

## **Improving Self-Efficacy and Reading Performance through Individualized Reading Strategy Instruction\***

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This study was planned to examine relationships (a) between students' strategy self-efficacy and reading strategy instruction and (b) among strategy self-efficacy, strategy use, and reading performance. Korean university students' strategy self-efficacy, strategy use, and the TOEIC reading performance were compared while teaching the eight reading strategies in an individualized context where the students had an opportunity to evaluate the effectiveness of the reading strategies for themselves. The participants' strategy self-efficacy was promoted by the reading strategy instruction. Their strategy self-efficacy was significantly correlated to their strategy use, but not to reading performance, while their strategy use was significantly correlated to their reading performance. Also, strategy self-efficacy and strategy use were significant predictors of the participants' reading performance. There were no group differences, neither between high and low self-efficacy groups nor between more and less frequent strategy use groups, in the reading performance. However, the high strategy self-efficacy group improved significantly at the post-test unlike the low group, and the more frequent strategy use group improved significantly at the post-test unlike the less group. Results and discussions are given, as are implications for English teachers and further potential research directions.

[self-efficacy/strategy use/reading strategy instruction/  
reading performance/자기 효능감/읽기 전략/읽기 전략 교수]

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## I. INTRODUCTION

What helps students decide to use a language learning strategy? There are a lot of studies showing that language learning strategies are effective for improving students' academic performances (e.g., Kaylani, 1996; Lai, 2009; Kyoung Rang Lee, 2007; Lee & Oxford, 2008; Gipyo Park, 1994; Jin-Yee Seok, 2010), but little is known what helps students continue to use a certain strategy after learning it. When a teacher teaches students how to use a strategy, not all students adopt it to do their tasks; some decide to use it while the others decide not to use it. What motivates such contrasting different decisions? The previous research gave little attention to what makes students adopt a strategy, focusing rather on the effect of using one on their performance. This study hypothesizes that the student believing in his/her capability to use a new strategy will continue to use it whereas the student not believing in his/her capability will give up adopting it, which will result in a lower performance than those who continue using it. The belief in a student's own capability to do something is defined as self-efficacy (Bandura, 1997), based on which, this study refers to students' belief in their capability to use a strategy as *strategy self-efficacy*.

Of various language learning strategies, this study focuses on reading strategies; because while reading, in comparison with the other language skills, is considered to be too passive to adopt active behaviors like strategies, this study assumes that students have to learn how to use reading strategies and that they must need something (so to speak, a conviction of their usefulness) to drive them to use them, which will improve their reading performance. Also, this study proposes that teaching reading strategies explicitly will promote students' strategy self-efficacy as the researchers addressed the effectiveness of explicit strategy instruction (e.g., Ikeda & Takeuchi, 2000). This study refers to the following as steps of constituting individualized reading strategy instruction. To help the students learn reading strategies in an individualized context, they should first find out what learning styles they have. They will be grouped into global and analytic learners to learn both global and analytic reading strategies, based on Kyoung Rang Lee (2008), which showed that how to deal with ideas (global vs. analytic styles) had a significant influence on the Korean students' strategy use. Then, they will learn reading strategies that match well with their styles (either global or analytic) as well as reading strategies that do not match well with their styles (either analytic or global), in order to give them an opportunity to evaluate the effectiveness of each reading strategy. In this way, the students will feel they learn reading strategies in an individualized way even though they are in a crowded class, which this study assumes will promote the students' strategy self-efficacy.

Therefore, this study aims to examine relationships (a) between students' strategy self-efficacy and reading strategy instruction and (b) among strategy self-efficacy, strategy use,

and reading performance. Based on these purposes, this study addresses the following research questions:

1. Does reading strategy instruction improve students' strategy self-efficacy?
2. Is there a relationship among students' strategy self-efficacy, strategy use, and reading performance? How well can strategy self-efficacy and strategy use predict the students' reading performance?
3. Is there a difference in reading performance between the students with high and low strategy self-efficacy and between those using strategies more frequently and less frequently?

## II. LITERATURE REVIEW

Bandura (1997) defines self-efficacy as “a judgment of one’s ability to organize and execute given types of performances” (p. 21). In other words, self-efficacy is neither a skill nor a behavior to produce some performance, but a belief whether he/she can do so. That belief (self-efficacy) is considered to have a close relationship with human cognitive functioning, such as strategies (Bandura, 1986). Strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (Oxford, 1990, p. 8), which have shown effective in improving academic performance (e.g., Kyoung Rang Lee, 2007; Hyejung Lim, 2009; Gipyo Park, 1994).

Students' high self-efficacy in a certain domain is a strong predictor of their abilities to solve the problems in the domain, so researchers have been interested in examining the relationship between self-efficacy and achievement in specific domains, such as mathematics (Pajares, 1996), nursing (Champion, Skinner, & Menon, 2005) and e-learning (Kiliç-Cakmak, 2010). In the field of English language learning and teaching, the importance of self-efficacy in students' proficiency started to gain attention. For example, Wong (2005) emphasized the importance of self-efficacy in strategy use after assessing learning strategy use and language self-efficacy of 74 Malay ESL pre-service teachers, observing that participants with high self-efficacy use more strategies more often than those with low self-efficacy. National Capital Language Resource Center (2000) pointed out how important self-efficacy is for strategy use, saying “an important aspect in viewing oneself as a successful learner is self-control over strategy use” (p. 2). Zimmerman and Martinez-Pons (1990) observed the self-efficacy and learning strategy use of the 5th, 8th,

and 11th graders and found out that their efficacy beliefs had a substantial relation with their strategy use. Schunk and Swarts (1993) showed that students with high self-efficacy tried to use writing strategies, resulting in improved writing achievement.

To assess students' strategy use, Oxford's (1990) Strategy Inventory for Language Learning (SILL) has been widely used and proved its effectiveness to measure and compare various samples' strategy use. To assess students' self-efficacy, Jinks and Morgan (1999) tested the inventory (Morgan-Jinks Student Efficacy Scale) developed with participants at three schools: one located in a major Midwestern urban area, another located in a suburban area, and the third located in a rural area. They administered the inventory to the students in the three schools and ran factor analysis of 900 students' data. The results showed that the items were grouped into three factors—talent items, context items, and effort items—and that the scale was a reliable tool to measure self-efficacy.

Using the revised SILL and the Morgan Jinks Student Efficacy Scale, Magogwe and Oliver (2007) explored the relationship between language learning strategies and self-efficacy beliefs of the Botswana students. They administered two questionnaires to 480 students between 2002 and 2005. Even though the differences of strategy use and the differences of self-efficacy did not clearly exist in terms the participants' proficiency levels, results showed patterns consistent with the previous studies; that is, the higher their proficiency levels were, the more they used strategies and the higher their self-efficacy were.

A fair amount of existing studies have presented a positive relationship between self-efficacy and academic performance and/or language proficiency (that is, self-efficacy in terms of language performance) and a positive relationship between strategy use and academic performance (that is, strategy use in terms of language performance). However, few previous studies have explored whether students' strategy use is promoted by strategy self-efficacy (that is, self-efficacy in terms of strategy use). Since strategy use and self-efficacy have been respectively proven to have a strong positive relationship with high language performance, more attention should be paid to the relationship between strategy use and self-efficacy prior to examining the effect of strategy use on performance or the effect of self-efficacy on performance.

### **III. METHOD**

#### **1. Participants and Setting**

In a university located in Seoul, Korea, an elective class was offered to teach reading

strategies (finding main ideas, visualizing, predicting, summarizing, making inferences, finding patterns, using graphic organizers, and grouping). This class has been offered for the past three semesters to teach the same eight reading strategies each semester, which showed effective in improving the students' reading performance.

In this semester, thirty-nine university students voluntarily chose to take this class and participated in this study for one semester. Of 39 students, 23 were male and 16 were female, whose ages ranged from 19 to 26 (16 seniors, 8 juniors, 12 sophomores, and 3 freshmen). Their academic majors were various: 22 were from engineering related majors, 10 from business related majors, and 7 from humanities related majors. They registered for this class not because they needed English for their major, but because they were highly interested in English, so they were strongly motivated to learn English reading strategies. No student had studied in English speaking countries before.

## 2. Instrument

In order to help the students monitor whether they could use each strategy that they learned, they were given a chance to evaluate which reading strategy was more effective for their reading, that is, they were taught reading strategies in an individualized context by their learning styles. Their learning styles were assessed with the Style Analysis Survey (SAS; Oxford, 1993). It had 110 items with the Likert scales of 4 (always or almost always true of me) to 0 (never or almost never true of me). The SAS was translated into Korean and the Korean version was back-translated into English by an English teacher. There were only minor differences between the original and the back-translated versions, and the differences were easily resolved.

There was no survey to assess strategy self-efficacy of the eight reading strategies to be taught for this study. Therefore, the students were asked how high their strategy self-efficacy was (4 signifies "I can use the strategy well" and 1 "I can't use the strategy") immediately after learning each new reading strategy (It was not checked before the strategy instruction because students should at least know what each strategy was before answering how sure they could use each strategy). Then, they were asked how high their strategy self-efficacy was for all the eight reading strategies at the end of the semester to examine whether their self-efficacy changed after learning all the reading strategies. Also, in order to measure their strategy use, the students were asked to check whether or not they used each strategy immediately after taking the reading test at the end of the semester. Lastly, in order to measure the students' reading performance, a validated reading test, the Test of English for International Communication (TOEIC) was chosen.

The TOEIC is one of the most widely used standardized tests to measure learners' English proficiency in terms of listening and reading. The reading comprehension section of the TOEIC consisted of 48 questions with various reading materials. The participants took the reading comprehension section before and after the intervention.

### 3. Data Collection Procedures

In the first week, the students were told that they would learn English reading strategies and asked to think of what types of the TOEIC reading comprehension questions they felt difficult and easy and what made them think so. They seemed to know there are different types of reading comprehension questions; some are related to specific information in the text and the others are related to main ideas of the text.

In the second week, the students completed the SAS as a required activity. Based on the results of the SAS, they were grouped into global and analytic learners, and they discussed the types of reading questions with which they felt most comfortable. They were instructed to evaluate each strategy because everyone had their own preference in choosing a reading strategy. They also took TOEIC reading comprehension questions as a pre-test.

In order to let the students feel that they were learning English reading strategies in a more individualized context than where they learned the same content at the same time without giving them opportunities to criticize its effectiveness, whenever they learned a new strategy, they were asked to think over whether each strategy would be helpful for their English reading and how well they could use it, and their answers were shared with their classmates every week. First, from the third week to seventh week, they learned the four reading strategies (finding main ideas, visualizing, predicting, and summarizing) that match well with global learners. Global learners felt comfortable at these four strategies while analytic learners struggled to practice them. Later, from the ninth week to 13th week, they learned the other four reading strategies (making inferences, finding patterns, using graphic organizers, and grouping) that match well with analytic learners. This time, analytic learners felt comfortable while global learners struggled.

In the 14th week, they took the TOEIC reading comprehension questions as a post-test. Immediately after taking the TOEIC, the students were asked to check how high their strategy self-efficacy was and whether they used each reading strategy they had learned.

### 4. Data Analysis Procedures

For the first research question, to explore whether reading strategy instruction improves strategy self-efficacy, a paired t-test was run with the students' answers every week and

their answers of the questionnaire at the end of the semester. To answer the second research question as to whether there is a relationship among strategy self-efficacy, strategy use, and reading performance, a bivariate correlation was conducted. Also, a regression test was run to examine the predictability of strategy self-efficacy and strategy use for the students' reading performance. Lastly, for the third research question, an independent t-test (the difference in the sample sizes were resolved with Levene's test for equality of variances) and paired t-test were conducted to compare their reading comprehension scores of the students in terms of strategy self-efficacy and strategy use.

Also, in order to compare the students' reading performance in terms of strategy self-efficacy, the students were grouped by their self-efficacy mean scores. Those whose average scores of strategy self-efficacy was lower than 2.00 (2 signifies "I don't think I can use this strategy. I may use it poorly" and 1 signifies "I can't use the strategy.") were grouped as the low efficacy group (N=9). Those whose self-efficacy was higher than 3.00 (3 signifies "I think I can use this strategy, but I'm not sure how well I will use it" and 4 signifies "I can use the strategy well.") were grouped as the high efficacy group (N=25). In order to compare the students' reading performance in terms of strategy use, the students were grouped by their strategy use mean scores. Those whose average scores of strategy use was lower than 0.30 (0 signifies "I did not use the strategy while reading" and 1 signifies "I used the strategy while reading.") were grouped as the less frequent use group (N=8) and those whose strategy use was higher than 0.70 were grouped as the more frequent group (N=29).

## IV. RESULTS AND DISCUSSION

### 1. Reading Strategy Instruction and Strategy Self-Efficacy

In order to explore whether reading strategy instruction improves students' strategy self-efficacy, the students' self-report immediately after learning each strategy (pre-efficacy) was compared with that at the end of the semester (post-efficacy) via a paired t-test. As noted earlier, because students should at least know of each strategy, they were asked to check their strategy self-efficacy right after learning (before practicing how to use it). In contrast to this pre-efficacy, the post-efficacy was checked at the end of the semester, after practicing with the other reading strategies while reading various texts throughout the semester.

The average score of the post-efficacy was 3.09, which was significantly higher than that

of the pre-efficacy, 2.33 ( $t=14.95$ ,  $df=38$ ,  $p=.000$ ). As presented in Table 1, the post-efficacy of all the eight reading strategies was significantly higher than the pre-efficacy, which gives the positive answer to the first research question; in other words, reading strategy instruction improved the students' strategy self-efficacy.

This suggests that strategy self-efficacy increases while learning other related reading strategies, and that students need time to personalize strategies to get greater trust in their capability to utilize them. Therefore, teachers should teach how to use strategies in an explicit way and give their students an opportunity to practice them to evaluate the effectiveness of the strategies for themselves in order to help them promote their strategy self-efficacy.

Table 1

*Effect of Reading Strategy Instruction on Strategy Self-Efficacy*

Reading Strategy	Pre-Efficacy M (SD)	Post-Efficacy M (SD)	N	t	df	p
Finding main ideas	2.13 (.95)	2.87 (.70)	39	5.11	38	.000
Visualizing	2.26 (.97)	3.23 (.81)	39	6.34	38	.000
Predicting	2.33 (.93)	3.21 (.77)	39	6.54	38	.000
Summarizing	2.31 (.80)	2.92 (.81)	39	3.38	38	.002
Making inferences	2.62 (.67)	3.21 (.62)	39	3.81	38	.000
Finding patterns	2.18 (1.00)	2.97 (.93)	39	4.82	38	.000
Using GO	2.21 (1.00)	2.82 (.97)	39	4.92	38	.000
Grouping	2.56 (.79)	3.49 (.68)	39	7.80	38	.000

## 2. Strategy Self-Efficacy, Strategy Use, and Reading Performance

In order to discover the relationship among students' strategy self-efficacy, strategy use, and reading performance, a correlation was first conducted. The average score of the students' strategy self-efficacy had a significant correlation with the average score of their strategy use ( $r=.54$ ,  $p=.000$ ,  $N=39$ ), but surprisingly, not with the TOEIC post-test scores ( $r=.27$ ,  $p=.094$ ,  $N=39$ ). In contrast, strategy use had a significant correlation with the TOEIC post-test scores ( $r=.49$ ,  $p=.001$ ,  $N=39$ ). This is summarized in Figure 1.



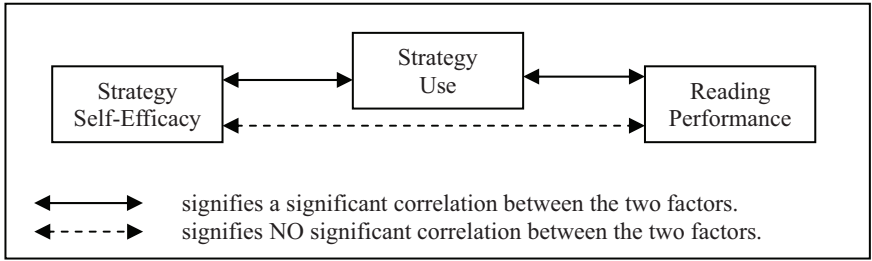


Figure 1. Correlation among strategy self-efficacy, strategy use, and reading performance.

This interesting result implies that believing that students can use reading strategies is not enough to improve their reading performance; rather, they should actually use the reading strategies to improve their reading performance. Therefore, teachers should encourage their students to believe in the strategies in terms of their capacity to use a certain reading strategy, and moreover, they should help students use the strategy to improve their reading performance.

Table 2

*Correlation between Strategy Self-Efficacy and Strategy Use*

Efficacy→ Use ↓	Finding main ideas	Visualiz- -ing	Predict- -ing	Summ- arizing	Making inferences	Finding patterns	Using GO	Group- ing
Finding main ideas	r=.63 p=.00	r=.35 p=.03						
Visualizing		r=.68 p=.00			r=.33 p=.04			
Predicting			r=.63 p=.00		r=.32 p=.05			
Summarizing			r=.38 p=.02	r=.61 p=.00	r=.49 p=.00			
Making inferences					r=.34 p=.03			
Finding patterns						r=.67 p=.00		
Using GO							r=.78 p=.00	
Grouping								r=.50 p=.00

Also, another correlation was run to see whether strategy self-efficacy of each reading strategy (not the average score) had any correlation with its use. As shown in Table 2, there were significant correlations between each strategy self-efficacy and its use. Every strategy efficacy had a significant one-on-one correlation with its use, and the self-efficacies of

visualizing, predicting, and making inferences had a significant correlation with other reading strategies. These statistical results revealed the assumption, that students would use a reading strategy when they have the strategy self-efficacy to use it, was accurate.

Then, how well do the students' strategy efficacy and strategy use predict their reading performance? The regression results showed that efficacy and use together had a significant predictability for reading performance ( $R=.59$ , Adjusted  $R^2=.31$ ,  $p=.000$ ). This means that the students' strategy self-efficacy and strategy use explained the 31% variance of their reading performance, which is remarkable, considering the complicated features of reading performance. In addition to this collective result, as shown in Table 3, strategy self-efficacy ( $Beta=.32$ ,  $t=2.37$ ,  $p=.023$ ) and strategy use ( $Beta=.52$ ,  $t=3.87$ ,  $p=.000$ ) are the significant predictors of reading performance.

Table 3  
*Predictors of Reading Performance*

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
1 (Constant)	34.13	8.28		4.12	.000
Self-efficacy	5.52	2.33	.32	2.37	.023
Strategy use	5.71	1.48	.52	3.87	.000

### 3. Reading Performance in terms of Strategy Self-Efficacy and Strategy Use

The third research question was, "Is there a difference in reading performance between the students with high and low strategy self-efficacy and between these using strategies more frequently and less frequently?" First, to compare the students' reading performance in terms of strategy self-efficacy, the students were grouped by their self-efficacy. Those whose average scores of strategy self-efficacy was lower than 2.00 were grouped as the low efficacy group ( $N=9$ ) and those whose self-efficacy was higher than 3.00 were grouped as the high efficacy group ( $N=25$ ). As suggested in the numbers of the students in each group, most of the participants had a high self-efficacy, which might have caused the insignificant difference in reading performance of the two groups (Table 4). The t-test results of the two groups with different sizes were gathered after Levene's test for equality of variances. The reliability of the TOEIC scores were quite high ( $\alpha=.82$ ).

Table 4

*Independent T-Test of Reading Performance by Strategy Self-Efficacy*

		M (SD)	N	t	df	p
Pre-Test TOEIC	High Self-Efficacy	33.53 (7.93)	25	.69	32	.494
	Low Self-Efficacy	31.44 (8.03)	9			
Post-Test TOEIC	High Self-Efficacy	35.80 (5.25)	25	.85	32	.403
	Low Self-Efficacy	33.89 (7.98)	9			

It was disappointing to find out that the students with high strategy self-efficacy did not have higher TOEIC scores than those with low self-efficacy in the post-test. However, there was a significant difference between the two groups' reading performance by the time; in other words, while the high self-efficacy group showed the significant improvement in the post-test in comparison with the pre-test, the low self-efficacy group did not (Table 5). Therefore, even though the group difference did not appear at the post-test, the students with the high strategy self-efficacy did show the significant improvement in their reading performance. Further studies are needed with the large groups.

Table 5

*Paired T-Test of Reading Performance by Strategy Self-Efficacy*

		M (SD)	N	t	df	P
High Self-Efficacy	Pre-Test	33.53 (7.93)	25	2.13	24	.042
	Post-Test	35.80 (5.25)	25			
Low Self-Efficacy	Pre-Test	31.44 (8.03)	9	1.83	8	.104
	Post-Test	33.89 (7.98)	9			

In addition, in order to compare the students' reading performance in terms of strategy use, the students were grouped by their strategy use. Those whose average scores of strategy use was lower than 0.30 were grouped as the less frequent use group (N=8) and those whose strategy use was higher than 0.70 were grouped as the more frequent group (N=29). The results were very similar to those of the two groups determined by self-efficacy. There were no significant differences in reading performance (neither in the pre-test nor in the post-test) between the more frequent and the less frequent groups (Table 6).

Table 6

*Independent T-Test of Reading Performance by Strategy Use*

		M (SD)	N	t	df	p
Pre-Test TOEIC	More Frequent	33.10 (8.16)	29	.07	35	.945
	Less Frequent	32.88 (7.26)	8			
Post-Test TOEIC	More Frequent	35.42 (6.19)	29	.12	35	.902
	Less Frequent	35.13 (5.11)	8			

As with the strategy self-efficacy, even though there was no difference between the two groups by strategy use neither in the pre-test nor in the post-test, there was a significant difference between the two groups' reading performance by the time. In other words, those who used reading strategies more frequently improved significantly more at the post-test than the pre-test, whereas those who used them less frequently did not improve at the end (Table 7). The excessively small number of the students in the less frequent group might have caused these results, so future studies should compare reading performance by the time and by the groups.

Table 7

*Paired T-Test of Reading Performance by Strategy Use*

		M (SD)	N	t	df	P
More Frequent	Pre-Test	33.10 (8.16)	29	2.32	28	.027
	Post-Test	35.42 (6.19)	29			
Less Frequent	Pre-Test	32.88 (7.26)	8	1.24	7	.254
	Post-Test	35.13 (5.11)	8			

## V. CONCLUSION

This study was planned to explore the relationship between strategy self-efficacy and strategy use and further to examine how they are related to students' reading performance. The Korean university students' strategy self-efficacy, strategy use, and the TOEIC reading performance were compared while teaching the eight reading strategies in an individualized context where the students had an opportunity to evaluate the effectiveness of the reading strategies for themselves. The results of this study were as follows. First, the

participants' strategy self-efficacy was promoted by the reading strategy instruction. Second, their strategy self-efficacy was significantly correlated to their strategy use, but not to reading performance, while their strategy use was significantly correlated to their reading performance. In accordance with these results, the strategy self-efficacy and the strategy use turned out to be significant predictors of the participants' reading performance. Third, there were no group differences, neither between high and low self-efficacy groups nor between more and less frequent strategy use groups, in the reading performance. However, the high strategy self-efficacy group improved significantly at the post-test while the low group did not. The more frequent strategy use group improved significantly at the post-test while the less group did not.

These results imply that reading strategy instruction is very effective in promoting students' strategy self-efficacy, resulting in more frequent strategy use, and that the promoted strategy self-efficacy and strategy use helped the students improve their reading performance significantly. Therefore, teachers should keep in mind that students' reading strategies can be taught, which can promote their strategy self-efficacy, and that the promoted self-efficacy can actually help students use the related reading strategies, which will eventually result in improving their reading performance. In this circle of improvement, strategy self-efficacy is the primary key to successful reading performance. However, teachers should not forget to encourage their students to use strategies since believing they can use the strategies is not enough to improve their reading performance.

As discussed earlier, the numbers of the two groups (high and low self-efficacy, more and less frequent strategy use) were different, and the total number of the participants was not big enough to generalize the results of this study. Thus, future studies with the same numbers of the groups with more participants should be conducted to determine if there is a difference from this study. Also, the questionnaire to measure strategy self-efficacy used in this study needs to be validated with further studies. Based on this study, more studies to discover the relationship among strategy self-efficacy, strategy use, and reading performance should be conducted.

## REFERENCES

- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, N. J.: Prentice-Hall.
- Bandura, A. (1997) *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Champion, V., Skinner, C. S., & Menon, U. (2005). Development of a self-efficacy scale

- for mammography. *Research in Nursing and Health*, 28, 329-336.
- Ikeda, M., & Takeuchi, O. (2000). Tasks and strategy use: Empirical implications for questionnaire studies. *JACET Bulletin*, 31, 21-32.
- Jinks, J., & Morgan, V. (1999). Children's perceived academic self-efficacy: An inventory scale. *The Clearing House*, 72(4), 224-230.
- Kaylani, C. (1996). The influence of gender and motivation on EFL learning strategy use in Jordan. In Oxford, R. L. (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp.75-88). Manoa: University of Hawaii Press.
- Kiliç-Cakmak, E. (2010). Learning strategies and motivational factors predicting information literacy self-efficacy of e-learners. *Australasian Journal of Educational Technology*, 26 (2), 192-208.
- Lai, Y. (2009). Language learning strategy use and English proficiency of university freshmen in Taiwan. *TESOL Quarterly*, 43(2), 255-280.
- Lee, Kyoung Rang (2008). Myths and realities of English learning strategies and styles. *Korean Journal of English Language and Linguistics*, 8(4), 501-522.
- Lee, Kyoung Rang (2007). *Strategy awareness-raising for success: Reading strategy instruction in the EFL context*. Unpublished doctoral dissertation, University of Maryland at College Park.
- Lee, Kyoung Rang, & Oxford, R. L. (2008). Understanding EFL learners' strategy use and strategy awareness. *Asian EFL Journal*, 10(1), 7-32.
- Lim, Hyejung. (2009). Effects of the reading task difficulty and students' achievement on the reading strategy use by Korean high school students. *Modern English Education*, 10(3), 242-266.
- Magogwe, J. M., & Oliver, R. (2007). The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System*, 35, 338-352.
- National Capital Language Resource Center. (2000). High school foreign language students' perceptions of language learning strategies use and self-efficacy. Unpublished research report. (ERIC Document Reproduction Service EDO-FL-026-388).
- Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Oxford, R. L. (1993). *Style analysis survey (SAS)*. Tuscaloosa, AL: University of Alabama.
- Pajares, F. (1996, April). *Assessing self-efficacy beliefs and academic outcomes: The case for specificity and correspondence*. Paper presented at the Annual Meeting of the American Educational Research Association, New York.
- Park, Gipyoo. (1994). Language learning strategies: Why do adults need them? Unpublished

manuscript, University of Texas at Austin.

- Schunk, D. H. (1984). Self-efficacy perspective on achievement behavior. *Educational Psychologist, 19*, 48-58.
- Schunk, D. H., & Swarts, C. W. (1993). Goals and progressive feedback: Effects on self-efficacy and writing achievement. *Contemporary Educational Psychology, 18*, 337-354
- Seok, Jin-Yee. (2010). The effect of self-regulated learning ability on EFL college students' achievement. *Modern English Education, 11*(1), 167-190.
- Wong, M. S. (2005). Language learning strategies and language self-efficacy: Investigating the relationship in Malaysia. *RELC Journal, 36*(3), 245-269.
- Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex and giftedness to self-efficacy and strategy-use. *Journal of Educational Psychology, 82* (1), 51-59.

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