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The Effectiveness of Reading Instruction in Korean EFL Classrooms: A Meta-Analysis

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This study employs a quantitative meta-analysis to investigate the effectiveness of input- and output-focused reading instruction in Korean EFL classrooms and moderating variables on L2 learners' reading comprehension ability. Through an extensive search on electronic data bases, a total of 129 studies with 149 effect sizes (ESs) were collected, and their common ES was calculated based on Hedge' *g* with the software CMA ver. 2.2.056. The results of this study showed that output-focused reading instruction (OFRI) had a greater effect than input-focused reading instruction (IFRI). The difference of ESs between two types of reading instruction was especially larger at the elementary and secondary school levels. Among specific writing activities incorporated in OFRI, multiple output tasks followed by speaking activities were the most effective regardless of school levels. For single activity types, response writing and summarizing turned out to be the most effective activities for elementary school students and secondary and college students, respectively. Authentic materials were a significant moderator regardless of school levels. In addition, reading approaches and collaborative tasks had a statistically significant moderating effect at different school levels.

[input-focused reading instruction/output-focused reading instruction/writing to read/writing activities/meta-analysis]

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I. INTRODUCTION

Reading is one of the most important language skills for L2 learners. It is a critical source for language input and also an essential skill for learning content areas (Anderson, 2003; Krashen, 2004). Since language skills are inter-related, reading can help L2 learners develop other language skills such as listening, speaking, and writing (Brown, 2007; Goodman, 1986). Also, through reading, L2 learners can learn not only language but also knowledge to attain their academic purposes. The recent development of digital networks has greatly increased opportunities for L2 reading. Therefore, reading has been a critical skill for L2 learners to acquire, and accordingly, many researchers have continued to study how to teach reading effectively.

There have been various attempts to improve Korean L2 learners' reading skills. Much research has been conducted to provide effective reading instruction methods such as literature-based reading (M. N. Jung & K. A. Cha, 2011; H. S. Kang, 2006; H. R. Kim & Y. M. Kim, 2010), extensive reading (H. Kim, 2011; J. S. Kim, 2012; S. H. Park & H. Choi, 2012), and form-focused instruction (M. S. Chung, 2003; B. J. Kim, 2005). Some studies have investigated the effects of using reading strategies (J. H. Byun & S. Park, 2012; H. R. Kim & Y. M. Kim, 2010; S. Lee, 2011; U. Maeng, 2010; J. Park & B. B. Im, 2013), and other studies have explored the effects of specific activities such as employing learners' schema (S. H. Hwang & W. J. Yoon, 2006; K. H. Kim, 2008; S. J. Yoon, 2009). These are all suggested as efficient reading instruction methods focusing on consolidating language input and enhancing learners' comprehension skills, but there have also been negative and mixed effects of these instructional methods across school levels, age groups, and treatments (U. Maeng, 2014; H. J. Park & E. J. Lee, 2011; Plonsky, 2011).

On the other hand, for effective reading skill development, some researchers have suggested writing can be beneficial (Harmer, 2004; Hirvela, 2004). As reading and writing are both meaning-making processes and share linguistic and cognitive commonalities, the two language skills are claimed to be interdependent or bi-directionally transferred (Tierney & Shananhan, 1991). Furthermore, not only does reading provide comprehensible input, but so does writing (Grabe & Kaplan, 1996). While producing output such as writing and speaking, L2 learners hypothesize, monitor, and internalize their language (Swain, 1985, 2000), and this can result in improving overall language proficiency including reading. That is, writing is closely connected to reading (Grabe, 2003; Hirvela, 2004, Hudson, 2007), and writing activities can be effectively used for reading skill development.

Some studies have explored the effects of writing in reading instruction for Korean L2 learners. Story mapping and graphic organizers have been proposed as useful activities for improving learners' reading skills (B. B. Im & S. S. Jang, 2001; H. S. Kim & K. A. Cha, 2010; M. N. Jung & K. A. Cha, 2011; H. J. Ryu, 2009), and book report and journal

writing have reportedly improved L2 learners' reading abilities (B. B. Im, H. S. Byeon, & C. S. Mun, 2009; H. R. Kim & Y. M. Kim, 2010; H. R. Kim & S. W. Lee, 2013; J. Kim & Y. V. Chon, 2013). Summarization has also been indicated as an effective reading and writing activity which develops learners' reading comprehension (J. Joh, 2000; H. Jung, 2012; J. Y. Lee & C. K. Min, 2010). However, some research has claimed its ineffectiveness for reading skill improvement. For example, W. J. Yoon (2007) reported that writing activities using semantic mapping were not effective in improving high school students' reading comprehension; K. M. O (2011) also reported that response writing such as keeping writing journals in extensive reading courses was not efficient for reading skill development at the university level.

Although many studies have reported some effects of reading instruction with various activities, no studies have been found that summarize the result. Furthermore, aforementioned reading instruction related studies can be divided into two different categories according to the activities implemented in the studies: input-focused reading instruction consolidating language input and output-focused reading instruction focusing on producing language. However, there was no attempt to synthesize effect sizes of these instructions and investigated their relative effectiveness. Since those input- and output-focused reading activities involve different purposes for reading and degrees of challenge, their possible effects on reading improvement can be differentiated, and these differences need to be considered for developing efficient teaching models and syllabi for reading improvement.

Therefore, the purpose of this study is to explore the overall effects of reading instruction in Korean EFL classrooms by synthesizing the findings of previous experimental research in Korea inclusively. More specifically, this study examines the common effects of input- and output-focused reading instruction in different school levels. It also investigates how moderator variables (reading materials, reading approaches, and collaboration tasks) were associated with the effects of reading instruction on L2 reading ability. For these purposes, this study investigates the following research questions:

1) What are the effect sizes of input- and output-focused reading instruction in Korean elementary, secondary, and college EFL classrooms?

2) Which type of writing activities in reading instruction is the most effective for improving Korean elementary, secondary, and college EFL learners' reading skills?

3) Do the effects of reading instruction vary according to the elements of reading materials, reading approaches, and the use of collaborative tasks?

II. LITERATURE REVIEW

1. Reading Instruction

Reading is a complex process of combining information from a text and learner's background knowledge to build meaning (Anderson, 2003). According to Krashen (2004), reading is a critical source for language input, and 'comprehensible input' through reading is essential for L2 learners to acquire a language. Comprehension is the ultimate goal of reading(Anderson, 2008) and fluent readers can read rapidly, purposefully, and effectively to achieve this goal (Grabe, 1991).

For effective reading skill development among Korean EFL learners, various teaching approaches and methods have been proposed. Among those, literature-based reading, especially using storybooks, has been widely recommended by many researchers (Certo, Moxley, Reffitt, & Miller, 2010; H. R. Kim, 2004; T. E. Kim, 2013; J. Lee, 2011; Liang & Galda, 2009; Martinez & McGee, 2000; McElvain, 2010), and has been usually used in combination with other teaching methods. For example, C. Oh (2000) used literature to examine the effects of language experience approach and reported that the effect was observed only among the mid-level students. S. H. Park and H. Choi (2012) investigated the effects of modified extensive reading with Internet English storybooks, and showed that the program improved elementary students' reading and listening skills. H. Kim (2011) also explored the effects of extensive reading with storybooks and reported that middle school students improved not only their reading skills but also their attitudes toward English learning.

Many studies have also examined the effectiveness of specific reading activities using stories. S. H. Hwang and W. J. Yoon (2006) examined the effects of pre-reading activities on middle school student's reading comprehension, while K. H. Kim (2008) explored the effects of schema activation on English reading comprehension of middle school students. Some studies also have suggested the effects of guided reading activities (D. B. Jeong & J. Y. Seok, 2007), games (S. S. Kim & K. S. Boo, 2009), and role plays (Y. H. Kim & E. J. Park, 2011).

Strategy-based instruction is also one of the widely studied topics for L2 reading skill development. J. H. Byun and S. Park (2012) explored the effect of teaching reading strategies in primary English classrooms, and reported that their reading comprehension and strategy use improved meaningfully. U. Maeng (2010), and J. Park and B. B. Im (2013) gave explicit reading strategy instruction to middle school students, respectively, and confirmed its effectiveness for L2 reading skill improvement. However, D. E. Lee and S. K. Shin (2013) reported that prediction strategy training for middle school students was not effective for improving reading comprehension. J. Jeong (2013) also reported that

reading strategy-based instruction with global strategies was not efficient in improving college students' reading abilities. W. J. Yoon, M. O. Won, and H. D. Kang (2001) reported that teaching meta-cognitive strategies did not improve students' overall reading ability but it enhanced reading scores of students with middle level English proficiency.

Some studies applied form-focused instruction to improve L2 learners' reading skills. B. J. Kim (2005) implemented form-focused instruction and reported that it meaningfully enhanced college students' reading abilities. M. S. Chung (2003) also reported that form-focused instruction improved not only elementary students' reading skills but also their writing and listening skills.

The aforementioned reading approaches and methods can be categorized into input focused reading instruction (IFRI) since they are focused on consolidating language input. The results for IFRI are not conclusive as mentioned above. Thus, it is necessary to investigate the overall effects of IFRI more closely.

2. Writing for Reading Instruction

Since reading and writing share essentially similar processes of meaning construction, reading and writing development are closely related to each other, and writing can facilitate reading development (Hirvela, 2004). Writing before, during, and after reading strengthens a readers' reading process and contributes to his/her L2 reading skill development. 'Writing to read' includes, for example, not only composing but also taking notes of ideas, writing questions while reading, and even highlighting or underlining sentences. These acts of writing all help learners understand reading better while focusing, monitoring, and organizing what she or he reads. That is, writing in 'writing for read' is not an end but a means to be used at different stages to develop reading skills and to consolidate comprehension (Hirvela, 2004).

The topic of reading and writing connection has begun to attract teachers' and researchers' attention since the early 2000s in Korea. Hirvela (2004) suggested three categories of writing-to-read activities: summarizing, synthesizing, and responding. Harmer (2004) also proposed writing for learning in the categories of reinforcement writing, preparation writing, and activity writing. With reference to these classifications, writing activities for reading which have been investigated so far in Korean EFL classrooms can be categorized into four different groups: reinforcement writing, response writing, summarizing, and writing followed by speaking activities.

Reinforcement writing includes simple sentence writing for learned grammar and vocabulary, and longer text writing to remember a paragraph or text structure (Harmer, 2004). Like other reading instruction with no writing activities involved, the purpose of reinforcement writing is to consolidate language input focusing on text and skill-based

reading. Thus, reinforcement writing activities such as copying, gap-filling, underlining, and filling in graphic organizers with learned words and phrases are categorized into input focused reading instruction in this study. Some studies have involved reinforcement writing in reading instruction across different school levels, and most of them use word and story mapping activities with different kinds of graphic organizers (B. B. Im & S. S. Jang, 2001; M. N. Jung & K. A. Cha, 2011; H. S. Kim & K. A. Cha, 2010; H. J. Ryu, 2009; W. J. Yoon, 2007). For example, M. N. Jung and K. A. Cha (2011) analyzed elementary students' reading ability after story grammar instruction, and reported a positive improvement. H. S. Kim and K. A. Cha (2010) also used graphic organizers to teach organizational patterns of 5 expository and narrative texts and improved middle school students' reading comprehension. However, B. B. Im and S. S. Jang (2001) failed to verify the effectiveness of employing semantic mapping activities to improve middle school students' reading ability, especially in the lower English proficiency level students. W. J. Yoon (2007) also reported that high school students did not show any significant improvement in reading comprehension in both high and low English proficiency level groups after 10 weeks of text diagramming activities.

Many of the studies showed the applicability and effectiveness of response writing in literature-based or extensive reading programs across different school levels (H. R. Kim & Y. M. Kim, 2010; H. R. Kim & S. W. Lee, 2013; J. Kim & Y. V. Chon, 2013; K. M. O, 2011). H. R. Kim and Y. M. Kim (2010) studied the effects of book report writing with reading strategy instruction for 5th grade elementary students, and reported students' growth in reading comprehension. H. R. Kim and S. W. Lee (2013) also attempted prediction activities with pictures before reading storybooks. J. Kim and Y. V. Chon (2013) examined the effects of response writing activities on university students' reading abilities with book review papers after in-class extensive reading with various questions such as describing characters, the most interesting sections, personal experiences or thoughts related to the story. These previous studies all showed positive effects for response writing for Korean L2 learners' reading comprehension. However, B. B. Im et al. (2009) failed to find significant effects for response writing when they attempted to improve middle school students' reading comprehension by focusing on small group writing with storybooks. They tried to determine the effects of keeping journals with various types of writing activities, but failed to verify its effectiveness for upper level students. K. M. O (2011) also investigated effects of response writing activities in a university English extensive reading course but failed to show a positive change in reading ability.

Summarizing is a form of analytic writing, and outlining, paraphrasing, and synthesizing can be included in this category. J. Joh (2000) examined the effects of summarizing expository texts as post-reading activities for university students following the stages of

discussion of topics, summarizing, and revising according to the teacher's feedback for a semester. H. Jung (2012) also attempted to teach summarizing strategies explicitly to college students in an English reading course focusing on the students' comprehension and a writing task of reconstructing content. The results showed that the college students in the experimental group enhanced their reading comprehension and integrated reading and writing skills as well as cognitive and metacognitive reading strategy use. For younger students, J. Y. Lee and C. K. Min (2010) also reported positive results for summarizing by high school students, when providing explicit summarizing instruction and practice with newspaper articles. E. J. Kim and S. Park (2001) tried to verify the effects of summarization tasks for middle school students with passages from textbooks, but they could not find any differences in reading comprehension improvement between the control and experimental groups. For elementary students, Y. Min (2001) provided summary activities with English newspapers, and the study showed positive changes in reading. However, only one study has been found pertaining to elementary school students, and more research on this is needed for exact examination.

The last type of writing activities is writing tasks followed by speaking activities. These are combinations of, e.g., response writing and presentation; script writing and role plays; summarizing and presentation or retelling; and word and sentence writing for reading games. This activity type differs from the others in that two output language skills, writing and speaking, are mixed to extend the effect on reading skill development. Many of those studies have been conducted in elementary schools. Y. H. Hur (2014) studied 6th grade elementary students' reading improvement after literature-based reading instruction, in which students had tasks for summary and retelling activities. S. A. Song (2003) tried to teach reading to 5th grade elementary students with pocket charts. After writing-followed-by-speaking activities such as book-making and reading for peers, their reading ability meaningfully improved. H. Jung and Y. S. Noh (2009) also employed various kinds of word- and sentence-level writing with book-making and reflection writing followed by role plays, games and other speaking activities according to the students' English proficiency levels. The results showed that the upper level students improved both reading and writing skills, but for the lower level students, no significant improvement was observed.

Overall, as all the aforementioned reading instructions with various types of writing activities except the one with reinforcement writing are focused on producing language, they can be categorized into output-focused reading instruction (OFRI). Reading instruction with reinforcement writing activities is input-focused reading instruction because it is focused on consolidating language input as mentioned above. Many studies with writing activities have shown that writing can be an effective means for Korean L2 learners' reading skill development. However, no study was found showing an overall indication of which writing activities are more or most effective for different school level

students, and to what extent they can improve their reading skills with those activities. Furthermore, some studies still indicate that the effects of writing are not significant for reading skill development. Therefore, for efficient L2 reading instruction, it is necessary to investigate the effects of OFRI as well as IFRI more conclusively and to provide exact information on its relative effectiveness.

3. Moderating Variables

Various elements have been tested as moderating variables for reading instruction. Reading materials have been considered as one of the most important elements for improving learners' reading skills (Krashen, 2004), and authentic materials have been reported as the most important factor by many researchers (M. Cho & H. Jung, 2003; I. O. Kim & K. Kim, 2006; Y. O, 2013). M. Cho and H. Jung (2003) reported that authentic materials such as newspapers, recipes, and diaries helped to significantly improve elementary students' reading abilities as well as confidence and interest in English learning. I. O. Kim and K. Kim (2006) also reported that authentic materials such as English newspapers were effective in improving elementary student' reading abilities. Conversely, some researchers have claimed that providing graded reading materials (simplified reading texts) to L2 learners is efficient for effective reading skill development (Day & Bamford, 1998; Nation, 2001; Waring, 1997).

Reading approaches such as intensive, extensive, and mixed approaches have been also proposed as important instructional elements (Anderson, 2008; Hedgcock & Ferris, 2009; Nuttall, 1996). Although Anderson (2008) has suggested intensive reading based on bottom-up skills for young L2 learners with low language proficiency, many other studies have also reported that extensive reading effectively improves young learners' reading abilities (H. Kim, 2011; J. S. Kim, 2012; S. H. Park & H. Choi, 2012). Therefore, more careful examination of the effectiveness of reading approaches is needed. Furthermore, the effects of mixed reading approaches are to be further explored, since both intensive and extensive reading can be frequently used in interactional modes in real classroom settings.

Collaboration has been also suggested as an effective instructional element for reading skill development (M. Joo, E. Kim, & J. Lee, 2012; Long & Porter, 1985; Y. H. Soh, 2000). M. Joo, E. Kim, and J. Lee (2012) indicated that collaborative tasks were effective in improving college students' reading abilities. M. Y. Lee (2008) also reported that collaborative tasks at different English proficiency levels of homogeneous classes were effective for high school students' reading skill improvement. On the other hand, S. E. Kim (2009) indicated that collaborative learning with English newspapers failed to improve elementary students' reading abilities. M. Jeong and K. Woo (2006) showed that collaborative tasks used in a homogeneous small group at different English proficiency

levels were not effective in improving elementary students' reading abilities and attitudes toward English learning.

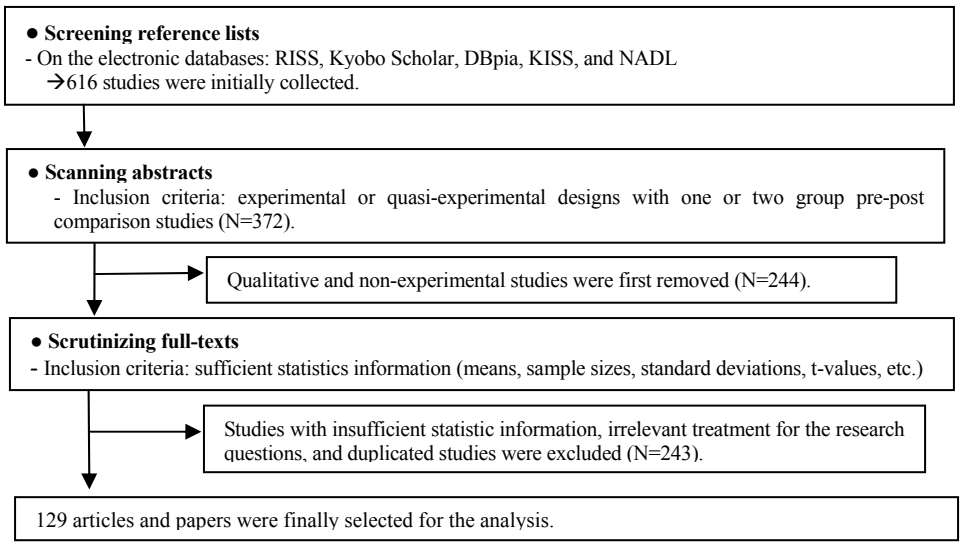
Therefore, since reading materials, reading approaches, and collaboration are important moderating variables as mentioned above, it is necessary to verify the effects of these moderating variables on Korean L2 learners' reading skill improvement.

III. METHOD

1. Collecting Data

The studies were collected through extensive searches on electronic databases such as RISS, Kyobo Scholar, DBpia, KISS, and NADL (National Assembly Digital Library) with key words such as: reading instruction, reading task, reading activity, reading program, reading comprehension, reading proficiency, reading skill, and reading ability. The collected studies include published articles, master's theses, and dissertations from Jan. 01, 2000 to May 31, 2014. The steps of the study screening are shown in Figure 1.

FIGURE 1
Flow Diagram for Collecting Data



There were 616 studies initially collected by screening reference lists on the databases. After that, qualitative studies and non-experimental studies (N=244) were first removed from the data based on the inclusion criteria. Then studies with insufficient statistical

information, studies with inappropriate interventions for answering the research questions, and duplicated studies were finally excluded (N=243). Among the initially collected 616 studies, 129 articles and papers were used for this analysis.

2. Coding and Analyzing Data

The studies are coded into data according to the variables in Table 1.

TABLE 1
Coding Table

Variables	Values
1. Study title (year)	
2. Subgroup: schools	1) Elementary school 2) Secondary (Middle & High) school 3) College
3. Treatment 1: Types of reading instruction	1) Input-focused reading instruction (IFRI) 2) Output-focused reading instruction (OFRI)
4. Treatment 2: Types of writing-for-reading activities	IFRI: 1) No writing 2) Reinforcement writing
	OFRI: 3) Response writing 4) Summarizing 5) Writing followed by speaking activities
5. Outcome	Reading comprehension
6. Teaching materials	1) Authentic materials 2) Simplified materials
7. Reading approach types	1) Intensive approach 2) Extensive approach 3) Combined approach
8. Collaborative tasks	1) Not involved 2) Involved

Treatment 1, reading instruction type, is divided into IFRI and OFRI. IFRI includes reading instruction with no writing or reinforcement writing activities focusing on text- and skill-based reading. Reinforcement writing is usually copying and controlled writing for learned language. Most forms of IFRI are strategy-based instruction, extensive reading, form-focused reading instruction, and even traditional grammar translation reading instruction. OFRI includes reading instruction with various output activities involving learners' active meaning-making processes, such as responding, summarizing, and writing followed by speaking activities. In OFRI, greater use of cognitive and linguistic processes is expected of learners. Treatment 2 refers to specific writing-for-reading activities consisting of: 1) no writing, 2) reinforcement writing, 3) response writing, 4) summarizing, and 5) writing followed by speaking activities.

Moderating variables are teaching elements such as reading materials, reading approaches, and collaborative task use. Reading materials are divided into authentic and

simplified materials. Authentic materials refer to unsimplified reading materials which were written for the English speaking community, not for English learners (Nuttall, 1996). These include stories for native readers, newspapers, and other real-world reading materials such as commercial leaflets and brochures. Simplified materials are mainly graded reading books for ESL/EFL learners, and reading passages from school textbooks and ELT course books.

Reading approach types are coded as intensive, extensive, or mixed approaches. Intensive reading is a bottom-up type reading instruction focusing on deliberately learning text and language skills, whereas extensive reading is basically reading for pleasure with minimal or no intervention. Mixed reading refers to reading instruction which incorporates intensive and extensive reading activities in a reading class. It is basically top-down and meaning-focused reading with necessary linguistic information delivery and practice. In addition to these elements, inclusion of collaborative tasks is also coded to look for any positive changes in reading skills when group or pair work tasks are provided to help learners' meaning-making processes. The outcome variable for this analysis is reading comprehension.

Study names, statistical information, and variables were coded into the Comprehensive Meta-Analysis software, and effect sizes were calculated by computing Heges' *g* (Borenstein, Hedges, Higgins, & Rothstein, 2009). Duval and Tweedie's Trim and Fill was used to "reduces the variance of the effects and yields the adjusted effect size" (an unbiased estimate of the effect size) (Borenstein et al., p. 286). A Q test was used to identify the homogeneity of a given predictor, and based on this result an effect model (fixed or random effects model) was selected to calculate the effect size of reading instruction. A subgroup analysis was also used to verify the effect of variables.

IV. RESULTS

1. The Effects of Input- and Output-focused Reading Instruction

The results of Duval and Tweedie's Trim and Fill as shown in Table 2 revealed no publication bias in the studies on the effects of reading instruction. As there were no adjusted studies, the effect size calculated from the sample studies can be considered valid (Borenstein et al., 2009).

TABLE 2
Duval and Tweedie's Trim and Fill

		Fixed effects			Random effects			*Q*
	Studies trimmed	Point estimate	Lower limit	Upper limit	Point estimate	Lower limit	Upper limit	
Observed values		.50774	.47627	.53922	.59236	.51888	.66585	732.77812
Adjusted values	0	.50774	.47627	.53922	.59236	.51888	.66585	732.77812

A homogeneity test based on Q statistics was conducted and the results are shown in Table 3. Since the value of Q is statistically significant (Q=732.778/*p*=.000), there was no homogeneity among the sample studies. Thus, a random effect model was chosen to compute an overall summary effect. The results indicate that the total ES of reading instruction on reading abilities in the Korean EFL context is .592, which represents a medium effect according to Cohen's (1988) scale.

TABLE 3
Effect Models

			95%				Heterogeneity		
	K	ES	Lower limit	Upper limit	z	*p*	*Q*	*p*	I^2
Fixed effects	149	.508	.476	.539	31.618	.000	732.778	.000	79.803
Random effects	149	.592	.519	.666	15.799	.000			

As shown in Table 4, IFRI for all groups has a small effect (ES=.477), whereas OFRI shows a big effect (ES=.866). The difference between the two types of instruction is statistically significant ($Q_{Between}$=21.404/*p*=.000). Therefore, OFRI turned out to be more effective than IFRI. That is, reading with writing activities involving active meaning-making processes helps learners cultivate their reading skills more effectively than language input- and comprehension-based reading.

TABLE 4
The Effect Sizes of IFRI and OFRI

				95%			Heterogeniety		
		k	ES	lower	upper	z	*p*	$Q_{Between}$	*p*
Elementary (E)	IFRI	25	.429	.293	.565	6.175	.000	15.742	.000
	OFRI	21	.937	.726	1.148	8.696	.000		
Secondary (S)	IFRI	64	.424	.340	.509	9.836	.000	10.555	.001
	OFRI	15	.782	.584	.981	7.718	.000		
College (C)	IFRI	16	.862	.500	1.224	4.662	.000	.000	.995
	OFRI	8	.864	.474	1.254	4.340	.000		
Total (T)	IFRI	105	.477	.396	.559	11.453	.000	21.404	.000
	OFRI	44	.866	.723	1.010	11.825	.000		

Among the different school levels, a statistically significant difference in effect sizes between IFRI and OFRI was found for elementary (Q=15.742/*p*=.000) and secondary (Q=10.555/*p*=.010) levels, but no meaningful difference at the college level (Q=.000/*p*=.995). More specifically, the ESs for IFRI at the elementary (ES=.429/*p*=.000) and secondary (ES=.424/*p*=.000) levels represent a small effect, whereas those for OFRI reveal a big effect (ES=.937/*p*=.000) and a medium effect (ES=.782/*p*=.000), respectively. At the college level, both IFRI (ES=.862) and OFRI (ES=.864) show a big effect. The biggest ES can be observed in OFRI for elementary students. These results indicate that OFRI has a relatively greater effect on enhancing reading ability of elementary and secondary students, and its effect becomes even greater at the elementary school level. Since OFRI or IFRI is not a meaningful variable ($Q_{between}$=.000/*p*=.995) at the college level, both instructional methods can be effectively used. Thus, other variables for influencing college students' reading development need to be identified.

2. The Effects of Different Types of Writing

The results in Table 5 show that the differences of effect sizes among types of writing activities are statistically significant across all school levels. The results imply that the effects of writing for reading differ as the types of writing activities across school levels changes. Thus, this difference needs to be considered in planning reading instruction.

TABLE 5
The Effect Sizes of Writing Activities in Reading Instruction

					95%			Heterogeniety		
			k	ES	lower	upper	z	*p*	$Q_{between}$	*p*
E	IFRI	No writing	8	.161	-.008	.331	1.862	.063	32.409	.000
		Reinforcement	17	.544	.376	.712	6.361	.000		
	OFRI	Responding	9	.822	.534	1.111	5.594	.000		
		Summarizing	1	.706	.366	1.046	4.074	.000		
		F. b. speaking	11	1.061	.723	1.399	6.156	.000		
S	IFRI	No writing	25	.419	.327	.512	8.901	.000	10.902	.012
		Reinforcement	39	.425	.297	.554	6.467	.000		
	OFRI	Responding	6	.689	.357	1.020	4.072	.000		
		Summarizing	9	.830	.575	1.084	6.379	.000		
		F. b. speaking	-	-	-	-	-	-		
C	IFRI	No writing	10	1.044	.513	1.574	3.858	.000	10.555	.032
		Reinforcement	6	.581	.381	.781	5.687	.000		
	OFRI	Responding	4	.376	.087	.664	2.552	.011		
		Summarizing	3	1.543	.379	2.707	2.599	.009		
		F. b. speaking	1	1.122	.533	1.711	3.732	.000		
T	IFRI	No writing	43	.490	.349	.630	6.832	.000	25.494	.000
		Reinforcement	62	.472	.375	.569	9.557	.000		
	OFRI	Responding	19	.683	.488	.878	6.872	.000		
		Summarizing	13	.939	.703	1.176	7.782	.000		
		F. b. speaking	12	1.065	.754	1.377	6.696	.000		

Among the writing activities, writing followed by speaking (F. b. speaking in Table 5) activities showed a big effect (ES=1.065/*p*=.000). It seems that when a writing task is mixed with another type of productive skill activity, it improves reading abilities more than single writing tasks. This result is valid at least for the elementary school level since 10 effect sizes from 11 studies used in the analysis come from the elementary school level. However, only one study showing a big effect (ES=1.122/*p*=.000) is used to analyze ES at the college level. Thus, in order to verify its effectiveness in secondary and college levels, more investigation is needed.

For single writing activities, summarizing (ES=.939) is the most influential activity, with a big effect. Actually, summarizing at secondary (ES=.830/*p*=.000) and college (ES=1.543/*p*=.009) level showed the biggest effect size. Meanwhile, in elementary schools, only one study on summarizing was involved in this synthesis, and more studies are needed for further accurate comparison. Excluding summarizing, response writing turned out to be the most effective writing activity for elementary students' reading improvement.

The third effective writing-for-reading activity is response writing (ES=.683/*p*=.000), with a medium effect, but the results vary across school levels. In elementary schools, the ES for response writing is .822, a big effect, and this is the most effective single writing task for elementary students. In secondary schools, the ES for response writing is .689, a medium effect, while the ES for college levels is .376, which represents a small effect and the least effective writing-for-reading activity. Therefore, it can be assumed that the effect of response writing are age- or language proficiency-dependent, and the activity can be more effectively used when learners are younger and have lower language proficiency.

The fourth effective writing-for-reading activity is no writing (ES=.490), and the least effective one is reinforcement writing (ES=.472). Both of these activities have small effects, and no meaningful differences between those two seem to exist. The same result can be observed at the secondary school level, where the ESs for reinforcement writing and no writing are .425 and .419, respectively, and both represent a small effect. In the meantime, different results were found at the elementary and college levels, with the ES for reinforcement writing of .544 in elementary schools and .581 in colleges. Reinforcement writing in elementary and college levels is moderately effective in improving learners' reading skills. However, no statistically significant effect for no writing activity was found at the elementary level while a big effect (ES=1.044) of no writing activity was found at the college level. This is in fact the second most effective activity for improving college students' reading skills. Therefore, it can be assumed that college students can improve their reading skills effectively regardless of the types of writing activities.

3. The Effects of Moderating Variables

Reading materials, reading approaches, and collaboration tasks were examined as moderating variables on reading development across school levels, and the results are shown in Table 6. ESs for authentic and simplified materials are .733 and .549, respectively. Although both ESs have a medium effect on Cohen's scale, they are statistically different. In other words, the ES for authentic material is higher than that for simplified materials. Thus it can be assumed that Korean L2 learners' reading skills could be enhanced more effectively when authentic materials are used. Meanwhile, reading approaches (Q=5.072/*p*=.079) and collaboration tasks (Q=.338/*p*=.561) could not be verified as meaningful moderators.

TABLE 6
The Effect Sizes of Moderators

					95%				Heterogeniety	
			k	ES	lower	upper	z	*p*	$Q_{between}$	*p*
E	Reading materials	Authentic	23	.703	.509	.897	7.093	.000	.388	.533
		Simplified	23	.616	.424	.808	6.295	.000		
	Reading approaches	Extensive	6	.239	.047	.430	2.445	.014	16.944	.000
		Intensive	24	.677	.475	.879	6.579	.000		
		Mixed	16	.789	.584	.994	7.554	.000		
	Collaboration	N/Involved	20	.501	.297	.706	4.841	.000	4.176	.041
		Involved	26	.782	.607	.957	8.736	.000		
S	Reading materials	Authentic	10	.645	.440	.849	6.178	.000	2.305	.129
		Simplified	69	.472	.383	.561	10.426	.000		
	Reading approaches	Extensive	5	.821	.532	1.109	5.575	.000	7.761	.021
		Intensive	67	.453	.366	.541	10.176	.000		
		Mixed	7	.707	.415	.999	4.741	.000		
	Collaboration	N/Involved	54	.490	.381	.599	8.807	.000	.0053	.817
		Involved	25	.508	.397	.619	8.981	.000		
C	Reading materials	Authentic	2	1.737	-.071	3.545	1.883	.060	1.079	.299
		Simplified	22	.770	.520	1.029	6.048	.000		
	Reading approaches	Extensive	5	.592	.165	1.019	2.719	.007	1.559	.212
		Intensive	19	.930	.615	1.245	5.784	.000		
		Mixed	-	-	-	-	-	-		
	Collaboration	N/Involved	15	1.065	.673	1.438	5.411	.000	5.106	.024
		Involved	9	.541	.310	.771	4.597	.000		
T	Reading materials	Authentic	35	.733	.575	.891	9.076	.000	4.084	.043
		Simplified	114	.549	.467	.631	13.078	.000		
	Reading approaches	Extensive	16	.512	.317	.708	5.133	.000	5.072	.079
		Intensive	110	.567	.480	.654	12.785	.000		
		Mixed	23	.762	.598	.926	9.104	.000		
	Collaboration	N/Involved	89	.576	.472	.679	10.900	.000	.338	.561
		Involved	60	.617	.523	.711	12.873	.000		

The results across the school levels showed somehow different results from the overall results. Among the variables, reading approaches in elementary and secondary schools, and collaboration task use in elementary and college levels were found to be significant moderators on L2 learner's reading improvement. The ESs for intensive and mixed reading approaches in elementary schools are .677 and .789, respectively, which represent a medium effect, while the ES for extensive reading approaches is .239, showing a small effect. In contrast, in secondary schools, the ES for extensive reading is .821, representing a big effect. This result indicates that for elementary students, intensive or mixed approaches are more appropriate for improving their reading skills than extensive reading; for secondary students, extensive reading is more effective.

The ESs for the use and non-use of collaborative tasks at the elementary level are .782 and .501, respectively. Although both ESs show a medium effect, the use of collaborative tasks turned out to be more effective than their non-use (Q=4.176/*p*=.041). At the college level, the ES for the use of collaborative tasks has a medium effect (ES=.541) and a big effect (ES=1.065) for their non-use. Therefore, it can be assumed that elementary students can improve their reading skills more effectively with group work, but with individual tasks for college students.

V. DISCUSSION

This study explored the effects of two different types of reading instruction and the influence of moderating variables. First, OFRI turned out to be more effective in improving Korean L2 learners' reading comprehension than IFRI. This finding provides conclusive evidence that OFRI involving productive meaning-making writing activities such as response writing, summarizing, and multiple output tasks is more effective for developing Korean L2 learners' reading skills than IFRI (no writing or reinforcement writing involved). Previous studies claim that reading and writing are closely connected, sharing meaning-making processes, and that skills and knowledge learned while writing can transfer to the reading process (Grabe, 2003; Grabe & Kaplan, 1996; Hirvela, 2004; Hudson, 2007; Swain, 2000). Thus, it can be concluded that output processes in writing can serve as an effective reading instruction model which help Korean L2 learners to effectively cultivate their reading skills.

This study also provides new evidence that the effects of writing for reading become greater when applied to younger learners. Although OFRI shows more than a medium effect across all school levels, the greatest gap between IFRI and OFRI is found in elementary schools, and the gap between the two types of instruction decreases as grade levels increase. This is likely because younger learners can transfer one type of learned

skills and knowledge to another type more easily than older students. This result not only supports the previous claims of the connection between reading and writing (Grabe, 2003; Grabe & Kaplan, 1996; Hirvela, 2004; Hudson, 2007; Swain, 2000), but also provides new evidence that the transfer can occur more actively when learners are young. It implies pedagogically that writing should be actively employed in elementary or secondary levels, and the incorporation of earlier writing in reading instruction largely benefits learners' reading skills development. However, in spite of the aforementioned evidence, writing is still considered a supplementary language skill, especially for elementary students, and its importance has been downplayed (S. Choi & S. Hong, 2008; H. Joo & Y. A. Lee, 2012; S. Lee, 2013). As teaching written language in elementary schools has been emphasized by many researchers (S. Choi & S. Hong, 2008; H. Joo & Y. A. Lee, 2012; S. Lee, 2013), more active involvement of writing in reading instruction should be implemented in elementary English classes.

For the second research question, both writing followed by speaking activities and summarizing can be considered as the most effective writing-for-reading activities. Writing followed by speaking turned out to be the most effective activity in elementary schools and the second most effective in colleges. When an output activity is used with another one, it is likely that the activities come to have a synergistic effect to strengthen learners' reading skills. That is, while learners encounter multiple chances to produce language, the process of producing output leads learners to develop their reading more effectively. Reading, writing, and speaking share the similar process of constructing meaning, and when these language skills are productively utilized, L2 learners can successfully learn language as well as content (Connor & Mayberry, 1996). Swain (2005) also claims that output is a process of language learning, and while writing and speaking, L2 learners can negotiate meaning, producing its accurate forms and appropriate uses. Since language is comprised of multiple facets (Celce-Murcia & Larsen-Freeman, 1999; Nation, 2001), producing both types of outputs in multiple manners is likely to strengthen learning. However, since the synthesized results in this study are mostly based on elementary school levels, more studies at the secondary and college levels are needed for generalizing the results further.

Among single writing tasks, summarizing was found to be the most effective at secondary and college levels, but response writing at the elementary level. Since summarizing is analytic writing and requires complex cognitive and meta-cognitive processes (H. Jung, 2012), it seems to be efficient for upper-level students. While summarizing, secondary and college students need to not only use high-order thinking such as evaluating, selecting, analyzing, and synthesizing, but also read a text recursively (H. Jung, 2012), and these multiple processes plausibly help to effectively improve reading comprehension. For elementary students, response writing turned out to be the most effective. While writing, elementary students interact with the text and the author, and they

are engaged in the process of making meaning. They also experience negotiating with peers while doing collaborative writing activities. These processes effectively lead elementary students to improve their reading ability (Hirvela, 2004; H. R. Kim & Y. M. Kim, 2010). On the other hand, response writing turned out to be age- or language-proficiency-dependent, and its effectiveness decreases greatly at the secondary and college levels. Therefore, close investigations on this phenomenon should be followed up in further studies. For more accurate analysis of single writing tasks, more studies on summarizing in elementary school levels should be provided.

For the third research question, reading materials were found to serve as a statistically significant moderator, as many studies indicated the effectiveness of using authentic materials for reading instruction (M. Cho & H. Jung, 2003; I. O. Kim & K. Kim, 2006; Y. O, 2013). However, reading approaches and collaborative task use showed different results across the school levels. Reading approaches are a significant moderator at the elementary and secondary levels, but collaborative task use at the elementary and college levels. From these results and the results of many studies claiming that the collaborative tasks facilitate students' reading improvement (M. Joo, E. Kim, & J. Lee, 2012; Long & Porter, 1985; Y. H. Soh, 2000), it can be concluded that elementary students can learn best when a mixed approach is used with collaborative tasks; and secondary students can do best when an extensive reading approach is employed. For college students, individual tasks turned out to be more effective in improving their reading skills than group work. This runs counter to the results of previous studies reporting positive effects of collaboration or its association in reading instruction (J. Jeong, J. Kim, & D. B. Jeong, 2010; J. Joh, 2000; J. S. Kim, 2012). Thus, more accurate examination is needed to verify the causes of this result. Overall, three moderators and their variation in their effectiveness across different school levels should be considered in developing effective reading instruction models and syllabi.

VI. CONCLUSION

Based on the results discussed in the previous section, following suggestions can be presented. First, an output-focused reading instruction model should be developed to enhance the reading abilities of Korean EFL learners more effectively, as the greater effectiveness of output-focused reading instructions has been confirmed. In addition, its applicability in real-world classrooms should be tested.

Second, incorporation of writing into reading instruction is suggested especially for elementary and secondary students. Specifically, multiple output tasks of writing and speaking, and response writing as a single writing activity are recommended for elementary students, while summarizing is suggested for secondary and college students.

For elementary students, reinforcement writing can be provided first as a scaffolding activity, and gradually one can move to introducing productive writing tasks. More studies on summarizing, especially in elementary schools and writing followed by speaking activities at secondary and college levels should be conducted for further analysis.

Third, variables other than output activities, reading materials, reading approaches, and collaborative task use, need to be investigated. Particularly, for college students, only collaborative task use turned out to be a significant moderating variable. Thus, more studies focusing the effects of these variables on reading improvement need to be conducted in the future.

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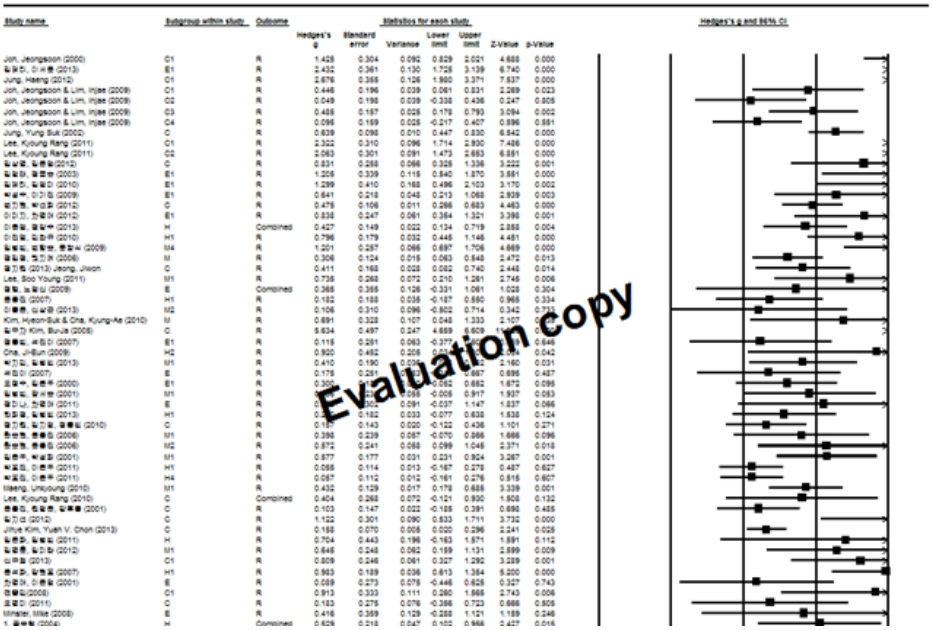
APPENDIX A

Effect Size and Statistics for Each Study



APPENDIX B

Data Coded from Primary Studies

Study Name	Subgroup	I/O	Output types	Outcome	Authentic M	App	Collaboration
1. Joh, Jeongsoon (2000)	C	O	summarizing	R	x	I	2
2. 김혜리, 이세운 (2013)	E	O	responding	R	o	I	2
3. Jung, Haeng (2012)	C	O	summarizing	R	o	I	1
4. Joh, Jeongsoon & Lim, Injae (2009)	C	I	reinforcement	R	x	I	1
	C	I	no writing	R	x	I	1
	C	O	responding	R	x	I	2
	C	I	no writing	R	x	I	2
5. Jung, Yung Suk (2002)	C	O	summarizing	R	x	I	1
6. Lee, Kyoung Rang (2011)	C	I	no writing	R	x	I	1
	C	I	no writing	R	x	I	1
7. 김상경, 김은영 (2012)	C	I	reinforcement	R	o	I	1
8. 김영태, 정금숙 (2003)	E	O	write & speak	R	x	I	2
9. 김혜리, 김영미 (2010)	E	O	responding	R	o	M	2
10. 박성수, 이기진 (2009)	E	O	responding	R	x	E	2
11. 변지현, 박선희 (2012)	C	I	no writing	R	x	I	2
12. 이미지, 차경애 (2012)	E	O	responding	R	o	M	2
13. 이윤영, 정양수 (2013)	H	I	reinforcement	R1	o	I	2
	H	I	reinforcement	R2	o	I	2
14. 이진영, 민찬규 (2010)	H	O	summarizing	R	o	I	1
15. 임병빈, 변향숙, 문창식 (2009)	M	O	responding	R	o	M	2
16. 정길정, 권지예 (2006)	M	I	no writing	R	x	I	2
17. 정지원 (2013)	C	I	no writing	R	x	I	1
18. Lee, Soo Young (2011)	M	I	no writing	R	x	I	1

19. 정행, 노영신 (2009)	E	O	write & speak	R1	x	I	2
	E	O	write & speak	R2	x	I	1
20. 윤웅진 (2007)	H	I	reinforcement	R	x	I	2
21. 이동은, 신상근 (2013)	M	I	no writing	R	x	I	1
22. Kim,Hyeon-.Suk&Cha,Kyung-Ae(2010)	M	I	reinforcement	R	x	I	1
23. 김부자 (2005)	C	I	no writing	R	x	I	1
24. 정동빈, 석진이 (2007)	E	I	no writing	R	x	E	1
25. Cha, Ji-Eun (2009)	H	O	responding	R	x	E	1
26. 박지민, 임병빈 (2013)	M	I	no writing	R	x	I	2
27. 석진이 (2007)	E	I	no writing	R	x	I	2
28. 오정수, 김은주 (2000)	E	I	reinforcement	R	o	M	2
29. 임병빈, 장세숙 (2001)	M	I	reinforcement	R	x	I	2
30. 정미나, 차경애 (2011)	E	I	reinforcement	R	o	I	1
31. 한희정, 임병빈 (2013)	H	I	reinforcement	R	x	I	1
32. 정지원, 김지영, 정동빈 (2010)	C	I	no writing	R	x	I	1
33. 황숙현, 윤웅진 (2006)	M	I	no writing	R	x	I	1
	M	I	no writing	R	x	I	1
34. 김은주, 박성희 (2001)	M	O	summarizing	R	x	I	2
35. 박효진, 이은주 (2011)	H	I	no writing	R	x	I	1
	H	I	reinforcement	R	x	I	1
36. Maeng, Unkyoung (2010)	M	I	no writing	R	x	I	1
37. Lee, Kyoung Rang (2010)	C	I	no writing	R1	x	I	1
	C	I	no writing	R2	x	I	1
38. 윤웅진, 원명옥, 강후동 (2001)	C	I	no writing	R	x	I	1
39. 김지선 (2012)	C	O	write & speak	R	x	E	2
40. Jihye Kim, Yuah V. Chon (2013)	C	O	responding	R	x	E	1
41. 임은화, 임병빈 (2011)	H	I	no writing	R	x	I	1
42. 김경훈, 임미란 (2012)	M	I	reinforcement	R	x	E	1
43. 신규철 (2013)	C	O	responding	R	x	E	1
44. 윤석화, 강현호 (2007)	H	I	no writing	R	x	I	1
45. 차경애, 이은영 (2001)	E	I	reinforcement	R	x	I	1
46. 전종민 (2008)	C	I	reinforcement	R	x	E	1
47. 오경미 (2011)	C	O	responding	R	x	E	2
48. Minster, Mike (2008)	E	I	no writing	R	x	E	2
49. 공순택 (2004)	H	I	reinforcement	R1	x	I	2
	H	I	reinforcement	R2	x	I	2
50. 박지민 (2011)	M	I	no writing	R	x	I	2
51.. 김윤미 (2012)	H	I	reinforcement	R	x	I	1
52. 권부연 (2001)	H	I	reinforcement	R	x	I	2
53. 조은정 (2004)	H	I	no writing	R	x	I	2
54. 유미경 (2010)	E	I	reinforcement	R	x	I	1
55. 이은영 (2008)	M	I	reinforcement	R	x	I	2
56. 심미성 (2006)	E	I	no writing	R	x	I	1
57. 김현아 (2008)	H	I	reinforcement	R	x	I	1
58. 서인순 (2009)	H	I	reinforcement	R	x	I	1
59. 임지현 (2011)	M	I	no writing	R	x	I	1
60. 마선미 (2013)	C	I	reinforcement	R	x	I	2
	C	I	reinforcement	R	x	I	2
	C	I	reinforcement	R	x	I	2
61. 임승연 (2006)	E	I	reinforcement	R	x	I	1
62. 김민정 (2013)	H	I	reinforcement	R	x	I	1
63. 박민아 (2013)	M	O	responding	R	x	M	1
64. 이기정 (2005)	E	O	write & speak	R	o	M	2
65. 조연주 (2011)	H	O	summarizing	R	o	M	1
66. 석진이 (2006)	E	I	reinforcement	R	x	E	2
67. 김민정 (2013)	H	I	reinforcement	R	x	I	1
68. 김 숙 (2012)	E	I	no writing	R	o	M	2
69. 이지현 (2011)	M	I	reinforcement	R	x	M	1
70. 장복희 (2012)	E	I	reinforcement	R	o	M	2
71. 송혜정 (2011)	E	O	write & speak	R	x	M	2

72. 김효정 (2010)	M	I	no writing	R	x	E	2
73. 강혜순 (2005)	E	I	reinforcement	R	o	I	1
74. 강효진 (2005)	E	I	reinforcement	R	x	M	2
75. 김경만 (2006)	E	I	reinforcement	R	o	M	2
76. 최낙일 (2013)	E	I	no writing	R1	x	I	1
	E	I	no writing	R2	x	I	1
77. 장미자 (2004)	E	O	write & speak	R	x	I	2
78. 민예구 (2001)	E	O	summarizing	R	o	I	1
79. 김민해 (2008)	E	I	reinforcement	R	o	I	1
80. 김성식 (2004)	M	I	reinforcement	R	x	I	2
81. 라인순 (2004)	H	I	reinforcement	R	x	I	1
82. 박현진 (2008)	H	I	reinforcement	R	x	I	1
83. 송현주 (2013)	H	I	reinforcement	R	x	I	2
84. 오경순 (2013)	M	I	reinforcement	R	o	I	2
85. 윤수진 (2010)	M	I	reinforcement	R	x	I	1
86. 이다예 (2014)	H	I	reinforcement	R1	x	I	1
	H	I	reinforcement	R3	x	I	1
	H	I	reinforcement	R2	x	I	1
	H	I	reinforcement	R4	x	I	1
87. 이준경 (2009)	H	I	reinforcement	R	x	I	1
88. 정승화 (2001)	M	I	no writing	R	x	I	1
89. 조민서 (2013)	H	I	reinforcement	R	x	I	1
90. 최윤경 (2010)	H	I	reinforcement	R	x	I	2
91. 최지혜 (2013)	H	I	reinforcement	R	x	I	1
92. 이수진 (2007)	H	I	no writing	R	x	I	1
	H	I	no writing	R	x	I	1
	H	I	no writing	R	x	I	1
	H	I	no writing	R	x	I	1
93. 윤명은 (2011)	E	O	responding	R	x	M	2
94. 장지현 (2004)	M	I	reinforcement	R	x	I	1
95. 이용호 (2009)	H	I	no writing	R	x	I	1
96. 황영희 (2012)	H	O	responding	R	x	I	1
97. 송성아 (2003)	E	I	reinforcement	R	x	M	2
98. 김동군 (2008)	E	O	responding	R	o	M	2
99. 차은실 (2006)	H	I	no writing	R	o	M	2
	H	O	summarizing	R	o	M	2
	H	I	no writing	R	x	I	1
100. 이정인 (2010)	E	I	no writing	R	o	E	1
	E	I	no writing	R	o	E	1
101. 오지숙 (2010)	H	O	summarizing	R	x	I	1
102. 허윤화 (2014)	E	O	write & speak	R	o	I	1
103. 김미옥 (2013)	E	I	reinforcement	R	o	M	1
104. 지정화 (2007)	E	O	write & speak	R	x	I	1
105. 좌승희 (2002)	E	O	responding	R	o	M	2
106. 윤현희 (2008)	E	O	write & speak	R	o	M	1
107. 유정순 (2005)	E	O	responding	R	x	I	2
	E	O	responding	R	x	I	2
108. 손명경 (2002)	E	O	write & speak	R	o	M	2
109. 김태종 (2006)	E	O	write & speak	R	x	I	2
110. 김소은 (2009)	E	I	reinforcement	R	o	I	1
	E	I	reinforcement	R	o	I	2
111. 김은주 (2007)	H	O	summarizing	R	x	I	2
112. 김종찬 (2006)	H	I	reinforcement	R	x	I	1
113. 김주미 (2008)	H	I	reinforcement	R	x	I	1
114. 김혜원 (2012)	M	O	responding	R	x	E	1
115. 박현제 (2006)	H	O	summarizing	R1	x	I	1
	H	O	summarizing	R2	x	I	1
116. 이종희 (2012)	H	O	responding	R	o	I	1
	H	I	reinforcement	R	o	I	1

117. 이진화 (2007)	M	I	reinforcement	R	x	I	1
118. 권은숙 (2009)	M	O	summarizing	R	x	E	1
119. 김동연 (2011)	H	I	reinforcement	R	x	I	1
	H	I	reinforcement	R	x	I	2
120. 김태규 (2011)	H	I	reinforcement	R	x	I	2
121. 박은정 (2011)	M	I	no writing	R	x	I	1
122. 심재후 (2002)	M	I	no writing	R	x	I	1
123. 김현수 (2013)	H	I	reinforcement	R	x	I	1
124. 김종대 (2010)	E	I	reinforcement	R	x	I	1
125. 이정화 (2009)	H	I	reinforcement	R	o	M	1
126. 류혜정 (2009)	E	I	reinforcement	R	o	I	1
127. 양은아 (2014)	H	O	summarizing	R	x	I	2
128. 조난라 (2007)	M	I	no writing	R	x	I	2
129. 허진동 (2011)	H	I	reinforcement	R	x	I	2

Examples in: English

Applicable Language: English

Applicable levels: Elementary, Secondary, and Tertiary Level

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