learners (Grosuch & Taguchi, 2008).

As mentioned, studies on chunking in EFL or ESL have not been productive. Among the few, Kim (2007) suggests in her study of parsing skills used by Korean university EFL learners that L2 parsing skills can facilitate L2 reading fluency in terms of speed and accuracy. In her study, the participants with correctly parsed texts outperformed those with abnormally parsed texts in the gains between pre-and post-tests of reading speed and accuracy, especially with those at the upper-intermediate level showing the greatest impacts of the parsing treatment. From the results, she also suggests the threshold level of L2 proficiency for L2 parsing skills to take effect is at the upper-intermediate level, equivalent to TOEIC scores from 680 to 795. The positive relationship between chunking and reading comprehension was also found in the study of pausing when ESL learners read a text aloud (Johnson & Moore, 1997). They associated pausing in speaking with punctuations or phrase or clause boundaries in written language, emphasizing the importance of prosody, especially pausing in a stress-timed language such as English for better intelligibility. The results showed more native-like use of pausing correlated positively with reading scores of the ESL participants, implying the possibility that L2 reading progress may be similar to L2 speaking progress, but a cause and effect relationship between the two domains remains unanswered. It appears that chunking practice in reading has a positive effect on speaking, but this relationship needs to be verified as spontaneous speaking and reading a text aloud differ.

3. Chunking in Silent Reading vs. Oral Reading

There has been little research investigating the relationship between silent reading and oral reading, and particularly it is even more difficult to find research comparing the two reading modes in terms of chunking behaviors exclusively. According to Baker and Good (1995), there appeared more resemblance in the processes involved in reading aloud by Spanish children learning English with their silent reading, than there were with their speaking. In a similar line, Daneman and Carpenter (1983) found more similarities than differences between oral and silent reading; learners engaging in both types of reading were able to integrate information by reading with appropriate pausing at boundaries when inconsistency occurred. Lems' (2005) study investigating correlations between oral and

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silent reading noted that learners' L1 background has a crucial role in determining the degree of correlation between the two reading types. A strong correlation was revealed if the learner's L1 shares the same alphabet system with English; for example, Polish and Spanish learners of English showed a strong correlation between their oral and silent reading, while learners whose L1 was Chinese showed no correlation between the two types of reading regardless of their comprehension scores. From the inconsistent results according to L1, Lems (2005) questions the validity of oral reading as an assessment of reading comprehension in the case of English language learners. In addition, EFL or ESL learners' foreign accents, though still intelligible, can also lower their scores on the measures of accuracy and speed. For these reasons, oral reading fluency might not be suggested as a valid measure for reading comprehension in the case of English language learners (Birch, 2007; Lems et al., 2010).

To my knowledge, no research exists regarding the transfer effects of chunking from reading to speaking or vice versa. A common belief in language learning is that perception precedes production, and thus comprehension practice would promote both comprehension and production in the L2. One interesting study (Trofimovich, Lightbown, Halter & Song, 2009) investigating the impact of long-term comprehension practice on L2 pronunciation shows that L2 pronunciation in terms of fluency, accuracy, and listener ratings of comprehensibility and fluency indeed developed after two years of reading and listening practice. However, the results yielded no differences between the groups of comprehension-only practice and a regular program. What is more is that the listeners judged learners who belonged to the regular ESL program to be more fluent and comprehensible.

Although Trofimovich et al.'s (2009) study on the comprehension-production relationship suggests comprehension as a means of perception leads to L2 production, this is not always guaranteed. In relation to the purpose of this particular study on chunking, it may be quite questionable that the learners' chunking ability in silent reading will be transferred to oral reading without special speaking training. When reading aloud, readers inevitably have the added burden of processing phonological information of words in text as well as identifying the meaning of the words or phrases. It is well assumed that EFL learners are at a disadvantage in dealing with such a dual process, although there is variability among learners according to their proficiency level.

Based on the aforementioned discussions on chunking and its role in reading comprehension, this study addresses the following research questions.

1) How do chunking skills of EFL Korean learners in both oral and silent reading affect reading comprehension?
2) How does the participant's ability to chunk in silent reading relate to that of oral

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reading?

III. METHODS

1. Participants

The participants of this study consisted of 30 Korean university students enrolled at a university in Korea. They were taking part in a 15-week required 'English Reading' course while this study was conducted. Most of the participants were freshmen and their majors varied. Their level of English proficiency was considered to be elementary to low intermediate, given that their TOEIC scores ranged mostly from 250 to 450. No one had experience living or studying in English speaking countries longer than 2 weeks.

2. Data Collection Procedures

1) Chunking skills in Silent Reading

The participants of this study learned English reading texts appropriate for or a little higher than their English level during the semester. The main focus of their reading activities was on finding main ideas and supporting ideas, but a huge emphasis was also placed on practicing how to chunk at a sentence level and interpret the chunks in English word order. They were informed at the beginning of the semester that chunking was one of the criteria by which they were to be evaluated during their mid-term and final examinations. The participants were evaluated according to their chunking scores obtained from their final examinations. These scores were regarded as their chunking ability in silent reading.

2) Test of Reading Comprehension

At the end of the semester, the students were administered a reading comprehension test, which consisted of three reading texts with seven questions for each. The number of questions was 21 all together. The reading comprehension test was taken from a review section given at the end of the textbook, which was designed in a way to review vocabularies and phrasal expressions the students had already learned in the previous units. Thus, the participants were familiar with the words and expressions appearing on the test. This ensured the level of text difficulty was appropriate for the participants in terms of vocabulary and content. However, even though the reading texts on the reading

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comprehension test were provided in their textbook, no participants reported that they had had a chance to read the texts given on the test before sitting on the test.

3) Chunking skills in Oral Reading

After the reading comprehension test, the participants were asked to read aloud the first paragraphs of the texts given in the test and record their voice while reading using a specially designed recording facility provided from an E-class. Their recordings were stored automatically as a recording file at the E-class. They were not given any guidelines for reading aloud, but just asked to read loudly and as naturally as possible so that their actual oral reading abilities could be revealed. They were also told that their recording would be used for a research purpose only and there was no need to practice reading before recording. Half of the participants were able to participate in recording in an AV room immediately after the test, while the rest half was not because they had another class to take afterwards. Thus, it was given as a home assignment to those who couldn't record on the spot, thus making it difficult to avoid practice effects in measuring their oral reading abilities. Nevertheless, there were no dramatic differences in chunking scores from oral reading between the two groups- those who recorded immediately and those who recorded at home. Rather, the participants' chunking scores from oral reading were more closely related to reading comprehension scores than to the timing they recorded. Their chunking ability in oral reading was rated based on pauses in their recordings. Only the number of pauses occurring in inappropriate places was computed.

3. Data Analysis

Chunking scores in silent reading were obtained from the items on chunking in final examinations. A total of 8 questions were given in the final examination. The students were required to indicate a subject, a verb, and an adjective, noun, or adverb clause if any, and put a slash mark into chunking units. The size in chunked units can differ from learner to learner according to their proficiency level. Thus, chunking sentences in the possible smallest unit was not penalized as long as words were grouped into meaningful grammatical units, but after the test recommended chunking units were discussed with the whole class. The following is the example sentence given on the final examination.

You can decide /how much money you want to make/, and who will work for you.//
S V noun clause noun clause

The markings for the above sentence were intended as the correct answer. However,

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for example, putting a slash mark between *who will work* and *for you* as in *who will work/ for you//* was regarded as correct.

For oral reading, the participants were presented three paragraphs to read with 11 sentences in them. Most sentences presented were complex, with adjective or noun and adverb clauses. Based on the native speaker's reading given from an accompanying audio CD, the texts were divided into 45 meaningful units (See Appendix). The junctures between the units were predetermined as places to pause. The participants' chunking scores in oral reading were obtained basically by computing the number of incorrect pauses made by the participants in places other than the predetermined junctures. However, pausing within the predetermined unit was sometimes coded correct if the participant paused in places where smaller chunking was possible, although it may have sounded like non-native speech. Hesitations and incorrect pronunciation for each word were not considered in this study, as the purpose of this study was on examining chunking delivered mostly through pauses in oral reading. Overall, the participants made up to 11 incorrect pauses. For the convenience of easy comparison with silent reading, chunking scores were given to each participant by deducting the number of incorrect pauses from a total of 45 chunking units.

IV. RESULTS

Table 1 shows the descriptive statistics of means and standard deviations for the three measures completed by the 30 Korean EFL learners. Overall, it was found that the participants performed better in oral reading (OR) than in silent reading (SR) in terms of chunking. The participants obtained a mean score of 9.53 out of a total of 21 on the reading comprehension test (RC), showing that approximately only half of their answers were right. It is considered that the difficulty level of the reading comprehension test is somewhat higher for the participants of this study.

TABLE 1

Descriptive Statistics of Means and Standard Deviations

	N	*M*	*SD*
Chunking in Silent Reading (CSR)	8	5.48	1.90
Chunking in Oral Reading (COR)	45	39.43	3.98
Reading Comprehension (RC)	21	9.53	3.41

Figure 1 shows the percentage of the scores obtained in each measure. Since the full score for each measure differs, it would be easier to compare the participants' chunking abilities between SR, OR and RC scores through the percentage information as in Figure 1.

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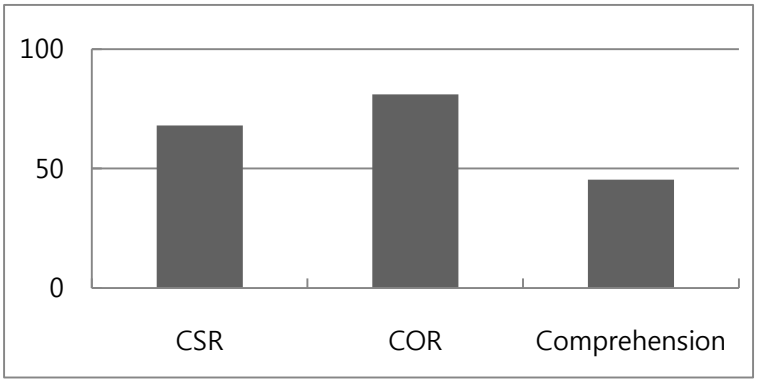
FIGURE 1

Chunking Scores in SR, OR, and RC by Percentage



As shown in Figure 1, the participants' chunking ability was discovered relatively higher in OR than in SR by approximately 10%. It is rather unexpected on the ground that participants had a chunking training almost exclusively with written language, that is, in SR conditions, and OR was expected to be more difficult as it requires competence in pronunciation, a feature lacking in SR. However, a simple comparison with quantitative numbers can be misleading. It appears that the scoring method might be the cause of this rather unexpected result- OR over SR in terms of chunking. When measuring chunking in OR, the number of incorrect pauses was the criteria of chunking skills; accordingly, all the tokens of pausing made by the participants were recorded and counted. In contrast, SR chunking scores were calculated by sentence, regardless of the number of chunking units available in a sentence. That is, if a participant made one mistake in chunking for a sentence, no point was given although chunking in other parts of the sentences was successful.

Table 2 shows the correlation matrix for the participants' performance on the three measures. All of the possible pairs of measures were correlated with each other. Most noticeable in the correlation matrix in Table 2 is that CSR most strongly correlates with the other two measures. The highest correlation was found between CSR and RC (r=0.671**). Also, the correlation between CSR and COR (r=0.641**) was statistically as strong as that of CSR and RC. COR showed a statistically meaningful relationship with RC (r=0.491*), although the degree of correlation between the two measures is weaker than that of CSR with RC.

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TABLE 2

Correlation Matrix for the Three Measures of CSR, COR, RC

	CSR	*COR*	*RC*
Chunking in SR(CSR)	-	.641**	.671**
Chunking in OR(COR)		-	.421*
Reading Comprehension (RC)			-

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

V. DISCUSSION

1. Chunking and Reading Comprehension

The correlation results suggest that chunking in both silent and oral reading is strongly tied to reading comprehension. Hence, both silent and oral reading focusing on effective chunking can be used as a valid predictor for EFL reading comprehension. The results can be well accepted since a variety of literature and studies in L1 (Casteel, 1990; Rasinski, 1990; Lems et al., 2010) and L2 (Johnson & Moore, 1997; Kim, 2007) have found the close relationship between reading comprehension and chunking. Especially interesting of the findings is that the participants' oral chunking abilities were closely related to their reading comprehension without particular speaking practice for prosodic features necessary for chunking as found in Johnson and Moore's (1997) research. However, chunking in silent reading was revealed as a more significant indicator of reading comprehension than that of oral reading.

Given that the level of English proficiency of the participants is lower than intermediate, the particular findings do not corroborate Kim's (2007) suggestion that an upper intermediate level is the appropriate timing to intervene for L2 parsing skills. The results imply that chunking in oral reading as well as silent reading should be continuously encouraged to increase reading comprehension of all levels of EFL learners including low levels of learners.

2. Chunking in Silent vs. Oral Reading

What is also encouraging is that chunking scores in silent reading were statistically highly interrelated (although modest) with those of oral reading. This result is consistent with the findings of other research (Baker & Good, 1995; Daneman & Carpenter, 1983) that oral reading shares more similarities with silent reading than differences. The correlation between chunking in silent reading and in oral reading may imply that

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chunking practice in silent reading can contribute to the EFL learners' development of prosody such as pausing in spoken language as well. This suggestion is in the same line with Trofimovich et al.'s (2009) research findings on the positive transfer effects of long-term comprehension practice on L2 pronunciation.

However, the focus of this study was on the correlation between silent and oral reading in terms of chunking and chunking effects on reading comprehension, not on the improvement effects of chunking practice by comparing pre- and post-test scores, even though chunking practice was highly emphasized in class. Thus, the implication that chunking in silent reading may have transferred to oral reading can be considered rather radical; there are always possibilities that other factors such as English speaking practice outside the class may have contributed to chunking scores of oral reading corresponding to those of silent reading. Still, from the result, it can be at least suggested that written language development tends to go hand in hand with spoken language development in terms of chunking in the case of this particular population of EFL learners at a low English level. In other words, the participants are already positively influenced by English prosodic patterns when reading whether silently or orally, and accordingly are ready to receive instructions on such features through oral reading. It seems, thus, reasonable to encourage oral reading practice specially designed for prosodic features such as pause and intonation for EFL reading.

Unlike Lems et al.'s (2010) view questioning oral reading as a valid assessment of reading comprehension, this study suggests that oral reading as well as silent reading should be considered valid measurements for EFL reading comprehension from the observed statistically high correlations between oral reading and reading comprehension, and between oral and silent reading.

VI. CONCLUSION

The primary focus of this study has been to find out the degree of correlation between reading comprehension and the ability to chunk in two different reading conditions, namely silent reading and oral reading by Korean EFL university students.

Overall, the correlation results in this study suggested that chunking abilities in both silent and oral reading corresponded with EFL reading comprehension. The results implied that oral reading as well as silent reading as strong facilitators of chunking should be practiced continuously to improve reading comprehension of all levels of EFL learners, including low levels of learners. However, the participants' chunking ability in silent reading more strongly correlated with reading comprehension than that of oral reading with reading comprehension. The reason for this could be because the participants had chunking

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practice with silent reading in class, and the performances in both silent reading and comprehension involved written language exclusively. Chunking in silent reading appears to be a stronger indicator of improved reading comprehension.

In relation to the correlation between chunking in silent and oral reading, despite the concern that chunking skills in silent reading may not work for oral reading especially in the case of EFL learners, a statistically meaningful correlation was detected between silent reading and oral reading in terms of chunking skills. This may suggest that the chunking ability in silent reading is closely related to oral reading as well as contribute to improving reading comprehension. However, as the focus of this study was not on examining the role of chunking practice in silent reading on reading comprehension, transfer effects from silent reading to oral reading can only be assumed. What can be suggested with more conviction is that written language may develop in parallel with spoken language in terms of chunking in the case of this particular population of low-level EFL learners. That is, the participants are already positively influenced by English prosodic patterns when reading whether silently or orally, and accordingly are ready to receive instructions on such features through oral reading. It is considered necessary to provide ample opportunities to practice chunking and its speaking pair, prosody with spoken language, to help more effectively improve EFL learners' comprehension abilities not only in reading but also in listening.

REFERENCES

Al-Jarf, R. S. (2005). The effects of listening comprehension and decoding skills on spelling achievement of EFL freshmen students. *English Language & Literature Teaching*, *11*(2), 35-50.

Anderson, N. (1999). *Exploring second language reading; Issues and strategies.* Boston: MA, Heinle & Heinle.

Baker, S. K., & Good, R. H. (1995). Curriculum-based measurement of English reading with bilingual Hispanic students: A validation study with second-grade students. *School Psychology Review, 24*, 561–578.

Birch, B. (2007). *English L2 reading: Getting to the bottom* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Publishers.

Casteel, C. A. (1990). The effects of chunked material on reading comprehension of high and low ability readers. *Reading Improvement*, *27*(4), 269-275.

Daneman, M., & Carpenter, P. A. (1983). Individual differences integrating information between and within sentences. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *9*(4), 561-584.

교보문고 KYOBO Book Centre

Dowhower, M. (1991). Speaking of prosody: Fluency's unattended bedfellow. *Theory into Practice, 30*, 165-175.

Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. New York: Longman.

Grabe, W. (2004). Research on teaching reading. *Annual Review of Applied Linguistics, 24*, 44-69.

Grosuch, G., & Taguchi, E. (2008). Repeated reading for developing reading fluency and reading comprehension: The case study of EFL learners of Vietnam. *System, 36*, 253-278.

Irwin, J. W. (2007). *Teaching reading comprehension processes.* Englewood Cliffs, NJ: Pearson.

Johnson. R., & Moore, R. (1997). A link between reading proficiency and native-like use of pausing in speaking. *Applied Language Learning, 8*, 25-42.

Kim, Seung-Jung. (2007). The importance of L2 parsing skills for L2 reading fluency. *English Teaching, 62*(2), 31-46.

Koda, K. (2005). *Insights into second language reading: A cross-linguistic approach*. Cambridge University Press.

Kuhn, M. R., & Stahl, S. A. (2003). Fluency: A review of developmental and remedial practice. *Journal of Educational Psychology, 95*, 3-21.

Lems, K. (2005). A study of oral reading of adult ESL reading fluency and silent reading comprehension. In B. Maloch, J. V. Hoffman, D. L. Schallert, C. M. Fairbanks & J. Worthy (Eds.), *54th Yearbook of the National Reading Conference* (pp. 240-256). Chicago, IL: National Reading Conference.

Lems, K., Miller, L. D., & Soro, T. M. (2010). *Teaching reading to English language learners: Insights from linguistics.* New York: The Guilford Press.

Park, Yong-Hyo. (2010). A relationship between reading and listening proficiency of Korean ESL college students: Listening potential. *English Language & Literature Teaching, 16*(1), 101-122.

Rasinski, T. V. (1990). Effects of repeated reading and listening-while-reading on reading fluency. *Journal of Educational Research, 83*, 147-150.

Rasinski, T. V. (2003). *The fluent reader: Oral reading strategies for building word recognition, fluency, and comprehension*. New York: Scholastic.

Samuels, S. J. (1979). The method of repeated reading. *Reading Teacher, 32*, 403-408.

Segalowitz. N., Poulson. C., & Komeda, M. (1991). Lower level components of reading skills in higher level bilinguals: Implications for reading instruction. *AILA Review, 8*(10), 19-30.

Trofimovich, P., Lightbown, P. M., Halter, R. H., & Song, Hyojin. (2009). Comprehension-based practice: The development of L2 pronunciation in a listening and reading program. *Studies of Second Language Acquisition, 31*, 609-639.

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APPENDIX

A Script for Oral Reading

Movies for the blind?

When you think of the cinema/, the phrase/ "watching a movie" probably comes to mind/, and, in fact/, moviemakers work very hard/ to make their films interesting visually//. But/ movies also contain/ stories, dialogues, music,/ and sound effects/- things that people don't need to see /in order to enjoy//.

Meet Freddy Adu, Soccer Sensation

Born in Ghana, West Africa/, in 1989/, Freddy Adu has become one of the most promising young soccer players/ in the world//. Soccer fans have been extremely enthusiastic about Adu/ since 2003/, when he became the youngest player ever /to sign a professional sports contract/ in the United States//. He was thirteen years old at the time//. The next year/ he became the youngest athlete/ ever to play in an all-star-game/, a match /in which the best individual players from many professional teams/ compete//.

Combining new and old medicine

The human body is an amazing/and complex machine//. It is very resilient/, and we usually recover from illness or injury/ on our own/, without the help of the doctor//. But/ what happens/ when we need medical treatment//? In the past/, some people went to a clinic or hospital/ to see a medical doctor//. Other people trusted ancient traditions and chose treatments/ such as herbal medicine or acupuncture//. These two types of medicine/ – one modern and Western /and the other ancient and Eastern/-used to have nothing to do with each other//.
(Slash marks are drawn by the author based on the native speaker reading from an accompanying audio CD)

Examples in: English
Applicable Languages: English
Applicable Levels: All Levels

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