TEACHERS' USE OF MULTIPLE INSTRUCTIONAL STRATEGIES: A

COMPARISON OF READING PERFORMANCE OF THIRD GRADE ENGLISH

LANGUAGE LEARNERS IN ESL/BILINGUAL PROGRAMS

A Dissertation

by

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ABSTRACT

The purposes of this dissertation are three-fold. The first purpose is to identify the effects of four different English as a Second Language/English as a Foreign Language (ESL/EFL) instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) on reading performance of English language learners (ELLs) across grade level, intervention duration, ESL/EFL environment, and sample size. The second purpose is to ascertain how frequently teachers should use these four strategies to enhance third-grade ELLs' reading performance. The third purpose is to discuss how Project English Language and Literacy Acquisition (Project ELLA) curriculum can be modified to fit Taiwan's English-language planning and education policy.

To respond to the first purpose, a meta-analysis for quantitative synthesis was adopted to review and examine the effectiveness of the four instructional strategies on ELLs' reading performance. For the second purpose, a multilevel path analysis using structural equation modeling was adopted to examine if teachers' frequency of using these four instructional strategies moderates the relationship between ELLs' reading performance on pretest and on posttest. For the third purpose, a case study was conducted to discuss incorporating Project ELLA into Taiwan's English-language planning and education policy.

The overall findings supported an educational belief that explicit instruction coupled with multiple instructional strategies is essential for enhancing ELLs' reading

performance. The findings further indicated that higher frequency of using multiple instructional strategies had a significant interaction effect on the relationship between ELLs' reading performance on the pretest and the posttest.

To conclude, the use of multiple instructional strategies is a key factor in predicting successful reading performance. To enhance ELLs' performance in reading, teachers are strongly suggested to adopt multiple instructional strategies. When using these strategies, teachers should pay special attention to the frequency of use. A more frequent use of multiple instructional strategies should help improve ELLs' reading performance. The four strategies combined with the curriculum of Project ELLA should strengthen Taiwan's English-language planning and education policy.

DEDICATION

This dissertation is dedicated to my beloved family in Taiwan (Mom Hsiu-Yu, and Sister San-San). Thank you, Mom Hsiu-Yu and Sister San-San, for your unconditional love, absolute trust, and active support during my pursuit of degrees at Texas A&M University. In addition, thank you, Dad Chuan-Yuan and Brother Chang-Wei, for your spiritual support and blessings from heaven.

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CHAPTER I

INTRODUCTION

Reading is a great equalizer. It has the ability to positively impact a child's academic achievement, which in turn can strengthen a nation's economy (Jones, Reutzel, & Smith, 2012; National Reading Panel, 2000). This implies that children's level of reading ability is positively linked to the competitiveness of their nation. Therefore, the United States proposed the No Child Left Behind Act in 2001 and implemented it the following year, and then replaced it with the Every Student Succeeds Act in 2015. The primary purpose of these two Acts was to promote "reading first" and "quality instruction" (Bush, 2001; Executive Office of the President, 2015). This was intended to ensure that if teachers effectively use a rigorous curriculum with explicit instructional practices, standardized assessments, instructional materials aligned with district benchmarks, and state standards, English language learners (ELLs) in the nation should successfully learn to read by the end of the third grade and should be reading to learn from the fourth grade forward.

According to the National Center for Education Statistics (2016), within the six years from 2009 to 2015, the number of ELLs in K-12 public schools in the United States increased 3.6%. In Texas, according to Texas Education Agency (2010, 2016), within the same six years, the number of ELLs increased 16%. In addition, according to Texas Education Agency (2010, 2016), the number of ELLs enrolled in either English as

a Second Language (ESL) or bilingual programs in public schools in the 2014-2015 academic year increased 19.4% over the 2009-2010 academic year.

Due to not reaching an acceptable level of English proficiency as regulated by each state, ELL students are often pulled from their regular class to attend either ESL or bilingual programs. In Texas, students whose first language (L1) is not English need to take one or more of the approved English proficiency tests based on their grade levels. For example, a fourth grade student will take Woodcock-Muñoz Language Survey-Revised (WMLS-R) for assessing his/her oral and speaking proficiency and STAAR for assessing his/her reading and writing proficiency. If the student does not reach a passing level (e.g., below CALP Level 4 for WMLS-R and below 40th percentile on Reading and/or Language Arts), he/she will be identified as an ELL and must attend either ESL or bilingual education programs.

The major goals of ESL and bilingual programs are to increase ELLs' English proficiency, develop their academic English skills, and most importantly, improve their English reading performance/reading comprehension. Given the critical roles of English proficiency and reading performance, a rigorous ESL curriculum needs to be implemented (Tong et al., 2017). The curriculum should contain certified ESL teachers, a systematic and scripted instructional plan, evidence-based instructional strategies, and reliable English reading assessments. More importantly, the ESL teachers' instruction should be explicit and lead to intense discussion, investigation, and research to determine what might constitute effective, efficient reading instruction. The goal must be

to produce the most positive effects on ELLs' linguistic competence and reading performance.

Statement of the Problem

With increasing numbers of ELLs, K-12 public schools face two major critical challenges: (a) how to assist ELLs in reading English well, and (b) how to enhance their reading performance. To meet these challenges, several types of ESL/bilingual programs (e.g., transitional bilingual education and structured English immersion) have been developed and introduced to K-12 public schools. Regarding which type of ESL/bilingual program should be used to enhance ELL's English language competence and reading performance, some scholarly researchers (Kapinus, Miller, Sen, & Malley, 2007; Lara-Alecio, Irby, & Meyer, 2001; Rolstad, Mahoney, & Glass, 2005) are in favor of transitional bilingual education programs. These researchers believe that ELLs should be taught to read in their L1 before English is introduced (90/10 ratio in kindergarten to 50/50 in fifth grade). However, some scholarly researchers (Baker, 1998; Clark, 2009; Rossell & Baker, 1996) prefer structured English immersion programs because they believe that ESL teachers should use English as a primary language to teach ELLs to read, only adding a limited amount of ELLs' L1 for clarification when necessary. Even though these researchers do not agree on which program is better for the ELLs, they all emphasize the importance of explicit instruction and evidence-based ESL instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions) on enhancing ELL's reading performance.

Even though scholars and researchers in the field of teaching ELLs understand the importance of the use of multiple strategies to improve students' English reading performance, they tend to focus on only one cognitive strategy at a time (Alyousef, 2006). The National Reading Panel (2000) reported that with the use of multiple instructional strategies in class, teachers' instruction became more effective, and students had a modest improvement in standardized test scores. Moreover, according to Lara-Alecio et al. (2009) and Tong et al. (2014), ELLs' reading performance was increased by using multiple instructional strategies. Therefore, to better ELLs' reading performance, ESL teachers are strongly suggested to use multiple instructional reading strategies instead of only one strategy in class. Even though the use of multiple strategies is important, no study has discovered how the frequency of using multiple ESL instructional strategies enhanced ELLs' reading performance. Therefore, additional research on this topic is necessary.

Purpose of the Study

Effective reading instruction on ELLs' reading performance emphasizes a belief that ESL teachers should organize large amounts of content and transform them into meaningful concepts; moreover, they should direct and engage ELLs in mastering content by adopting instructional strategies (Cervetti, Kulikowich, & Bravo, 2015). To deliver more effective reading instruction, the use of multiple strategies and a logically structured lesson plan need to be considered (Coyne, Kame'enui, & Carnine, 2011).

The overall purpose of this study was to present a pedagogical insight into teaching ELLs to read English well with the use of multiple evidence-based instructional

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strategies. These strategies also serve as a tool to assist ESL teachers in enhancing ELLs' reading performance. More specifically, the aim of this study was to examine how teachers' frequency of using the four instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) moderates the relationship between ELLs' reading performance on the pretest and on the posttest.

Significance of the Study

I assumed, in this study, that to assist ELLs in reading well in English, a rigorous ESL/bilingual curriculum design with well-trained ESL/bilingual teachers should be developed. The rigorous curriculum design must consist of evidence-based ESL instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions), which have been identified to have a beneficial effect on ELLs' reading performance. In addition, the curriculum needs to emphasize the use of multiple identified evidence-based instructional strategies. The findings of the study suggest that ESL teachers should use graphic organizers, scaffolding, interactive read aloud, and leveled questions as target instructional strategies in reading intervention. The findings also suggest that the more frequently the ESL teachers use the multiple ESL instructional strategies, the more beneficial will be the effect for ELLs.

Definition of Key Terms

Bilingual Students

Students who are fluent in two languages.

English as a Foreign Language (EFL)

English is learned as a foreign language in an environment where English is used only in academia, business, technology, and higher education.

English as a Second Language (ESL)

English is learned as a second language in an environment where English is the primary or official language.

English Language Learners (ELLs)

Students, whose native language is not English, learn to be a proficient speaker of English.

Explicit Instruction

Explicit instruction is a systematic teaching approach with a selected set of direct teaching strategies. In addition, explicit instruction consists of clear teaching goals, learning objectives, adequate modeling, and guided practice with corrective feedback.

Evidence-based ESL Instructional Strategies

Evidence-based ESL instructional strategies help ESL/EFL learners more easily construct and comprehend concept knowledge. These strategies are identified to be effective with the support of empirical evidence.

First Language (L1)

L1 is referred to as the first language a student acquired; in other words, their native language or home language.

Graphic Organizers

Graphic organizers act as a teaching strategy to visually organize information for students. This strategy is intended to help the students meaningfully and systematically understand text concepts and link fragments of information together.

Interactive Read Aloud

Interactive read aloud acts as a teaching strategy to have students verbally interact with texts, peers, and teacher. This strategy is intended to help the students construct concept knowledge and explore the reading process.

Leveled Questions

Leveled questions act as a teaching strategy to enhance students' reading performance. As a guideline, Bloom's Taxonomy is adopted to develop six levels of questions: knowledge, comprehension, application, analysis, synthesis, and evaluation.

Prior Knowledge

Prior knowledge is the sum of previous learning and experiences that precede a learning situation.

Reading Performance

A student can read text, analyze the content, and understand its meaning. Reading performance requires that students have substantial vocabulary knowledge.

Scaffolding

Scaffolding acts as a teaching strategy to use students' prior knowledge to facilitate their learning of a new concept.

Second Language (L2)

L2 is referred to as the second language a student learned; in other words, their non-native language.

Limitations

There are two limitations in the study; possible resolutions are considered. First, the original data set, from a longitudinal (kindergarten to third grade) project named Project English Language and Literacy Acquisition (Project ELLA- R305P030032), contains participating ELLs' reading performances on Woodcock Language Proficiency Battery-Revised (WLPB-R) at six different time frames (i.e., at the beginning and end of kindergarten, the beginning and end of first grade, the end of second grade, and the end of third grade). Because no data were collected at the beginning of the third grade academic year, participating ELLs' test scores at the end of second grade were used as the pre-test (baseline) scores. Second, this project was implemented in one urban Texas school district only. As a result, participating teachers in the two experimental groups (transitional bilingual education-enhanced [TBE-E] and structured English immersion-enhanced [SEI-E]) may have a stronger relationship with the teachers in the two control groups (transitional bilingual education [TBE] and structured English immersion [SEI]); therefore, they might share their learning contents and any related information with the control group teachers. This could influence the outcome of the students in the control group. To avoid letting this happen, the researchers of Project ELLA tried to keep the teachers in the experimental and control groups from communicating with each other

about the project by providing a clear and explicit protocol for intervention administration.

Delimitations

Project ELLA adopted the design of cluster-randomized trials with three levels (school, teacher, and student levels). To better understand project participants' reading performance, WLPB-R was given to them at the beginning and end of kindergarten, the beginning and end of first grade, the end of second grade, and the end of third grade. This study delimited third grade students and teachers. The participating students were Hispanic ELLs as identified by state of Texas criteria. The participating teachers were certified ESL teachers and have experience working with ELLs.

Assumptions

I assumed that four ESL instructional strategies (i.e., graphic organizers, scaffolding, interactive read aloud, and leveled questions) should be used in reading intervention; moreover, the more frequently these four strategies are employed by the ESL teachers, the more effective their instruction will be. In addition, I assumed that when ELLs receive reading intervention utilizing any or all of these instructional strategies, they can more easily comprehend texts, and will therefore boost their reading performance as well.

Structure of the Study

Chapter II-Journal Manuscript 1

Chapter II is a meta-analysis study. The purposes of this study were: (a) to review articles focusing on reading with ELLs; and (b) to identify the effects of four

different instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) on ELLs' reading performance. Moreover, I evaluated the combined effect of these four strategies when used together on reading performance.

Chapter III-Journal Manuscript 2

Chapter III is an empirical study. I investigated a moderating effect of four evidence-based ESL instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) on reading performance of third grade ELLs. More specifically, this study was focused on how teachers' frequency of using the instructional strategies moderates the relationship between ELLs' reading performance on the pretest and on the posttest.

Chapter IV-Journal Manuscript 3

Chapter IV is a policy case study. I reviewed a rigorous ESL curriculum of structured English immersion programs designed by Project ELLA and implemented in ESL environments. In addition, I discussed how the curriculum can be modified to align with Taiwan's English Language Planning and Education Policy and how the modified curriculum can be used by English teachers in Taiwanese elementary, middle, and high schools, where English is taught as a foreign language.

CHAPTER II

FOUR DIFFERENT ESL/EFL INSTRUCTIONAL STRATEGIES ON ENGLISH READING PERFORMANCE AMONG THE ELLS: A META-ANALYSIS

Introduction

According to the National Center for Education Statistics (2016), the number of English language learners (ELLs) in K-12 public schools increased from 4,638,344 (2009-2010) to 4,803,579 (2014-2015) in the United States. These students are often put in English as a Second Language (ESL) or special education programs due to a poor command of the English language, which leads to low academic performance. The major goals of these programs are to increase ELLs' English proficiency, develop ELLs' academic English skills, and most importantly, improve their English reading performance. Reading performance has a strong relationship with successful second language acquisition (Jiménez, García, & Pearson, 1996) and learning performance in other subject areas (e.g., math and science) (National Reading Panel, 2000).

To improve ELLs' reading performance, researchers (Lara-Alecio, Tong, Irby, & Mathes, 2009; McNamara, 2009) suggested teachers use multiple instructional strategies. However, teachers working with ELLs still experience challenges in finding effective instructional strategies for increasing ELLs' reading performance and English language skills when they provide reading instruction (Gándara, Maxwell-Jolly, & Driscoll, 2005). Moreover, according to Batt (2008), ESL teachers expressed a need to enhance their literacy instructional strategies. To help English as a Second

Language/English as a Foreign Language (ESL/EFL) educators discover more effective instructional strategies that can be used for reading with ELLs, I determined a meta-analysis was needed. The purpose of this meta-analysis was to identify four ESL/EFL instructional strategies to improve ELLs' reading performance.

Literature Review

Reading performance involves having students actively engage in reading and understanding texts (Wigfield et al., 2008). This process requires not only students' word knowledge but their thinking, inferring, and reasoning skills as well. Only by actively engaging in text reading will learners construct knowledge from texts. Researchers (Fountas & Pinnell, 2006; Goldenberg, 1992, 2011; Lara-Alecio et al., 2009; Tong, Irby, Lara-Alecio, & Koch, 2014) acknowledged the effectiveness of reading with students (also known as Shared Reading or Guided Reading) in improving their reading performance. Moreover, both Shared Reading and Guided Reading are explicit reading interventions sharing the same goals, which are to develop, enhance, and improve students' reading performance.

Effective Guided Reading (Fountas & Pinnell, 2006) and Shared Reading (Lara-Alecio et al., 2009; Tong et al., 2014) occur when ESL/EFL teachers use specific instructional strategies (e.g., scaffolding) to extend students' understanding of reading content. Aghaie and Zhang (2012) and Dabarera, Renandya, and Zhang (2014) discovered that teaching with specific reading strategies improves ELLs' reading performance. To get a better understanding of the moderator effects of instructional strategies on ELL's reading performance in class, this study focused on four commonly

used strategies that were recommended by Herrell and Jordan (2004): graphic organizers, scaffolding, interactive read aloud, and leveled questions. These four strategies — graphic organizers (Mohammadi, Moenikia, & Zahed-Babelan, 2010); scaffolding (Kelly, Gomez-Bellenge, Chen, & Schulz, 2008); interactive read aloud (Ross & Begeny, 2011); and leveled questions (Taboada, Bianco, & Bowerman, 2012) — have also been shown to have a positive effect on reading performance for ELLs.

Graphic Organizers

Graphic organizers are tools to visually organize information for students to assist with understanding concepts systematically (Irwin-DeVitis & Pease, 1999) and linking fragments of information together (Hyerle, 2008). Graphic organizers are classified into four different types: conceptual (e.g., Venn diagrams and central question organizers), hierarchical (e.g., main idea pyramid and hierarchical organizers), sequential (e.g., cause-effect and problem-solving organizers), and cyclical (e.g., cycle diagrams) (Bromley, Irwin-DeVitis, & Modlo, 1995). Bromley et al. (1995) addressed two major advantages of using graphic organizers: helping students understand text, and increasing students' efficiency in learning new concepts. Some empirical studies (Jiang, 2012; Liu, Chen, & Chang, 2010; Tang, 1992) indicated that graphic organizers help ELLs capture not only primary concepts but also secondary concepts within the texts; moreover, graphic organizers also assist readers in processing concepts in texts.

Jiang (2012) investigated how graphic organizers affected the English reading performance of university-level ELLs whose major was not English. The students were divided into two groups; one group received graphic organizers and the other group

received traditional ESL/EFL instruction (e.g., lexico-grammatical analysis of the text). The students who received graphic organizers performed better on both an immediate post-test and a delayed test administered seven weeks later. The results indicated that graphic organizers provided visual and logical structures for ELLs to organize conceptual knowledge of text, facilitate learning, and improve English reading performance.

Scaffolding (Prior Knowledge)

Prior knowledge is a significant predictor of text comprehension. Students with prior knowledge of a given topic are able to comprehend better than those with less prior knowledge (Amadieu, Gog, Paas, Tricot, & Marine, 2009; Molinary & Tapiero, 2007; Ozuru, Dempsey & McNamara, 2009). Moreover, students who struggle with reading rarely link new content knowledge with their own background knowledge (Narkon & Wells, 2013). This suggested that with prior knowledge, students' reading performance would be increased. Many researchers (Alemi & Ebadi, 2010; Dabarera et al., 2014; Proctor, Dalton, & Grisham, 2007) have also found that using scaffolding as a pre-reading activity can increase reading performance of ELLs. In addition, scaffolding encourages ELLs to develop a broader knowledge base and motivates them to learn more (Cho, Xu, & Rhodes, 2010).

Morgan, Moni, and Jobling (2009) and McKay and Vilela (2011) suggested the use and activation of prior knowledge should be ongoing. The absence of ongoing prior knowledge engagement may lead to underutilization of preexisting knowledge and ultimately result in lower reading performance. Obtaining prior knowledge is much like

preparing the soil before planting a garden. The richness of background knowledge creates the most balanced environment for optimal, sustained growth. Therefore, engaging prior knowledge can have positive effects on ELLs' reading performance.

Interactive Read Aloud

Two key aspects of interactive read aloud are that reading should be reciprocal and interactive (Lara-Alecio et al., 2009). Interaction with books allows for a more meaningful and intellectually-stimulating learning experience (Doyle & Bramwell, 2006). Moreover, using language, providing feedback, and having adult-child/student interactions through picture book reading will facilitate students' language learning and develop their language skills (Zevenbergen & Whitehurst, 2003).

According to Chow, McBride-Chang, Cheung, and Chow (2008) and Tsybina and Eriks-Brophy (2010), if ESL/EFL teachers introduced interactive read aloud activities in the classroom as early as possible in the school year, ELLs could acquire comprehension skills early on and then transfer those skills to a future advanced English learning stage. This is because the comprehension skills help ELLs shorten the time for becoming an exceptional English user. In addition, by introducing interactive read aloud to young ELLs they can learn to interact with text normally associated with higher language levels (Eng & Chandrasekaran, 2014).

Leveled Questions

According to the National Reading Panel, meaningful questions can improve students' reading performance (NICHD, 2000). Moreover, using meaningful questions in class can lead students to a higher level of comprehension of the learning materials

(Harvey & Goudvis, 2000). Researchers (Guastello & Lenz, 2005; Lara-Alecio et al., 2009; Miciano, 2002; Pham & Humid, 2013) studying the use of leveled questions to enhance ELLs' reading performance adopted Bloom's Taxonomy as a guideline for developing six levels of questions: knowledge, comprehension, application, analysis, synthesis, and evaluation. Empirical studies (Farahian & Farshid, 2014; Khansir & Dashti, 2014) have shown that different levels of questions can help ELLs comprehend new concepts. In addition, leveled questions can help ELLs negotiate for meaning, which allows them to receive more comprehensible input to later enhance their development of reading performance (Ayaduray & Jacobs, 1997).

Even though scholars and researchers in the ESL/EFL and bilingual education fields understand the importance of the use of multiple strategies to improve students' English reading performance, they still tend to focus on only one cognitive strategy at a time (Alyousef, 2006). The National Reading Panel (2000) reported that with the use of multiple instructional strategies in class, teachers' instruction became more effective, and students had modest improvement in standardized test scores. Moreover, according to Lara-Alecio et al. (2009) and Tong et al. (2014), ELLs' reading performance was increased by using multiple instructional strategies. The National Reading Panel report and representative research studies (Lara-Alecio et al., 2009; Tong et al., 2014) provided the impetus for conducting this meta-analysis. The purpose of this meta-analysis was two-fold: (a) to identify the effects of four different ESL/EFL instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) on ELLs' reading performance across grade level, intervention duration, ESL/EFL environment,

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and sample size; and (b) to evaluate the combined effect of these strategies when used together on ELLs' reading performance.

With these stated goals of this meta-analysis, the following research questions were addressed:

1. a. What are the effects of different ESL/EFL instructional strategies on reading performance?

   b. What is the combined effect of these four ESL/EFL instructional strategies on reading performance?

2. Do the effects of ESL/EFL instructional strategies vary across grade level, intervention duration, ESL/EFL environment, and sample size?

Method

In the current meta-analysis, empirical studies of reading instruction and strategies among ESL and EFL learners were reviewed. I followed established procedures for conducting meta-analyses (Cooper, 2010; Lipsey & Wilson, 2001).

Selection Criteria

I conducted a preliminary examination of empirical studies; it focused on experimental or quasi-experimental studies of best practices for teaching English to non-English speakers. To be included in the meta-analysis, each study had to provide a description of original data and meet the following criteria:

1. The population had to be ESL or EFL learners. Studies with students learning a second/foreign language other than English were excluded.

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2. The population had to be non-clinical. Studies of students with learning disabilities were excluded.

3. The studies had to include an experimental group with a clearly reported strategy, and a control group.

4. The grade level of students in the studies had to range from first grade to university.

5. Reading performance as a measured outcome had to be clearly reported for both experimental and control groups. Measured outcomes other than reading performance were excluded.

6. Studies had to report sufficient data (e.g., scores for pre- and post-tests, the number of students in the experimental and control groups, mean scores for both groups, and standard deviation for both groups or summary statistics that permitted calculating an effect size) to allow for effect size calculations. Studies with insufficient data for effect size calculations were excluded.

7. Studies had to be publicly accessible online and conducted after 1990.

Data Sources and Search Strategies

I accessed the following databases in search of studies: the Education Resources Information Center (ERIC), Linguistics and Language Behavior Abstracts (LLBA), Texas A&M University Library Search, and Google Scholar. I used the following search terms: ESL/EFL, guided reading, reading performance, interactive read aloud, storytelling, scaffolding, graphic organizer, reader response, and leveled question.

Search Outcomes

One graduate student and I identified 793 articles and removed any duplicates. We also served as raters in the screening process. There were two phases of the screening process for these articles. In the first phase of the screening process, I reviewed the title, abstract, and research question of each article. Articles that did not meet the selection criteria were excluded, resulting in 141 included articles after the first phase. To determine the reliability of this process, we randomly selected 50 of the articles and reviewed them independently. The inter-rater reliability (Cohen's kappa) was .90.

In the second phase of the screening process, we independently read the full text of the retained articles. We excluded articles that did not meet the selection criteria. We calculated inter-rater reliability for this phase to determine agreement on excluded articles. Cohen's kappa was .91.

Results

A total of 23 empirical studies, with an overall sample of 2,191 participants, met the selection criteria. The characteristics of each study included the grade level of participants, the total number of participants involved in each study, country where the participants received ESL/EFL lessons, the type of strategy or intervention, invention duration, the unbiased effect size Hedges' g, and the 95% lower and upper confidence intervals around each unbiased effect size (see Table 1).

Table 1
Characteristics of 23 Studies

Author(s)	Year	Strategy	Country	Intervention Duration	Grade Level	Sample Size	Hedges' g	95% CI Lower	Upper
1. Dabarera, C. et al.	2014	Scaffolding	Singapore	5 weeks	Middle School	67	0.55	0.06	1.04
2. Proctor, C. P. et al.	2007	Scaffolding	USA	4 weeks	Elementary School	30	-0.86	-1.64	-0.14
3. Van Staden, A.	2011	Scaffolding	South Africa	6 months	Elementary School	288	1.32	1.07	1.58
4. Safadi, E., et al.	2012	Scaffolding	Jordan	9 weeks	High School	107	1.23	0.83	1.66
5. Moghaddam et al.	2016	Scaffolding	Iran	8 weeks	High School	38	0.99	0.33	1.68
6. Chen, et al.	2014	Scaffolding	Taiwan	4 weeks	High School	60	0.62	0.11	1.14
7. Chen, et al.	2011	Scaffolding	Taiwan	1 week	University	39	0.67	0.04	1.33
8. Mohammadi, M. et al.	2010	Graphic organizer	Iran	8 weeks	High School	141	0.75	0.41	1.09
9. Heidarifard, M.	2014	Graphic organizer	Iran	10 weeks	High School	80	1.57	1.08	2.08
10. Jiang, X.	2012	Graphic organizer	China	16 weeks	University	340	0.31	0.10	0.52
11. Liu, P. L., et al.	2010	Graphic organizer	Taiwan	10 weeks	University	99	0.74	0.34	1.16
12. Ozturk, O.	2012	Graphic organizer	Turkey	12 weeks	University	50	1.96	1.31	2.67
13. Tang, G.	1992	Graphic organizer	Canada	4 weeks	Middle School	45	0.63	0.04	1.24
14. Ashraf, H. et al.	2014	Leveled questions	Iran	8 weeks	Middle School	40	1.72	1.02	2.48
15. Khansir, A. A. et al.	2014	Leveled questions	Iran	10 weeks	Elementary School	120	0.75	0.38	1.12
16. Farahian, M. et al.	2014	Leveled questions	Iran	4 weeks	University	74	1.98	1.45	2.56
17. Bensoussan, et al.	1990	Leveled questions	Israel	12 weeks	University	270	0.34	0.10	0.58
18. Al-Mansour, N. S. et al.	2011	Interactive read aloud	Saudi Arabia	12 weeks	University	40	1.72	1.02	2.48
19. Amer, A. A	1997	Interactive read aloud	Egypt	4 weeks	Elementary School	75	1.48	0.98	2.01
20. Kowsary, M. A. et al.	2013	Interactive read aloud	Iran	12 weeks	Elementary School	40	1.72	1.02	2.48
21. Moon, J. et al.	2014	Interactive read aloud	South Korea	10 weeks	Elementary School	40	0.12	-0.50	0.74
22. Tsou, W.	2012	Interactive read aloud	Taiwan	6 weeks	University	78	0.30	-0.14	0.75
23. Kalantari, F. et al.	2016	Interactive read aloud	Iran	12 weeks	Middle School	30	1.98	1.15	2.91

Across four ESL/EFL instructional strategies for reading with ELLs (Guided Reading and Shared Reading), a strong effect size was observed, $g = .80$ ($k = 23$, $N = 2,191$), with a standard error of the mean at 0.05. This effect size represented an overall advantage of about .9 of a standard deviation for the use of four different ESL/EFL instructional strategies over other ESL/EFL instructional strategies. The 95% lower and upper confidence intervals around the mean effect size were .71 and .89, respectively, thus showing a statistically detectable overall mean effect size. However, heterogeneity was detected for this overall effect, suggesting that potential moderators could explain the variability among the individual effect sizes (Qtotal = 155.64, p < .01). With 22 degrees of freedom, the I^2 estimate for this meta-analysis was 85.86, which confirmed that there is a high heterogeneity among the studies. This also suggested further examination of the study features was necessary and could help explain the variability among effect sizes. Hence, I conducted moderator analyses on the following factors: ESL/EFL strategy, grade level, intervention duration, ESL/EFL environment, and sample size.

Research Question 1: Effects of ESL/EFL Instructional Strategies

All four ESL/EFL strategies produced statistically detectable mean effect sizes. Results showed that interactive read aloud produced the largest effect of all the strategies, with a weighted mean effect size of 1.00 across four instructional strategies. However, the other three ESL/EFL instructional strategies (i.e., graphic organizers, scaffolding, and leveled questions) still produced a large weighted mean effect size on reading performance (see Table 2). Because the total between-studies variance was

statistically detectable (QB = 10.96, p = .01), I conducted *post-hoc* analyses among the strategies. Scaffolding and interactive read aloud were significantly different from graphic organizers and leveled questions. However, scaffolding and interactive read aloud were not different from each other; neither were graphic organizers from level questions. The average adjusted effect size of the four strategies was .84.

Table 2
Effect Sizes of ESL/EFL Strategies

Variable	Adjusted Effect Size (g)				95% Confidence Interval		Test of Homogeneity		
	N	k	G	SE	Lower	Upper	Q	p	I^2 (%)
Interactive read aloud	303	6	1.00	0.13	0.76	1.25	32.94	0.00	84.82
Leveled questions	504	4	0.71	0.09	0.52	0.89	36.77	0.00	91.84
Graphic organizers	775	6	0.66	0.08	0.51	0.81	37.54	0.00	86.68
Scaffolding	629	7	0.97	0.09	0.80	1.14	37.43	0.00	83.97
Total within (Q_w)							144.68	0.00	
Total between (Q_B)							10.96	0.01	
Total							155.64	0.00	85.86

Research Question 2: Effects of ESL/EFL Instructional Strategies across Grade

Level, Intervention Duration, ESL/EFL Environment, and Sample Size

Grade level. All four grade levels (i.e., elementary school, middle school, high

school, and university) produced statistically detectable mean effect sizes (see Table 3).

Because the total between-studies variance was statistically detectable ($QB = 23.29$, p

$< .01$), I conducted *post-hoc* analyses among the strategies. There were statistical

differences between university and elementary, middle and high school students.

However, no significant statistical differences were found among elementary, middle

and high school students. Analysis of variance (ANOVA) was used to detect if an

interaction between grade level and ESL/EFL instructional strategies exists. The results

shown that there was no interaction between grade level and instructional strategies, $F(1,$

$10) = .143$, $p = .978$.

Table 3
Effect Sizes of Grade Level

Variable	Adjusted Effect Size (g)				95% Confidence Interval		Test of Homogeneity		
	N	k	G	SE	Lower	Upper	Q	p	I^2 (%)
Elementary school	593	6	1.02	0.09	0.85	1.20	46.52	0.00	89.25
Middle school	182	4	0.97	0.16	0.66	1.28	13.36	0.01	77.54
High school	426	5	1.00	0.10	0.80	1.20	10.31	0.03	61.22
University	990	8	0.57	0.07	0.44	0.70	62.16	0.00	88.74
Total within (Q_w)							132.35	0.00	
Total between (Q_B)							23.29	0.00	
Total							155.64	0.00	85.86

Intervention duration. Two subcategories of intervention duration (i.e., a period of less than three months and a period of more than three months) produced statistically detectable mean effect sizes. These two subcategories produced large effect sizes of .85 and .75, respectively (see Table 4). However, there was no significant difference between studies conducted during a period of less than three months and those conducted during a period of more than three months ($QB = 1.20$, $p > .05$).

Table 4
Effect Sizes of Intervention Duration

Variable	Adjusted Effect Size (g)				95% Confidence Interval		Test of Homogeneity		
	N	k	G	SE	Lower	Upper	Q	p	I^2 (%)
< 3 months	1133	16	0.85	0.06	0.73	0.97	73.79	0.00	81.03
≥ 3 months	1058	7	0.77	0.06	0.62	0.88	80.65	0.00	91.32
Total within (Q_w)							154.44	0.00	
Total between (Q_B)							1.20	0.22	
Total							155.64	0.00	85.86

ESL/EFL environment. Two subcategories of ESL and EFL environments (i.e.,

studies conducted in countries where English is an official language and studies

conducted in countries where English is a non-official language) produced statistically

detectable mean effect sizes. These two subcategories produced large effect sizes

with .77 and .95, respectively (see Table 5). However, there was no significant

difference between ESL and EFL countries ($QB = 2.43$, $p > .05$).

Table 5
Effect Sizes of ESL/EFL Environment

Variable	Adjusted Effect Size (g)				95% Confidence Interval		Test of Homogeneity		
	N	k	G	SE	Lower	Upper	Q	p	I^2 (%)
EFL	1761	19	0.77	0.05	0.67	0.87	118.72	0.00	84.84
ESL	430	4	0.95	0.10	0.74	1.15	34.48	0.00	91.30
Total within (Q_w)							153.21	0.00	
Total between (Q_B)							2.43	0.12	
Total							155.64	0.00	85.86

Sample size. According to Suter (2012) and Wilson, Voorhis, and Morgan (2007), to measure group differences (e.g., *t*-test), a more reasonable sample size for each of the two test cells should be larger than 30. I therefore used 60 as a cutoff number and divided our 23 studies into two groups (i.e., below and above 60 participants). Two subcategories of sample size (i.e., studies with less than 60 participants and studies with more than 60 participants) produced statistically detectable mean effect sizes. These two subcategories produced large effect sizes of .94 and .77, respectively (see Table 6). However, there was no significant difference between studies with less than 60 participants and those with more than 60 participants ($QB = 2.38$, $p > .05$).

Table 6
Effect Sizes of Sample Size

Variable	Adjusted Effect Size (g)				95% Confidence Interval		Test of Homogeneity		
	N	k	G	SE	Lower	Upper	Q	p	I^2 (%)
≤ 60 participants	452	9	0.94	0.10	0.74	1.14	59.58	0.00	83.21
> 60 participants	1739	12	0.77	0.05	0.67	0.86	93.69	0.00	88.09
Total within (Q_w)							153.26	0.00	
Total between (Q_B)							2.38	0.06	
Total							155.64	0.00	85.86

Discussion

The overall findings provide evidence for the positive effects of these four ESL/EFL instructional strategies on reading intervention (i.e., read with ELLs). This implies that each of these instructional strategies is beneficial for ELLs' reading performance. These findings support that when ELLs receive reading intervention utilizing any of these instructional strategies, the strategies will help ELLs more easily comprehend texts, and will therefore boost students' reading performance as well (Dabarera et al., 2014; Lara-Alecio et al., 2009). This would suggest that teachers should use these four instructional strategies when implementing reading interventions.

Moreover, the average effect of these four instructional strategies was large, suggesting that teachers of ELLs may use graphic organizers, scaffolding, interactive read aloud, and leveled questions as target instructional strategies in reading intervention. This finding is consistent with previous research findings of the National Reading Panel (2000) and Tong et al. (2014). According to Tong et al. (2014), when reading intervention combined multiple instructional strategies, ELLs' reading performance should be enhanced. Additionally, students' English language ability and academic performance in content areas (e.g., science) significantly increased (Tong et al., 2014). The finding also further supports the positive effect of using all four ESL/EFL instructional strategies in reading interventions to improve ELLs' reading performance across grade levels. The moderator analyses (i.e., grade levels, intervention durations, ESL and EFL environments, and sample sizes) highlight a number of additional details relevant to the overall findings.

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Regarding *grade level*, the four ESL/EFL instructional strategies produced statistically significant benefits for ELLs in all grade levels from elementary school to university. This implies that the progress of reading performance is irrespective of students' grade level; therefore, teachers of ELLs across all grade levels can adopt the four strategies when reading with their students. According to Lesnick, George, Smithgall, and Gwynne (2010), the level of students' reading performance in the early grades was directly related to their high school performance and college enrollment. Therefore, teachers of ELLs who work at the elementary level are strongly encouraged to use these four strategies to enhance students' reading performance. According to Kids Count (2015), only 35% of fourth graders in the nation read proficiently. Because of this, educators and researchers should adopt and adapt instructional strategies to improve reading performance of ELLs and other students before they graduate from elementary school.

Regarding *intervention duration*, the results indicated that the mean effect sizes of the studies conducted less than or over three months were significant; however, no significant difference was detected between the two periods of time. This suggests that if teachers of ELLs plan to implement a one-month reading intervention, the four ESL/EFL instructional strategies can be adopted. The finding also implies that if teachers of ELLs plan to implement the reading intervention for a semester, the four strategies could be used to enhance ELLs' reading performance. Moreover, the results further support the sustained effects of four instructional strategies over time for improving ELLs' reading performance. According to Tong et al. (2014), receiving and practicing multiple

strategies for over a year produced a sustained learning effect on ELLs' reading performance, which later could be positively reflected in English language ability and academic performance in content areas. To sustain a positive effect on ELL's reading performance, teachers are, therefore, strongly encouraged to use all four instructional strategies.

Regarding *ESL and EFL environment*, the moderator analyses indicated that the mean effect sizes associated with ESL and EFL countries were statistically significant; however, no difference was detectable irrespective of whether the four ESL/EFL strategies needed to be used in ESL or EFL countries. This means the strategies are beneficial for ELLs' reading performance no matter where they learn English. The finding also suggests that teachers of ELLs in EFL countries should be strongly encouraged to use the four ESL/EFL instructional strategies when implementing reading intervention. This is because the ELLs in EFL countries benefited to a similar degree as did the ELLs in ESL countries. The findings regarding the effects of instructional strategies across environment and grade level reinforce the following cautionary note for teachers of ELLs. When applying these four instructional strategies to increase ELLs' reading performance, teachers must understand that the strategies' level of effect might differ psychologically and socially based on students' ages (Gürsoy, 2010).

Regarding *sample size*, the results showed that the mean effect sizes for each group were significant. A non-significant difference between these two groups was detected. This indicates the four ESL/EFL instructional strategies are still effective for improving reading performance for ELLs in a study with a sample size less than 60

participants. Therefore, the number of participants would not influence the effect of the strategies.

Publication Bias

All 23 studies included in this meta-analysis were published in journals. For each study, the funnel plot displays an effect size on the x-axis and a sample size on the y-axis (see Figure 1). The funnel plot shows that one study has a negative effect, and other studies have positive effects. The study with the negative effect contained a small sample size of less than 60; however, some studies with the positive effect were also found to have small sample sizes. According to Torgerson (2003), studies with larger sample sizes may have a better quality methodology. He also argued that larger sample sizes may produce more reliable results; smaller sample sizes can "produce some surprisingly good or bad results, merely by chance" (p. 65). To examine the potential publication bias of this meta-analysis, I calculated classic fail-safe N in Comprehensive Meta-Analysis. The results indicated that 1,992 studies with a mean effect of zero would be required to invalidate the overall effect of this meta-analysis. This suggests the results of this meta-analysis are robust, and the true effect is unlikely to be non-zero.
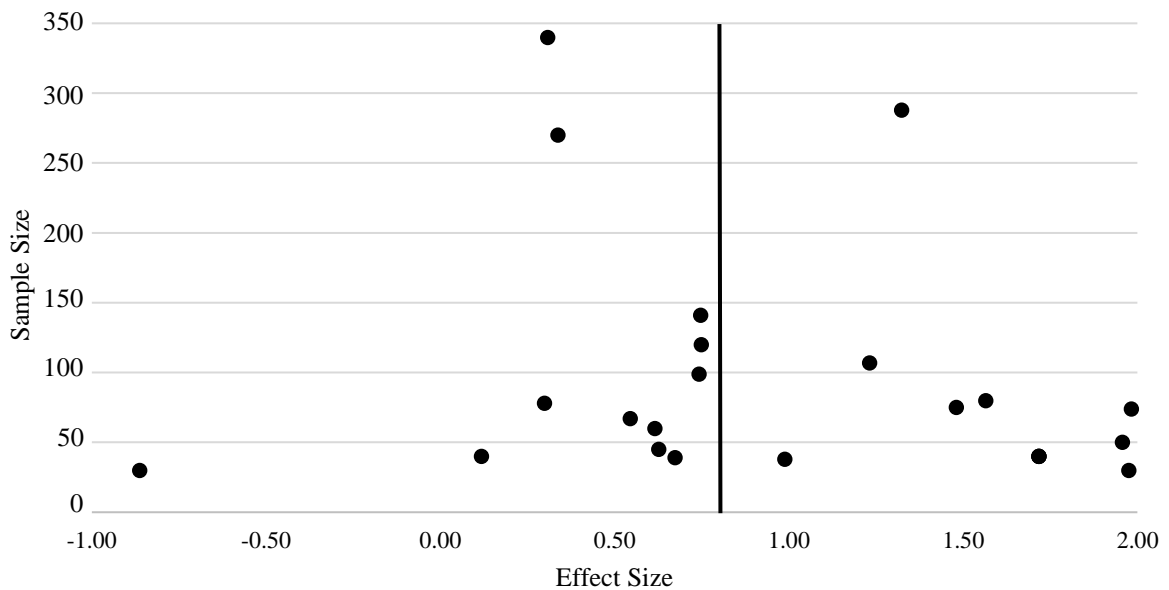
Figure 1. Funnel plot of the 23 studies. Three of these studies had the same sample size (40) and effect size (1.72).

Limitations

This meta-analysis had two limitations. First, in the past 20 years, there were no empirical studies on the effects of the four ESL/EFL instructional strategies on English reading performance among students from first to third grade. In addition, few studies were focused on examining the effect of the four ESL/EFL strategies on reading performance among bilingual students. More studies with bilingual students and first- to third-grade students are needed to make broad statements about generalizability of the results across different populations.

Second, there is evidence to suggest that a relationship exists between duration of strategy use and progress in reading performance (Lara-Alecio el al., 2009). All of the studies reported the duration of reading intervention; however, few studies reported how much time was spent on instruction and how often teachers used the four strategies.

Therefore, it is difficult to draw conclusions about the strength and nature of this relationship. In future studies conducted with elementary ELLs, it is recommended researchers clearly specify how long and how often the ESL/EFL instructional strategies are used. Hong-Nam and Leavell (2006) reported that there was a strong relationship between frequency of using strategies and language proficiency. There are studies showing Shared Reading/Guided Reading improves ELLs' reading performance; however, these studies did not include how frequently teachers use ESL/EFL instructional strategies. Moreover, there is no study on how the frequency of using the instructional strategies moderates the relationship between Shared Reading/Guided Reading and reading performance. Therefore, additional research on this topic is necessary.

Conclusion

The purpose of this meta-analysis was to identify the effects of four ESL/EFL instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) on reading intervention (i.e., reading with ELLs) across grade level, intervention duration, ESL/EFL environment, and sample size, and to evaluate the combined effect of these four ESL/EFL instructional strategies on ELLs' reading performance. In Guided Reading or Shared Reading, the primary role of ESL/EFL teachers is to provide reading materials, encourage ELLs to explore the content of textual materials, and use ESL/EFL instructional strategies to improve and enhance students' reading performance. To help ELLs become good readers, teachers are encouraged to provide explicit, intensive, and ongoing reading instruction. When

providing explicit instruction and striving to improve ELLs' reading performance, teachers should employ effective strategies, including graphic organizers, scaffolding, interactive read aloud, and leveled questions. ELLs benefit from the use of multiple strategies to improve their reading performance. According to Lara-Alecio et al. (2009), to have an effective structured ESL/EFL reading program, teachers should be versed in using multiple instructional strategies.

According to Shulman (1986), instructional strategies were considered as propositional knowledge. Shulman further classified propositional knowledge as principles, maxims, and norms. As principles evolve from empirical research, this meta-analysis of 23 studies provides further evidence that these ESL/EFL strategies are effective in improving ELLs' reading performance. The results of this meta-analysis have shown the use of graphic organizers, scaffolding, interactive read aloud, and leveled questions may be considered principles for effective ELL reading intervention.

CHAPTER III

THE EFFECTS OF TEACHERS' FREQUENCY OF USING FOUR
INSTRUCTIONAL STRATEGIES ON ELLS' READING PERFORMANCE

Theoretical Framework

The framework of this empirical study is derived from pedagogical reasoning and action, direct instruction, and cognitive reading process. Shulman (1986) developed the framework of pedagogical reasoning and action. Shulman's framework emphasizes a circle of content knowledge teaching: comprehension, transformation, instruction, evaluation, reflection, and new comprehension. This framework helped enhance teachers' professional development on content knowledge instruction with an emphasis on the development of English language learners (ELLs) English linguistic competence (Irvine-Niakaris & Kiely, 2015). Irvine-Niakaris and Kiely (2015) suggested that to enhance ELLs' reading performance, teachers should be aware of and use specific instructional strategies in class. To be mindful of this, the framework of direct instruction is considered in this study as well.

The framework of direct instruction was developed by Bereiter & Engelmann in 1966 and modified to be a model by Becker (Becker & Carnine, 1980). Direct instruction emphasizes that a teacher should take the initiative and lead students to learn content knowledge. For instance, a teacher demonstrates comprehension strategies (e.g., leveled questions and scaffolding) and provides opportunities for the students to practice those strategies. Moreover, a teacher should logically plan his/her lesson to present

instructional materials and strategies before any instruction is given. By receiving such direct instruction, ELLs can reach a higher level of reading performance (Van Staden, 2011).

The framework of cognitive reading process was developed by the National Assessment of Education Progress (NAEP) in 1992 and modified in 2009. The modified framework emphasizes three levels of cognitive reading processes: locate/recall, integrate/interpret, and critique/evaluate. This suggests a pedagogical implication of reading comprehension development: reading comprehension requires a stepwise process. First, students need to locate/recall meaningful information from texts and identify key vocabulary and information from the text. Second, students need to integrate/interpret the key information they locate and examine relations of multiple pieces of meaningful information across the text. Third, students need to critique/evaluate those pieces of meaningful information and show how they relate to one another. This study suggests that reading intervention can be designed in consideration of the NAEP framework.

Introduction

According to the National Center for Education Statistics (2016), within six years the number of ELLs in K-12 public schools in the United States increased from 4,638,344 (2009-2010) to 4,803,579 (2014-2015). In Texas, according to Texas Education Agency (2010, 2016), in the 2009-2010 school year, 817,074 students (16.9% of the entire student population) were identified as ELLs, compared to 949,074 students (18.1%) in the 2014-2015 school year. In addition, according to Texas Education

Agency (2010, 2016), the number of ELLs enrolled in either English as a Second Language (ESL) or bilingual programs in public schools in the 2009-2010 academic year was 779,771 while there were 931,376 ELLs in the 2014-2015 academic year. Therefore, the number of students in ESL or bilingual programs increased by 151,605, or 19.4%, between 2009-2010 and 2014-15. During the school year 2014-2015, among the 931,376 ELLs enrolled in the program, Hispanics (89.5%) represented a majority of the student population.

With increasing numbers of ELLs, K-12 public schools face two major critical challenges: (a) how to assist ELLs with reading well in English; and (b) how to enhance their reading performance. To support ELLs who need more assistance in achieving higher reading performance and higher performance in core content areas (e.g., language arts, math, and science), the United States proposed the No Child Left Behind Act in 2001 and implemented it the following year. In 2015, this act was replaced with the Every Student Succeeds Act. The primary purpose of these two Acts was to promote "reading first" and "quality instruction" (Bush, 2001; Executive Office of the President, 2015). This was intended to ensure that with effective teachers using a rigorous curriculum with explicit instructional practices, standardized assessments, instructional materials aligned with district benchmarks, and state standards - which is defined as quality instruction (Lara-Alecio et al., 2012; Tong, Luo, Irby, Lara-Alecio, & Rivera, 2017) - ELLs would successfully develop their linguistic competence, enhance their reading performance and attain higher levels of performance in the core content areas.

Literature Review

Reading is a great equalizer; the level of reading performance has a strong relationship with learning performance in other subject areas such as science and math, and with future academic performance (National Reading Panel, 2000). According to Lesnick, George, Smithgall, and Gwynne (2010), the level of reading performance of third graders is a significant predictor of their ninth-grade reading performance. In addition, students' level of reading performance by the end of third grade is linked to their future academic performance (Feister, 2013). This indicates that if ELLs do not reach the level of third-grade reading performance, and fail to acquire adequate reading strategies by third grade, their reading performance may lag behind English-speaking students throughout their later grades. Therefore, providing early reading intervention coupled with effective reading instruction is necessary; increasing the level of reading performance should be the ultimate goal of reading intervention (Tong, Lara-Alecio, Irby, & Mathes, 2011; Tong et al., 2017).

Effective Reading Instruction

Effective reading instruction on ELLs' reading performance emphasizes that teachers should organize large amounts of content and transform them into meaningful concepts; moreover, they should direct ELLs in mastering content by adopting instructional strategies (Cervetti, Kulikowich, & Bravo, 2015). Instructional strategies incorporated into reading intervention have proven effective in improving ELLs' reading performance (Tong et al., 2017). In addition, according to Tong, Lara-Alecio, Irby, and

Mathes (2011), the earlier the ELLs are exposed to this reading intervention, the faster any developmental reading performance difficulties can be remedied.

A higher level of reading performance is not an innate ability for ELLs; moreover, extensive reading cannot directly enhance their reading performance (Al-Homoud & Schmitt, 2009). Instead, scholars (De la Colina, Parker, Hasbrouck, Lara-Alecio, 2001; Lara-Alecio et al., 2012) have a legitimate concern that ELLs' levels of reading performance depend on the use of multiple evidence-based instructional strategies for enhancing reading performance. The ultimate goal of teachers' use of multiple instructional strategies in class should be to help ELLs become independent readers and to moderate their reading performance (Lara-Alecio et al., 2012).

To get a better understanding of how instructional strategies enhance ELL's reading performance in class, this study focused on four commonly used strategies that were recommended by Herrell and Jordan (2004): graphic organizers, scaffolding, interactive read aloud, and leveled questions. These four strategies have also been identified for their effectiveness on reading performance among ELLs.

Four Instructional Strategies

Regarding graphic organizers, using visualization for learning (i.e., concept mapping/graphic organizers) is one effective way of teaching students to comprehend what they read (Bromley, Irwin-DeVitis, & Modlo, 1995). Graphic organizers can be used as pre-reading, during-reading, and post-reading instructional strategies. As a pre-reading strategy, graphic organizers can help to evaluate if students possess prior knowledge on new topics and if their prior knowledge is correct on new concepts. As a

during-reading strategy, graphic organizers can visually present the relationships between concepts within texts. As a post-reading strategy, graphic organizers can help students integrate and review new learned concepts. Because of the visual assistance from graphic organizers, ELLs can easily and effectively obtain substantial information from the text (Tang, 1992). Researchers (Jiang, 2012; Liu, Chen, & Chang, 2010) have also found that the use of graphic organizers yields significant growth in ELLs' reading development and performance.

Regarding scaffolding, to help ELLs make sense of what they read, as well as develop a deeper understanding of content knowledge, researchers (Alemi & Ebadi, 2010; Proctor, Dalton, & Grisham, 2007) suggested that teachers should use 'scaffolding' to activate students' prior knowledge before initiating content knowledge learning. According to Dabarera, Renandya, and Zhang (2014), scaffolding as a teaching strategy can effectively help ELLs link prior knowledge to new information. Moreover, through the process of elaborating and integrating new information with prior knowledge, ELLs can have a deeper understanding of new information and reach a higher level of reading performance (Lara-Alecio et al., 2012). Therefore, ESL/bilingual teachers are strongly encouraged to use scaffolding to enhance their students' reading performance.

Regarding interactive read aloud, it is defined as reading that should be reciprocal and interactive between ELLs, teachers, and texts (Lara-Alecio et al., 2009). This reciprocal interaction in reading allows for a more meaningful and intellectually-stimulating learning experience, which will facilitate students' language learning and

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develop their language skills (Hickman & Pollard-Durodola, 2009). Studies have found the positive impact of interaction in reading between ELLs, teachers and texts on ELLs' vocabulary knowledge attainment (Pollard-Durodola et al., 2011) and reading performance (Amer, 1997; Kowsary, 2013). In terms of the concept of interactive read aloud, Zevenbergen and Whitehurst (2003) captured the overall meaning and implementation of it; using language, providing feedback, and having adult-child/student interactions through text reading will facilitate students' learning or enhance their reading performance (Zevenbergen & Whitehurst, 2003). The concept is essential to fully understanding the overall effect of interactive read aloud on reading performance.

Regarding leveled questions, teaching content knowledge through varied questions is considered a beneficial factor in the development of emergent literacy skills and reading performance (National Reading Panel, 2000). National Institute of Child Health and Human Development (2000) conducted a study that examined if asking questions rendered greater growth of reading performance; they found that meaningful questions from teachers could increase their students' reading performance. To enhance the effectiveness of questioning on ELLs' reading performance, researchers (Lara-Alecio et al., 2009; Pham & Humid, 2013) further suggested that teachers should use leveled questions embedded with Bloom's Taxonomy to assist their students in gaining a deeper understanding of texts. Studies have also shown the effectiveness of leveled questions on ELLs' processing of information to a deeper level (Fenesi, Sana, & Kim, 2014) and more fully comprehending new knowledge (Farahian & Farshid, 2014; Khansir & Dashti, 2014). Moreover, according to Ayaduray and Jacobs (1997), leveled

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questions provided more opportunities for ELLs to engage in their reading, which should yield a more positive influence on ELLs' reading development and performance.

Even though the use of evidence-based instructional strategies is important, the picture is less clear regarding how teachers' frequency of using these strategies might positively moderate the relationship between reading intervention and ELLs' reading performance. In a search of articles published in major journals (e.g., *Journal of Educational Research, TESOL Quarterly, and International Journal of Bilingual Education and Bilingualism*), no study in the past ten years has addressed the issue of the frequency of instructional strategies employed by teachers on reading performance among elementary level ELLs. Therefore, I initiated this study to provide a more comprehensive picture of how teachers' frequency of using the four instructional strategies - graphic organizers, scaffolding, interactive read aloud, and leveled questions - impacts ELL's reading performance on their pretest and posttest. Figure 2 depicts our research model and hypothesis: a more frequent use of instructional strategies enhances students' reading performance.

In this study I determined to address one research question: how does teachers' frequency of using the four instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) affect the relationship between ELLs' reading performance on the pretest and on the posttest?

Level 2: Teacher/Classroom
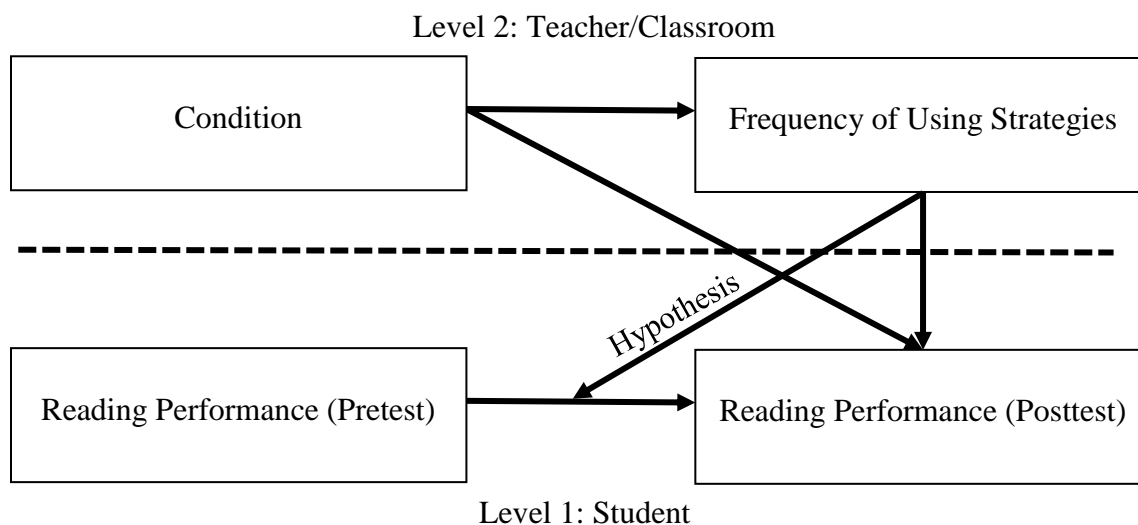
Figure 2. Research model and research hypothesis.

Method

Context and Research Design

The data were derived from a longitudinal (kindergarten to third grade) project named Project English Language and Literacy Acquisition (Project ELLA-R305P030032). Project ELLA was implemented in one major suburban school district in Southeast Texas from 2004 through 2008. According to the Texas Education Agency (2017), during the school year 2007-2008, Hispanic (64%) and African American (31%) represented a majority of the student population. Of the total student population, 80.1% were economically disadvantaged, 31% were considered to have limited English proficiency, and 29% were put into bilingual/ESL education programs.

Project ELLA adopted the design of cluster-randomized trials with three levels (school, teacher, and student). Project ELLA had two experimental groups (transitional bilingual education-enhanced [TBE-E] and structured English immersion-enhanced

[SEI-E]) and two control groups (transitional bilingual education [TBE] and structured English immersion [SEI]). To better understand project participants' reading performance, Woodcock Language Proficiency Battery-Revised (WLPB-R) was given to them at the beginning and end of kindergarten, the beginning and end of first grade, the end of second grade, and the end of third grade.

In this study, I focused on third grade students and teachers in both groups. To accommodate the purpose of this study, data of third grade students and teachers were aggregated. There were 36 third grade teachers (18 in the experimental group; 18 in the control group) and 386 third grade students (187 in the experimental group; 199 in the control group). Among 386 students, 51% were male and 49% were female. Their average age in experimental and control groups were 9.24 and 9.25. Among 36 teachers, 6% were male and 94% were female. Their average year of teaching in experimental and control groups were 14.75 and 7.86. The participating students were Hispanic and were ELLs as identified by the state criteria. The participating teachers were certified ESL teachers and had experience working with ELLs.

Student Treatment and Condition

The students in the experimental classrooms received an extended 90-minute English instruction; the students in the control classrooms received the regular 45-minute English instruction. During the 90-minute block, students received: (a) a 55-minute Content Reading Integrating Science for English Language Acquisition ([CRISELLA], Irby, Lara-Alecio, Mathes, Rodriguez, & Quiros, 2007); and (b) a 35-minute Story Retelling and Higher Order Thinking Skills for English Language and Literacy

Acquisition ([STELLA], Irby, Lara-Alecio, Quiros, Mathes, & Rodriguez, 2004). The curriculum was standards-aligned with Texas English language art and science standards and national science standards; it was specific to oral-language development with an emphasis on reading and listening comprehension.

CRISELLA. CRISELLA was designed to enhance ELLs' English reading performance with the use of Pearson-Scoot Foresman's third-grade science textbook (2006 Edition). The researchers of Project ELLA chose this textbook primarily because it was comprised of multiple expository reading passages with an emphasis on the beneficial effects of scaffolding on the development of linguistic competence in science and expository reading skills. Teachers were asked to follow a scripted lesson plan designed by the researchers with the use of 5E models (i.e., Engage, Explore, Explain, Elaborate, and Evaluate). The teachers started the lesson by providing vocabulary-building activities, and then guided the students to comprehend the reading passages by using pre-selected ESL instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions).

STELLA. STELLA emphasized enhancing ELLs' English listening comprehension and oral language competency with the use of story repetitions, cloze sentences, and three-leveled questions (i.e., easy, moderate, advanced). The researchers of Project ELLA asked the teachers to use a researcher-developed lesson with an instructional script; teachers were requested to introduce one book per week. During instruction, teachers introduced targeted vocabulary, asked leveled questions, held

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discussions, and retold the story. The pre-selected ESL instructional strategies were used to assist the students in comprehending the story.

Student Outcome Measures

In this study, the participating ELLs' reading performance was measured using WLPB-R. WLPB-R is a norm-referenced standardized assessment to identify an individual's English or Spanish language proficiency (Woodcock, 1991). Detailed information about WLPB-R construct, content, and concurrent validity can be found in its test manual (Woodcock, 1991). In Project ELLA, WLPB-R (English Form) was given to the participating students. WLPB-R (English Form) is comprised of thirteen subtests (e.g., Picture Vocabulary, Letter-Word Identification, and Dictation) within three language domains (i.e., Oral Language, Reading, and Writing). WLPB-R also provides several clusters (e.g., Oral Language, Broad Reading, and Written Expression) to help teachers determine their students' corresponding English language skills.

In this study, students' reading performance took into consideration their abilities to decode and comprehend, per the recommendation of Nation (2005). Therefore, in this study the scores of participating ELLs' reading performance were derived from two subtests: Letter-Word Identification and Passage Comprehension. These scores were derived from the participants' reading performance at the end of second and third grades. The Letter-Word Identification subtest was used to measure students' orthographic skills (Woodcock, 1991). Students were required to read and identify a list of English words that increase in complexity based on the students' grade levels and linguistic abilities. The Passage Comprehension subtest was used to measure students' word knowledge

(depth and breadth) and understanding of a sentence and a passage (Woodcock, 1991).

This subtest was in the cloze format. Each student was required to orally provide a

missing word that was appropriate for the context of the sentence and passage s/he read.

Teacher Treatment and Condition

All teachers in experimental classrooms delivered the structured 90-minute ESL

lessons that the researchers of Project ELLA designed; however, the teachers in control

classrooms taught the typical 45-minute ESL lessons that were not as structured. The

teachers in experimental classrooms received scripted lessons with provided teaching

materials, while the teachers in control classrooms developed their own lessons by using

any teaching materials aligned with objective-based curriculum provided by the school

district.

The verification of intervention fidelity to treatment occurred in only one way.

Two research observers, trained by the research team of Project ELLA, used a checklist

on a four-point Likert scale to ensure the quality of implementation. The checklist was

completed three times throughout the academic year (the beginning, middle, and end).

The checklist contained five parts: (a) knowledge of the content and script; (b) materials

usage and student involvement; (c) teacher talk versus student talk; (d) leveled

questions; and (c) classroom management. The mean score of intervention fidelity was

86.6 from kindergarten through third grade.

Teacher Observation Measure

The teachers' measure was the number of times they used the four instructional

strategies (i.e., graphic organizers, scaffolding, interactive read aloud, and leveled

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questions). The number of uses was collected on at least three separate occasions (beginning, middle and end) during the academic year. Each occasion lasted 20 minutes, during which a 20-second interval observation was repeated 60 times. The length of observation was consistent across all participating teachers. To efficiently collect the teachers' data, an observation instrument named Transitional Bilingual Observation Protocol (TBOP) was used with the assistance of a personal digital assistant (PDA). In 1994, Lara-Alecio and Parker developed TBOP on the Four Dimensional Bilingual Pedagogical Theory (Language Content, Language of Instruction, Communication Mode, and Activity Structures). Coordinators in Project ELLA, who were also observers, were trained in person by TBOP designers. In our TBOP data set for third grade classrooms there are 8389 observations (a 20-second interval per observation), with an average of 80 minutes of observation per third grade teacher. For our analysis, teachers' frequency of using the four teaching strategies was expressed as a percentage of the total equated to 1 (i.e., .01 = 1%).

Professional Development

All teachers were required to receive an average of 48 hours of professional development (PD) courses per school year and attended several workshop-style training sessions. These courses and training sessions were provided primarily by well-trained certified specialists within the district or in universities. These courses and sessions were to enhance those teachers' knowledge about standardized assessments, lesson design aligned with Texas state standards, and evidence-based instructional strategies.

However, the teachers in experimental classrooms received PD training under Project ELLA. These teachers received a three-hour PD training session biweekly, with a total of six hours per month. There were three cohorts in PD: (a) instructional strategies on literacy development; (b) parental involvement; and (c) lesson planning. Under each cohort there were multiple topics. For example, under the instructional strategies on literacy development cohort, teachers were advised how to implement the strategy of interactive read aloud to enhance students' reading performance. In each training session, on-site PD coordinators also led teachers to preview upcoming lessons and review prior lessons.

Data Analysis

In this study, a multilevel path analysis using Structural Equation Modeling was employed to generate a model based on the multilevel structure of the data (i.e. students nested within teachers). The analysis helped to examine the association between students' reading performance at the end of second grade as a level-1 predictor and their performance at the end of third grade as an outcome variable. The analysis also helped to examine the association between level-1 regression coefficients as an outcome variable and level-2 predictors (teacher conditions and teachers' frequency of using the four instructional strategies). Four full models incorporating four different strategies were tested. The statistical package Mplus 7.0 (Muthén & Muthén, 1998-2012) was used for the analysis.

Results

This section contains five parts: the results of null model, graphic organizers full model, scaffolding full model, interactive read aloud full model, and leveled questions full model. The figure results of each full model analysis are depicted in Figures 3, 4, 5, and 6. The means and standard deviations of the outcome variable, level-1 predictor, and level-2 predictors are listed in Table 7.

Table 7

Means and Standard Deviations of the Outcome Variable, Level-1 Predictor and Level-2 Predictors

Variable	n	M	SD
Level-1: Student			
Pretest			
Control	199	480.85	16.52
Treatment	187	484.01	13.38
Posttest			
Control	199	506.22	19.62
Treatment	187	507.80	18.60
Level-2: Teacher			
Graphic Organizers			
Control	18	.07	.03
Treatment	18	.11	.09
Scaffolding			
Control	18	.08	.06
Treatment	18	.13	.08
Interactive Read Aloud			
Control	18	.03	.06
Treatment	18	.03	.03
Leveled Questions			
Control	18	.08	.11
Treatment	18	.22	.10

Null Model

The results showed that the average reading performance (Letter Word Identification and Passage Comprehension) varied across individual teachers (classrooms) ($\sigma^2 = 202.01$, $p < .001$). As noted, the average score of reading performance posttest across individuals is 505.83 when the pretest unit is 0.

The Intra-class Correlation (ICC) is .45, which means teachers account for 45% of the variance in individuals' reading performance scores. According to Cohen (1988), when ICC was larger than .058, the hierarchical nature of the data should be taken into account to avoid underestimating standard errors.

Therefore, per Cohen's recommendation, multilevel analysis was used in my study to help determine the existence of significant differences in intercepts and slopes across classrooms.

Full Model (Graphic Organizers)

This model was to test my hypothesis: teachers' frequency of using graphic organizers moderates the effect of students' pretest scores on their posttest scores. The results showed that the $\hat{\gamma}$ is 1.47 and reaches a statistical significance at alpha = .05 (see Figure 3). Hypothesis for graphic organizers strategy as a moderator was supported.

In addition, a significant, positive association was also found between conditions and teachers' frequency of using graphic organizers ($\hat{\gamma}$ = .05, $p < .05$). This indicated that teachers in an experimental group used more graphic organizers during observation than teachers in a control group.

Level 2: Teacher/Classroom

Level 1: Student

Figure 3. Multilevel path analysis summary for the interaction effect of graphic organizers read aloud on pretest and posttest.
*p <.05. **p <.01. ***p <.001.

Full Model (Scaffolding)

This model was to test my hypothesis: teachers' frequency of using scaffolding moderates the effect of students' pretest scores on their posttest scores. The results showed that the ˆγ is 1.34 and reaches a statistical significance at alpha = .05 (see Figure 4). Hypothesis for scaffolding strategy as a moderator was supported.

In addition, a significant, positive association was also found between conditions and teachers' frequency of using scaffolding (ˆγ = .07, $p < .05$). This indicated that teachers in an experimental group used more scaffolding during observation than teachers in a control group.

Level 2: Teacher/Classroom

| Condition | 0.07* | Frequency of Using Scaffolding |

0.16   1.34**   2.97

| Reading Performance (Pretest) | 0.36*** | Reading Performance (Posttest) |

Level 1: Student

Figure 4. Multilevel path analysis summary for the interaction effect of scaffolding on pretest and posttest.
*p <.05. **p <.01. ***p <.001.

Full Model (Interactive Read Aloud)

This model was to test my hypothesis: teachers' frequency of using interactive read aloud moderates the effect of students' pretest scores on their posttest scores. The results showed that the $\hat{\gamma}$ is 1.44 and reaches a statistical significance at alpha = .05 (see Figure 5). Hypothesis for interactive read aloud strategy as a moderator was supported. A non-significant association was also found between conditions and teachers' frequency of using interactive read aloud during observation ($\hat{\gamma}$ = .07, p < .05).

Level 2: Teacher/Classroom

| Condition | 0.002 → | Frequency of Using Interactive Read Aloud |

0.30   1.44**   3.44

| Reading Performance (Pretest) | 0.44*** → | Reading Performance (Posttest) |

Level 1: Student

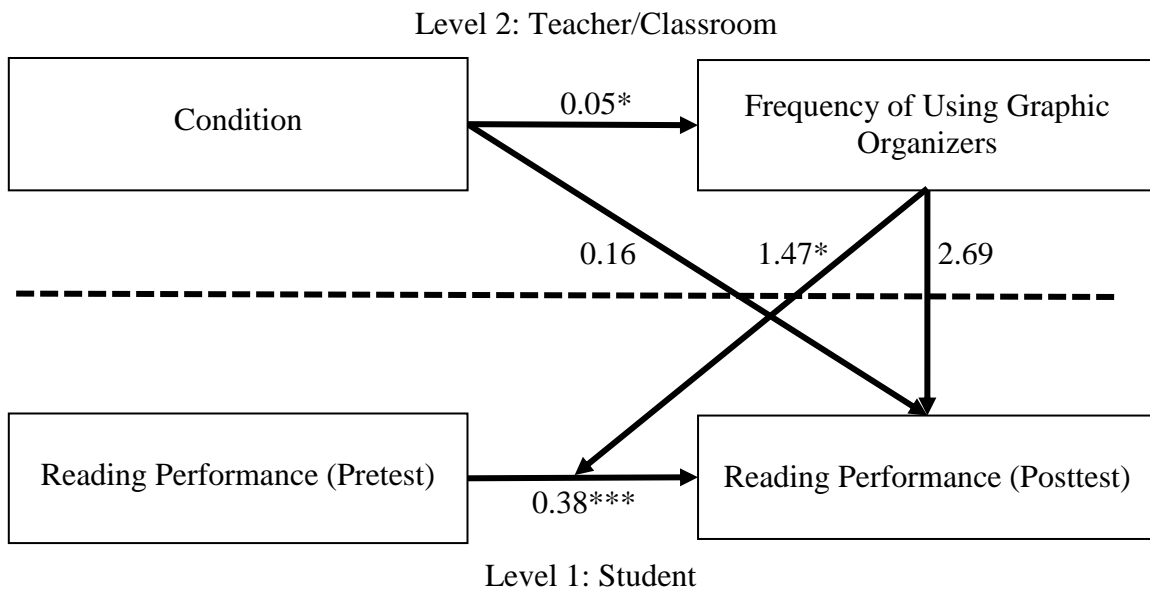*Figure 5*. Multilevel path analysis summary for the interaction effect of interactive read aloud on pretest and posttest.
p <.05. **p* <.01. ***p* <.001.

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Full Model (Leveled Questions)

This model was to test my hypothesis: teachers' frequency of using leveled questions moderates the effect of students' pretest scores on their posttest scores. The results showed that the $\hat{\gamma}$ is 1.31 and reaches a statistical significance at alpha = .05 (see Figure 6). Hypothesis for leveled questions strategy as a moderator was supported.

In addition, a significant, positive association was also found between conditions and teachers' frequency of using leveled questions ($\hat{\gamma}$ = .09, p < .01). This indicated that teachers in an experimental group used more leveled questions during observation than teachers in a control group.
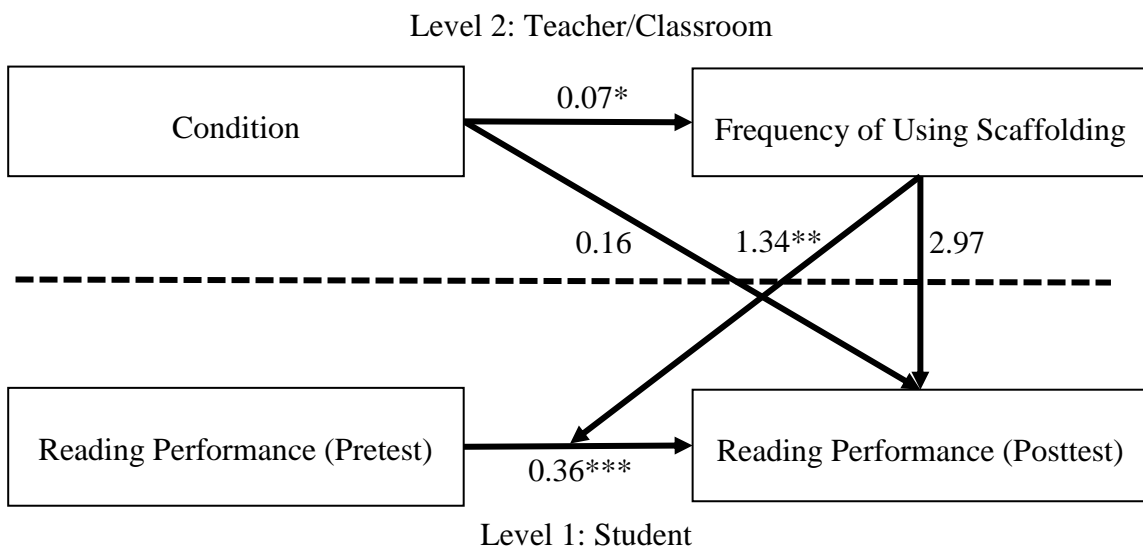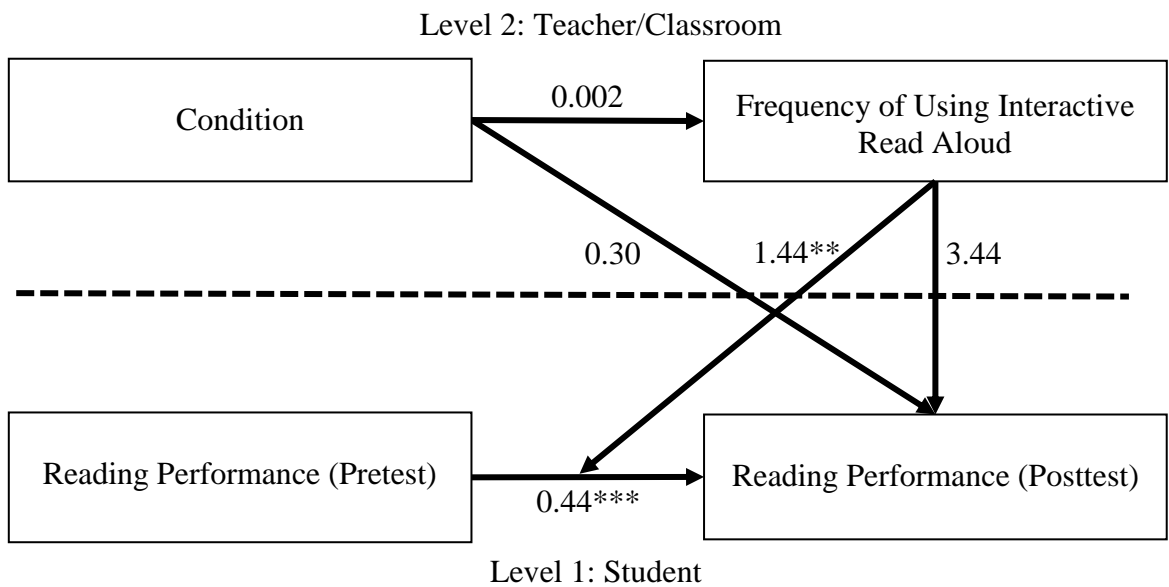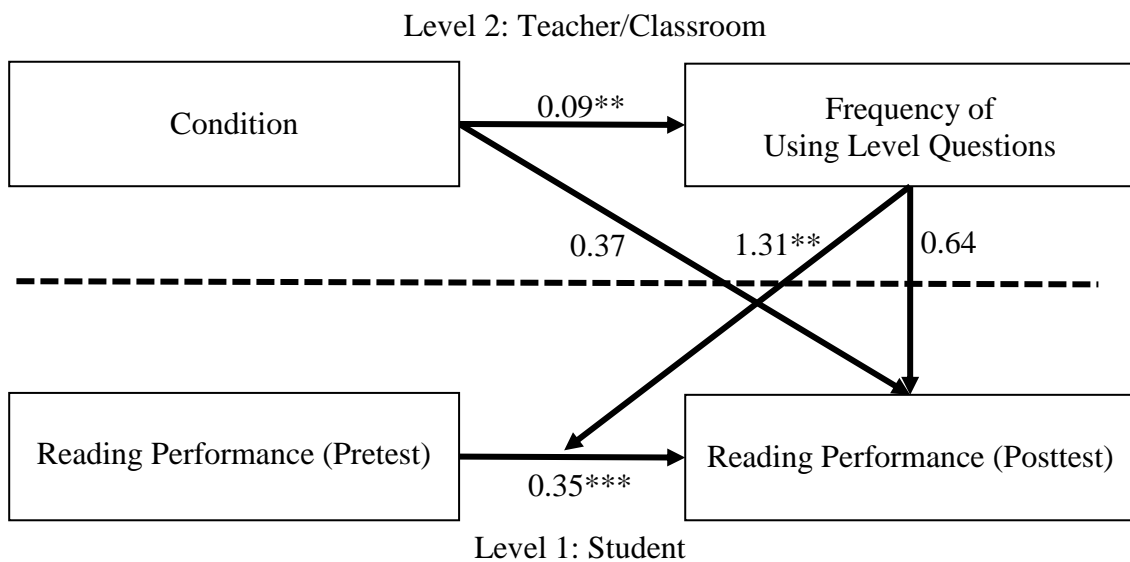
Level 2: Teacher/Classroom

Level 1: Student

Figure 6. Multilevel path analysis summary for the interaction effect of leveled questions on pretest and posttest.
p <.05. **p* <.01. ***p* <.001.

Discussion

The main purpose of this empirical study was to understand how teachers' frequency of using four instructional strategies (graphic organizers, scaffolding, instructional read aloud, and level questions) strengthens ELL's reading performance. This study has highlighted the importance of an explicit instruction coupled with the four instructional strategies on ELLs' reading performance.

The results revealed that teachers' frequency of using instructional strategies can strengthen the relationship of ELLs' reading performance between the pretest and the posttest. The findings further indicated that the higher frequency of using strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) can help enhance the effects of students' pretest on their posttest.

Regarding the effect of *graphic organizers*, the result indicated that as the frequency of graphic organizers used by teachers increased by 1%, the effect of pretest increased by 1.47 points. Liu, Chen, and Chang (2010) and Tang (1992) supported the finding that by applying graphic organizers in reading intervention, ELLs' reading performance should be enhanced. Graphic organizers help students build their mental simulation towards new knowledge acquisition, for graphic organizers help new knowledge become more visualized, concrete, and simplified (Toscano & Rizopoulos, 2013). This mental simulation can assist students with new knowledge understanding and memorization (Nyberg et al., 2001).

Regarding the effect of *scaffolding*, the result indicated that as the frequency of scaffolding used by teachers increased by 1%, the effect of pretest increased by 1.34

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points. The result explained that scaffolding activities adopted in this study act as a strategy to positively assist ELLs in understanding new knowledge by building on their prior knowledge and connecting to their prior knowledge. Prior knowledge can act as a guide for ELLs to more easily capture and construct substantial information within texts (Dabarera, Renandya, & Zhang, 2014). This finding is also consistent with previous research (e.g., Alemi & Ebadi, 2010; Proctor, Dalton, & Grisham, 2007) that prior knowledge is considered as a significant predictor of successfully comprehending texts.

Regarding the effect of *interactive read aloud*, the result indicated that as the frequency of interactive read aloud used by teachers increased by 1%, the effect of pretest increased by 1.44 points. This finding strengthens the belief that interactive read aloud activities, when constructed jointly by teachers and ELLs, should help capture the meaning of the text (Hickman, Pollard-Durodola, & Vaughn, 2004) and should help enhance reading performance (Kowsary, 2013). The finding is indicative of a pedagogical note that teachers should use storybooks in interactive read aloud activities. This is because storybooks contain redundancy of core information, semantic complexity, and story grammar. By interactively reading the storybooks with ELLs, their reading performance should be enhanced (Hickman et al., 2004). Moreover, such interactive read aloud activities provide a way to engage students (Barrentine, 1996). Therefore, with the aforementioned beneficial effects of interactive read aloud on ELLs' reading performance, teachers are strongly suggested to read storybooks coupled with interactive read aloud strategy to enhance their reading performance to ELLs.

Regarding the effect of *leveled questions*, the result indicated that as the frequency of leveled questions used by teachers increased by 1%, the effect of pretest increased by 1.31 points. This finding is also consistent with previous research (e.g., Alemi & Ebadi, 2010; Farahian & Farshid, 2014; Khansir & Dashti, 2014; Proctor, Dalton, & Grisham, 2007) that leveled questions applying to reading intervention should help enhance ELLs' reading performance. By asking leveled questions, students are guided to locate, interpret, and evaluate what they have learned and have known, which effectively helps them comprehend texts (Pham & Humid, 2013). Moreover, as questions require students' deeper level of cognition, students' analytical skills, critical thinking skills, and problem-solving skills should be enhanced (Veeravagu, Muthusamy, & Marimuthu, 2010). To elicit meaningful deep reasoning questions, teachers are strongly suggested to adopt Bloom's Taxonomy (Irby, Lara-Alecio, Quirós, Mathes, & Rodriguez, 2004).

Regarding the effect of *multiple instructional strategies*, by using Sequential Bonferroni Tests as a reference (Holm, 1979), the finding supported an educational belief that explicit instruction coupled with multiple instructional strategies is essential for enhancing ELLs' reading performance (Klinger & Vaughn, 1996). The p value for the interaction effect of leveled questions, scaffolding, interactive read aloud, and graphic organizers was lower than .0125, 0.017, 0.025, and 0.05 respectively. Therefore, the finding further indicated that higher frequency of using multiple instructional strategies had a significant interaction effect on the relationship between ELLs' reading performance on the pretest and the posttest. This finding is consistent with Tong and

associates' study (2014). According to Tong et al. (2014), explicit instruction using multiple instructional strategies should help strengthen ELLs' level of reading performance. The finding also supported that this explicit instruction helps ELLs comprehend content knowledge; in addition, the four instructional strategies used in the study act as visual and verbal stimuli to help students effectively process content knowledge. According to Richek, Caldwell, Jennings, and Lerner (1996), instructional strategies that provide visual and verbal assistance should activate a higher level of mental activity to comprehend content knowledge, monitor learning condition, and adjust ways of understanding texts to increase levels of reading performance. Therefore, to increase ELLs' levels of reading performance, teachers are strongly encouraged to apply explicit instruction with the use of multiple instructional strategies.

Additionally, the results indicated that there were significant differences on teachers' frequency of using graphic organizers, scaffolding, and leveled questions between experimental and control groups. With the significant interaction effects of these three strategies supported, the results further indicated that the pretest of students in an experimental group had a more positive influence on their posttest. By using Vygotsky's theory of Zone of Proximal Development (Vygotsky, 1978), I interpreted that the pedagogical impact of more frequently using instructional strategies on ELLs is to enhance their potential development of reading performance. To ensure the positive effects caused by the use of instructional strategies, teachers should provide students with more opportunities to practice these strategies (Gallimore & Tharp, 1990). It is

believed that in future reading activities, students will apply these strategies to better understand what they read (Gallimore & Tharp, 1990).

Conclusion

Successful reading performance (i.e., read to learn) is the ultimate goal of reading intervention for ELLs (National Reading Panel, 2000). To meet the goal, reading intervention should require a more structured explicit instruction, which may act as an offset to enhance students' levels of reading performance. In addition, to have a more beneficial effect on students' reading performance, teachers are strongly encouraged to apply multiple instructional strategies (National Reading Panel, 2000; Lara-Alecio et al., 2009). When teachers have more opportunities to use instructional strategies, students will have a higher possibility to learn more and to learn successfully (Rupley, Blair & Nichols, 2009).

I undertook this study to ascertain one pedagogical action and one pedagogical reasoning. The pedagogical action was to deliver a reading intervention containing explicit instruction, multiple evidence-based instructional strategies and expanded instructional time. The pedagogical reasoning was the proactive solution to help enhance ELLs' reading performance and English linguistic competence. According to Ghonsooly and Eghtesadee (2006) and Hamdan et al (2010), instructional strategies should help students better comprehend what they read. In addition, by using instructional strategies tied to text, students' self-regulation on their future reading skills attainment should be enhanced. This is supported by the theories of cognitive reading strategies and studies

conducted by Ozek & Civelek (2006), Ghonsooly & Eghtesadee (2006), and Hamdan et al. (2010).

CHAPTER IV

ADAPTING PROJECT ELLA CURRICULUM INTO TAIWAN ENGLISH

LANGUAGE CLASSROOMS: A POLICY CASE STUDY

Introduction

Kachru in 1985 proposed the idea of "World Englishes" and its three concentric circles (i.e., inner, outer, and expanding circles) to discuss the role of English as defined in these three circles (Kachru, 2005). The United States is identified as a country in the inner circle because its official language is English. Moreover, English is considered the mother tongue for the citizens of the United States. In the inner circle, English is considered as a second language for students whose native language is not English. Concerning why English is learned as a second language, Mohan (1986) stated that English as a Second Language (ESL) is mainly a tool for the English language learners (ELLs) to communicate; therefore, the primary reason ELLs learn English is for academic and business uses. Project English Language and Literacy Acquisition (Project ELLA) emphasizes that a bilingual/ESL curriculum should consist of two major components: (a) linguistic elements for learning the English language; and (b) content knowledge from textbooks for overall academic performance. Additionally, the bilingual/ESL curriculum should consider the contents of each lesson as the main focus, and the four language skills as the secondary focus.

Taiwan is included in the expanding circle and two facts can explain why: (a) Taiwan has not been colonized by countries in the inner circle; and (b) Taiwan uses

English as a foreign or international language (EFL/EIL) only in academia, business, technology, and higher education. Taiwan's English-language planning and education policy states that all students from grade three to grade twelve are required to receive English instruction. In post-secondary education in Taiwan, while not required by the government, English is usually a mandatory course. Most prestigious universities require their students to reach a certain level of English proficiency before graduation (e.g., 71 score on TOEFL iBT or 5.5 on IELTS for students majoring in Children English Education at National Taipei University of Education). School classrooms are the only places where Taiwanese students use English; outside the classroom they use Mandarin to communicate. Therefore, to provide Taiwanese students with more opportunities to practice English, most English teachers, especially in elementary schools, use English instruction with little Chinese clarification in class (Huang, 2002). However, English teachers in Taiwan still face challenges of the gap between elementary, middle, and high school English curriculum (Huang, 2003). To bridge this curriculum gap, I proposed to implement Project English Language and Literacy Acquisition (Project ELLA) curriculum in Taiwan. One of the intents of Project ELLA was to help ELLs enhance their English linguistic competence and reading performance in ESL learning environments. Because the curriculum developed in Project ELLA was aligned with the State of Texas standards, it must be modified to fit Taiwan's English-language planning and education policy so as to respond to the needs of Taiwanese ELLs, their parents, and teachers.

In this study, I first presented an overview of Project ELLA, followed by the structured English immersion programs in Project ELLA. Then, I shared an analysis of Taiwan's English-language planning and education policy concerning English as a required course. Next, how to adapt the Project ELLA curriculum to English classrooms in Taiwan, as well as suggested professional development for ESL/EFL teachers in Taiwan, were discussed. Finally, I concluded by considering how English curriculum can be effectively modified to improve English reading performance and linguistic competence of ELLs in Taiwan classrooms.

Project ELLA

Project ELLA (R305P030032) was a five-year longitudinal research granted project. The goals of the project were two-fold: (a) to provide a more systematic and structured professional development for bilingual/ESL teachers; and (b) to provide a more rigorous and comprehensive bilingual/ESL curriculum to assist disadvantaged ELLs in acquiring higher levels of English linguistic competence and reading performance.

Program ELLA argued that effective bilingual/ESL program models should provide a more rigorous bilingual/ESL curriculum design. The more rigorous curriculum design should contain instructional materials aligned with district benchmarks and state standards, explicit academic vocabulary instruction, evidence-based cognitive ESL instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions), various assessments, and structured lesson plans. In addition, Project ELLA emphasized the importance of bilingual/ESL teachers' professional knowledge

and skills on students' academic performance; therefore, professional development training should be provided to bilingual/ESL teachers. The professional development training in Project ELLA committed to enhance bilingual/ESL teachers' instructional practices and knowledge, as well as to strengthen their attitude about, and belief in, bilingual education.

Project ELLA focused on two major program models: transitional bilingual education [TBE] and structured English immersion [SEI]). These two models are commonly observed and implemented in Texas public schools. For the purpose of this study, the curriculum design and implementation of SEI in Project ELLA will be discussed.

The Structured English Immersion Programs in Project ELLA

SEI programs promoted by Project ELLA were different from regular SEI programs. SEI programs of Project ELLA put more attention on student-centered curriculum and emphasize the importance of extended learning block; students should have more flexibility on learning and more opportunities to develop their linguistic potentials and reading performance. In addition, the curriculum focused on reciprocal cognitive and linguistic development and a risk-taking approach. Therefore, such learning activities like letter and word pronunciation, and reading and writing miscues, were used as indications of language learning growth.

The goals of SEI programs in Project ELLA were: (a) to help disadvantaged bilingual/ESL students develop English linguistic competence and reading performance by using only English with little support from their first language; and (b) to help the

students acquire learning skills to succeed in a mainstream classroom. In addition, SEI programs helped students develop English academic abilities, demonstrate academic performance at or above the grade level, participate in cross-cultural relationships and learning experiences that foster the development of a positive self-esteem and bi-cultural perspectives, and get involved with their parents in their educational process (Lara-Alecio, Galloway, Irby, Rodriguez, & Gomez, 2004).

SEI programs of Project ELLA had three tiers. Tier 1 focused on content knowledge development in content areas (e.g., language arts and science). Tier II focused on English language and literacy skills enhancement integrated into content areas. This instruction consisted of: (a) the research-based content area curriculum for teaching ELLs; (b) story-retelling and higher-order thinking for English Literacy and Language Acquisition ([STELLA], Irby, Lara-Alecio, Quiros, Mathes, & Rodriguez, 2004); (c) Academic Oral Language ([AOL], Lakeshore Learning Materials, 1997)/ modified AOL in science (AOLS)/ academic oral and written language in science (AOWLS); (d) Early Intervention in Reading ([EIR], Mathes, Torgesen, Menchetti, Wahl, & Grek, 2004); and (e) Content Reading Integrating Science for English Language and Literacy Acquisition ([CRISELLA], Irby, Lara-Alecio, Mathes, Rodriguez, & Quiros, 2007). Tier III focused on a 20-minute remedial instruction for struggling ELLs. This instruction emphasized communication games (Quiros, Irby, Lara-Alecio, & Mathes, 2003) by highly qualified paraprofessionals.

Curriculum and Instruction

As previously stated, Project ELLA emphasized the importance of providing a more rigorous curriculum to enhance disadvantaged bilingual/ESL students' reading performance and linguistic competence. Therefore, Project ELLA suggested that this more rigorous curriculum should contain structured lesson plans, explicit instructional practices, standardized assessments and performance assessments, and instructional materials aligned with district benchmarks and state standards.

Structured lesson plans and instructional materials. The instructional materials of Project ELLA were aligned with district benchmarks and state standards (e.g., Texas Essential Knowledge and Skills) and these materials should be used with structured lesson plans. With structured lesson plans, teachers can effectively help students comprehend content knowledge, enhance their linguistic competence, and hopefully achieve state standards. Project ELLA emphasized that a successful lesson needs to be structurally designed upon one basic principle: "Where the objective is to master a body of knowledge or learn a skill which can be taught in a step-by-step manner" (Pratt & Associates, 2005, p.65). Therefore, the lesson plans of Project ELLA contain: (a) the main goals and objectives of the lesson; (b) the proposed abilities that students will have at the end of the lesson; (c) the ways to evaluate students' performance; and (d) the teaching procedures.

Explicit instruction coupled with evidence-based ESL instructional strategies. Project ELLA emphasized explicit instruction. Explicit instruction helps bilingual/ESL teachers focus on teaching content knowledge. Explicit instruction can be

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implemented at all grade, proficiency, and aptitude levels. To make explicit instruction more effective and systematic, evidence-based ESL instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions) should be applied. Immersed in this instruction, bilingual/ESL students can identify key concept knowledge and teachers' instructing routines. In addition, students' reading performance and linguistic competence can be enhanced.

Standardized assessments and performance assessments. Project ELLA believed that assessments act as a critical factor on program evaluation. Project ELLA used multiple standardized assessments to establish a comprehensive picture of the progress of students and the effectiveness of the curriculum: Woodcock Language Proficiency Battery-Revised (Woodcock, 1991) and DIBELS. In addition, Project ELLA used performance assessments (e.g., group presentations and portfolios) to help teachers immediately evaluate students' learning outcomes, learning skills, and aptitudes.

The purpose of using standardized assessments in SEI programs of Project ELLA was to help evaluate the effectiveness of curriculum, instructional practices, and students' learning performance. The results of assessments help school principals and program coordinators with curriculum decisions, help teachers with instructional decisions, and help students with educational decisions.

Five main reasons for performance assessments used in SEI programs of Project ELLA were: (a) to evaluate if students are reaching the program's goals and the teachers' expectations; (b) to have teachers and schools more clearly elaborate students' learning achievement; (c) to promote and improve students' learning skills and abilities;

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(d) to have curriculum, teaching, and evaluation reach a harmonious level; and (e) to better the curriculum itself and improve the teachers' instruction. The format of a performance assessment should follow the format of written assignments and oral presentations.

There were five main characteristics of performance assessments implemented in SEI programs of Project ELLA: (a) performance assessment required students to use higher-order thinking skills and problem-solving skills; (b) performance assessment contained meaningful and challengeable tasks which help students reach course goals with ease; (c) performance assessment linked the students' learning tasks with their daily life experiences; (d) performance assessment focused on students' learning processes and products; and (e) performance assessment maintained clear grading criteria and standards.

Professional development. In Project ELLA, all teachers were required to receive an average of 48 hours of professional development courses per school year and attend several workshop-style training sessions. These courses and training sessions were provided primarily by well-trained certified specialists within the district or in universities. These courses and sessions enhanced the teachers' professional development regarding language curriculum building, integrated language instructional practice, and class evaluation.

Project ELLA also emphasized five key teaching behaviors: (a) lesson clarity - the clear explanation of contents; (b) instructional variety - the varied ways of delivering the instruction; (c) teacher task orientation - the time the teacher spends on every

activity; (d) engagement in the learning process - students' contribution to their learning; and (e) student success rate - the level of students' learning outcome related to teachers' expectations. These behaviors helped the teacher's instruction become more systematic and focused. Additionally, with these five key teaching behaviors the students could understand content knowledge more effectively. As such, their learning outcomes could be more consistent with the course goals and objectives.

Taiwan's English Language Planning and Education Policy

Before 2014, by law, students in Taiwan were required to complete their middle school education; since 2014, nine years of required education have been extended to twelve years, so all Taiwanese students are now required to complete their high school education. In 2005, to accommodate the government's English language planning and education policy, Taiwan expanded English as a foreign language learning to all students in third grade through high school. According to Taiwan National Academy for Educational Research (2014), the curriculum consists of three main core competencies (autonomy; communication; and society involvement). Under the core of autonomy, students are expected to have a positive learning attitude, problem-solving ability, and organizing ability. Under the core of communication, students are expected to have verbal and non-verbal communication abilities, media literacy, and aesthetic literacy. Under the core of society involvement, students are expected to have better civic consciousness, interpersonal relationships and communications, and multicultural and global visions.

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According to Taiwan National Academy for Educational Research (2014), the goals of elementary, middle, and high school education are four-fold: (a) to develop students' English communication skills; (b) to strengthen their English learning interests and motivation; (c) to enrich students' global view; and (d) to enhance their nation's economic growth. The grades one through nine curriculum for English education emphasizes students' basic interpersonal communication skills development in the four language skills; grades ten through twelve curriculum emphasizes students' cognitive academic language proficiency development. Students should understand 300 words by the end of grade six, 1,200 words by the end of grade nine, and 4,500 words by the end of grade twelve (Taiwan National Academy for Educational Research, 2014). By the end of grade six, students should be able to introduce themselves by using simple sentence structures (e.g., I am a student. I like watching tennis. I can play piano.); they should be able to read picture books with repetitive text. By the end of grade nine students should be able to express their needs and feelings (e.g., I am hungry now. Where is the grocery store?), and should be able to respond to people's questions with one or two simple sentences (e.g., You will see a 7-11 store on your right hand side.). In addition, they should be able to read short English passages (e.g., travel itineraries, invitation letters, and forms). By the end of grade twelve, students should be able to describe a situation by using sentences that are more comprehensive (e.g., Last night my family and I went to a restaurant serving great seafood. We enjoyed having a nice conversation with the chef who won the biennial Bocuse d'Or culinary competition.). These students should

also be able to read short passages containing 300 to 350 words. Additionally, they should be able to write an English letter and a short passage containing 120-150 words.

In 1999, the General English Proficiency Test (GEPT) was developed by the Language Training and Testing Center (LTTC) supported by Taiwan's Minister of Education. The GEPT is a criterion-referenced test and has five levels: elementary, intermediate, higher-intermediate, advanced, and superior. The test of each level is aligned with the grade one through twelve curriculum standards. English linguistic competency of grade nine students should be at GEPT elementary level (2,263 words); grade twelve should be at GEPT intermediate level (4,947 words); a college graduate whose major is not English literature should be at GEPT higher-intermediate level (approximately 8,000 words); a college graduate whose major is English literature should be at GEPT advanced level (approximately 12,000 words); and people who pass superior level will be considered to have native-like English proficiency (Aziez, 2011; Wu, 2012).

How to Adapt the Project ELLA Curriculum to English Classrooms in Taiwan

To implement SEI programs of Project ELLA in Taiwan, the program curriculum needs to be revised to align with Taiwan English curriculum standards. Every lesson from the revised curriculum needs to ensure that Taiwanese students' linguistic competence and reading performance will be enhanced; moreover, Taiwanese students will achieve elementary level of GEPT at the end of grade nine and intermediate level at grade twelve. To successfully implement English lessons, instructional practices in content area should pay attention to three areas: (a) vocabulary development; (b)

evidence-based instructional strategies for assisting students with their reading

performance; and (c) various assessments.

Vocabulary Development

Word knowledge is essential to reading performance. Aaron, Joshi, and

Quatroche (2008) suggested that in the process of learning to read, a novice reader

converts graphemes in a word into the corresponding sound (i.e., phoneme awareness).

An expert reader will have phonological awareness and will directly access the meaning

of words. However, to comprehend a sentence, readers must store all the sentence words

in their working memory (Aaron, Joshi, & Quatroche, 2008). Project ELLA suggests

that bilingual/ESL teachers should adopt an interactive model to guide a skilled reader to

read. For a struggling reader, teachers should adopt a bottom-up model to develop their

phoneme and grapheme awareness; if teachers adopt a top-down model, they need to

instruct the meaning of target words in the contents.

Bottom-up model. Bottom-up model emphasizes students' linguistic skills (e.g.,

phoneme and grapheme). Students should acquire these skills to help them understand

what they read (Barchers, 1998). According to Lerner (2003), students who lack the

basic skills barely acquire reading performance. In other words, these skills are

prerequisite skills for helping students comprehend the content knowledge. Project

ELLA suggests that English teachers in Taiwan adopt an explicit teaching of vocabulary

approach (e.g., phonics approach, sight words method, and sentence-pattern method) to

help grades three, four, five and six students develop and enhance their phoneme and

grapheme awareness. Teaching procedure is suggested as follows: letter understanding,

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word understanding, sentence understanding, passage understanding and content knowledge understanding. An example of a lesson plan designed for Taiwan elementary school teachers to use is provided (see Appendix A). This lesson plan is aligned with Taiwan's English Curriculum Standards.

Top-down model. Top-down model emphasizes students' background knowledge (e.g., learned vocabulary and related experience about new knowledge). In a top-down model lesson, Project ELLA suggested that bilingual/ESL teachers guide their students in understanding new or unknown vocabulary by using background knowledge. The vocabulary instruction should be more implicit. Project ELLA suggested that English teachers in Taiwan use three encoding approaches (i.e., orthographic, phonological, and dual) to assist grade seven, eight and nine students with vocabulary learning. Orthographic approach uses visual cues while phonological approach uses auditory cues. Dual approach uses both visual and auditory cues. The suggested teaching procedure will be: background knowledge activation, passage understanding, and content knowledge understanding. An example of a lesson plan designed for Taiwan middle school teachers to use is provided (see Appendix B). This lesson plan is aligned with Taiwan's English Curriculum Standards.

Interactive model. Interactive model emphasizes the reciprocal use of bottom-up and top-down models. Project ELLA suggested that when bilingual/ESL teachers adopt an interactive model in their lesson, they should plan to give vocabulary instruction or enhance students' phonological and grapheme awareness if necessary. A suggested teaching procedure using an interactive model for English teachers in Taiwan

will be: background knowledge activation, passage understanding, content knowledge understanding, and explicit vocabulary instruction. An example of a lesson plan designed for Taiwan high school teachers to use is provided (see Appendix C). This lesson plan is aligned with Taiwan's English Curriculum Standards.

These suggested lesson plans are designed based on the framework of Understanding by Design (UbD) developed by Wiggins and McTighe in 1998. The aims of UbD are to improve and enhance student achievement on content areas. UbD is different from traditional educational lesson design. UbD stresses a three-stage backward design process. Wiggins and McTighe (2005) argued that the process focuses on not only hands-on activities but also students' mind-on processes. The three-stage process tends to engage students in constructive and metacognitive learning with clear purposes and explicit performance goals. In a class developed with the framework of UbD, students will be receiving more chances to do explanation, interpretation, application, perspectives, empathy, and self-knowledge (Wiggins & McTighe, 2005). These six facets help teachers reveal how much students comprehend their understanding of knowledge.

Evidence-based Instructional Strategies

Project ELLA suggested that bilingual/ESL teachers should act as a moderator to guide students in comprehending content knowledge by using evidence-based instructional strategies (e.g., graphic organizers, scaffolding, interactive read aloud, and leveled questions). With empirical data support, these instructional strategies have been proven effective on English linguistic competency and reading performance. Project

ELLA also suggested that bilingual/ESL teachers use multiple evidence-based ESL instructional strategies in a lesson, instead of one strategy. Using multiple strategies can keep students focused on their learning and help them with constructing and comprehending concept knowledge. Following are suggested evidence-based instructional strategies (i.e., graphic organizers, scaffolding, interactive read aloud, and leveled questions) used in Project ELLA; I suggest English teachers in Taiwan could use these strategies to help students better comprehend concept knowledge.

Graphic Organizers. Graphic organizers (e.g., Story Map, KWL, Definition Map, and Picture Map) act as a teaching strategy to visually organize information for students. The goal of this strategy is to help the students meaningfully and systematically understand text concepts and link fragments of information together. Project ELLA suggested teachers use graphic organizers to visualize concept knowledge.

Scaffolding. Scaffolding acts as a teaching strategy to use students' prior knowledge to facilitate their learning of a new concept. Project ELLA suggested teachers use a variety of scaffolding strategies that consisted of: modeling academic language; supporting academic language using visuals, gestures, and demonstrations; and assisting students in the use of academic language through interactive learning activities. Teachers are encouraged to use visuals, such as photographs and drawings, to allow ELLs to connect words or contents to images being displayed. The examples of scaffolding activities are shown in lesson plans (see Appendixes A, B, and C).

Interactive Read Aloud. Interactive read aloud is a strategy for enabling students to better understand reading contents through questions initiated by teachers. To

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provide meaningful and interactive questions, Project ELLA suggested that teachers use

PEER and CROWD, two methods of questioning prompts. PEER and CROWD were

developed by Whitehurst and associates in 1988. Using PEER and CROWD in class,

English learners' language skills and competence would be enhanced (Tsybina & Eriks-

Brophy, 2010). PEER is more like the skills of dialogic reading and stands for Prompt,

Evaluate, Expand, and Repeat. When teachers use the PEER skills in dialogic reading,

teachers firstly address some questions to 'prompt' the students to say some things about

the story. 'Evaluations' are made after their replies. Changing sentences and adding

words into the sentences will 'expand' the students' replies. Finally, the teachers should

encourage the child to 'repeat' the sentences to ensure that they understand the story. As

a way for teachers to engage ELLs in the reading process, teachers are suggested to use

CROWD to initiate different types of questions. CROWD stands for: Completion,

Recall, Open-ended, Wh-, and Distancing questions. It is believed that the question

prompts in both PEER and CROWD can provide ELLs with more opportunities to

participate actively in their reading and to be better storytellers.

PEER represents four basic techniques of dialogic reading:

1. Prompt: reminding the students to identify items in the book and prompting

them to talk more about the book.

2. Evaluate: statements that praise correct answers or that correct students'

incorrect responses. In this way students' replies are evaluated by their teachers.

3. Expand: repeating what the child says and providing additional information. Students' replies can be expanded by changing sentences, or adding words to the sentences.

4. Repeat: encouraging the students to repeat their responses.

CROWD consists of five speaking techniques, which can prompt a student's oral and written vocabulary development as well as speech and reading development:

1. Completion prompts: fill-in-the-blank questions. Teachers should leave a blank for the children or the students to complete the sentence. Here is an example: When it rains we use our _____.

2. Recall prompts: questions about the story. Teachers should ask questions to help the students recall details from the story. These questions can be used at any time during the story. Here is an example: Where did Lucy stay when it rained?

3. Open-ended prompts: statements that prompt the students to talk about the story. Most importantly, open-ended prompts encourage the students to use their own sentences to reply to the story questions. When utilizing this prompt, teachers should use various questions to guide the students to answer. Here are examples: It's your turn to tell me what's happening on this page. Look at Father Bear, how does he feel?

4. Wh- prompts: what, where, when, why and how questions. Here is an example: What are Father Bear, Mother Bear and Little Bear doing in the forest?

5. Distancing prompts: questions that ask the students to link events in the book to their own life experiences. Here are examples: Have you ever gotten lost on the street? What would you do if this happened to you?

Leveled Questions. Leveled questions act as a teaching strategy to enhance students' reading performance. As a guideline, Bloom's Taxonomy is adopted to develop six levels of questions: knowledge, comprehension, application, analysis, synthesis, and evaluation. When using leveled questions, teachers should identify students' cognitive and linguistic levels. Then, students can understand the questions. When asking the questions, teachers may use gestures, visuals, or slowing their speech while asking questions. The examples of leveled questions are shown in lesson plans (see Appendixes A, B, and C).

Various Assessments

Bilingual/ESL teachers often use paper-and-pencil standardized assessments to evaluate bilingual/ESL students' English reading performance and linguistic competence, because they are the easiest, most objective and most time-saving assessments. English teachers in Taiwan are suggested to use standardized assessments such as GEPT and Woodcock-Muñoz Language Survey Revised to evaluate Taiwanese students' English reading performance and linguistic competence.

In addition to the use of standardized assessment, per Project ELLA recommendations I suggest that English teachers in Taiwan should use performance assessments (e.g., portfolio) in their students' learning process. Project ELLA recommended that prior to using performance assessment in class, teachers need to fully understand the purpose, the standard and the process of the performance assessments they would like to use. Performance assessments do not give students a grade indicating their achievement at school, but instead provide the students with information about their

learning process. Based on the results of students' performance assessments, teachers can determine how best to adjust curriculum and deliver knowledge. As noted, performance assessment takes interaction between teachers and students into consideration. Performance assessments indeed benefit curriculum, teaching, learning, and evaluation.

To implement portfolio assessment in Taiwan, per Project ELLA recommendations I strongly suggest that teachers are urged to maintain a reciprocal communication with students. Such communications provide students with a supportive relationship that should enhance their learning (Hughes & Kwok, 2007). In addition, the teachers should instruct their students how to organize the documents needed in student portfolios. To increase the validity and reliability of portfolio assessments, teachers should review student portfolios more frequently (Chen and Martin, 2000; Khaliq, 2004); therefore, Project ELLA recommended that teachers evaluate students' work monthly.

Suggested Professional Development

Project ELLA suggested that, to implement SEI programs, schools should provide a 48-hour professional development synchronous online or blended training course for bilingual/ESL teachers. To implement SEI programs in Taiwan, three main activities should be included in the course: curriculum implementation activity; instruction activity; and a combined curriculum and instruction activity.

Under the curriculum activity, Language Curriculum Development will be the main focus. Program coordinators should provide an introductory overview of the

different phases and strategies involved in developing and implementing a sound, rational, and effective SEI program. In this activity, the coordinators should ensure that teachers will be able to: (a) plan and develop a language course with a well-planned curriculum and syllabi; (b) establish goals and objectives for a language course in which learners' age and language proficiency differences are strongly taken into account; (c) find optimal instructional strategies for enhancing, guiding and stimulating learning; and (d) create effective language learning environments.

Under the instruction activity, Integrative Language Teaching will be the main focus. This activity will help teachers identify the difference between using a segregated skills approach and an integrated skills approach in a foreign language classroom. This activity will be done in a communicative language learning context introducing both content-based instruction and task-based instruction. In this activity, the teachers will be able to: (a) demonstrate their understanding of the pedagogical and linguistic concepts involved in the course; (b) demonstrate various ways of integrating language skills in the classroom; (c) choose and adapt instructional materials that promote the integrated teaching of language skills; and (d) design an appropriate lesson by integrating the four language skills.

Under the curriculum and instruction activity, Approaches to Language Teaching and Learning will be the main focus. This activity provides an introduction to the language teaching methods and approaches. Topics covered include educational theories, teaching techniques and principles based on the communicative, cognitive, affective-humanistic, and the comprehension approaches. In this activity, the teachers will be able

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to: (a) identify the key principles of different language teaching methods and techniques; (b) understand and demonstrate clearly the various teaching approaches and evaluate their strengths and weaknesses; and (c) get familiar with the current language teaching situation in the US and Taiwan.

Conclusion

The goals of this study were two-fold: (a) to discuss the SEI programs of Project ELLA and its curriculum when implemented in an ESL environment; and (b) to present how the curriculum can be modified and used by English teachers in Taiwan. Project ELLA emphasized that quality SEI programs should consist of systematic curriculum, evidence-based instructional practices, and accountability. To implement the programs in Taiwan, an EFL learning environment, the curriculum should be revised to align with Taiwan's English Language Planning and Education Policy. To help students effectively acquire content knowledge and enhance linguistic competence, teachers are strongly suggested to use evidence-based instructional strategies. To make sure of the program's accountability, teachers are strongly suggested to use standardized assessments to effectively understand their students' overall learning achievement; moreover, schools can make crucial decisions about how to modify the school curriculum and create remedial programs for students with low test scores. To fully understand how students achieve academically and what effort they put into their work, English teachers in Taiwan are suggested to use performance assessments. Moreover, to enhance teachers' professional knowledge and skills in EFL curriculum planning and instructing and to

strengthen their commitment to quality English language education, professional

development must be provided.

CHAPTER V

SUMMARY

My dissertation consists of three studies. These three studies: (a) review the effectiveness of reading with ELLs on their reading performance; (b) discuss the effects of four instructional strategies on ELLs' reading performance in ESL learning environments; and (c) present suggestions on how the curriculum and instruction of Project ELLA structured English immersion programs should be modified and used by EFL teachers in Taiwan.

In study one, I employed a meta-analysis to evaluate the effects of reading with ELLs on their reading performance. More specifically, this meta-analysis included experimental and quasi-experimental studies of reading interventions for ELLs when coupled with an instructional strategy (graphic organizers, scaffolding, interactive read aloud, and leveled questions). Moreover, moderator analyses on five factors were conducted: ESL/EFL strategy; grade level; intervention duration; ESL/EFL environment; and sample size. These moderator analyses helped explain the variability among effect sizes. After an extensive search of previous articles, I identified 23 studies that met our selection criteria, with a total of 2,191 participants. Among these studies, mean effect sizes varied from small to large depending on which instructional strategies they focused on. These studies were associated with increased reading performance across varied grade levels, methodological features, and settings. The overall findings revealed the beneficial effects of these four instructional strategies on ELLs'

performance in reading. These findings further indicated that when ELLs receive reading intervention utilizing instructional strategies, their reading performance should improve.

In study two, I employed a multilevel path analysis using structural equation modeling to evaluate the effects of ESL instructional strategies on third grade ELLs' reading performance. The purpose of this study was to examine if teachers' frequency of using four different instructional strategies (graphic organizers, scaffolding, interactive read aloud, and leveled questions) moderates the relationship of ELLs' reading performance between their pretest and posttest. Thirty-six teachers and 386 third grade ELLs were recruited for this study. The overall findings revealed that the teachers' increased frequency of using each of the four instructional strategies could assist ELLs with better enhancing their reading performance. The findings further indicated that ELLs' reading performance should improve if their teachers used the four strategies simultaneously and increase their frequency of use.

Study three was a policy case study, focusing on how to adapt the curriculum of structured English immersion programs of Project ELLA in Taiwan, where English is taught as a foreign language. Project ELLA emphasized that English language skills should be acquired through content area instruction, but only when instruction was structurally designed and embedded with evidence-based instructional strategies. This study concluded that curriculum should be thought of as "doing the right thing" and instruction should be thought of as "doing the thing right." Curriculum by definition is a plan concerned with the purpose and content of what is to be taught and learned; instruction is defined as the process of teaching, delivering the curriculum, and

providing a learning environment for students. The curriculum anticipates the results of instruction.

In conclusion, these three studies strengthen the educational belief that the use of multiple instructional strategies is a key factor in predicting successful reading performance. To enhance ELLs' performance in reading, teachers are strongly suggested to adopt multiple instructional strategies. When using these strategies, teachers should pay special attention to the frequency of use. A more frequent use of multiple instructional strategies should help improve ELLs' reading performance.

In summary, I would like to share two things that I have learned in the process of writing the dissertation. First, I learned "The attitude within is more important than the circumstances without." Second, I learned "Teachers who love teaching, teach children to love learning." This dissertation also enhanced my teaching and learning philosophy. Student-centered learning and self-directed learning are important in every classroom as they incorporate a humanist learning philosophy. I encourage teachers of ELLs to give their ELLs a great deal of responsibility for learning on their own. I strongly believe that students should be actively involved in their own learning, not simply passive recipients of knowledge. The role of the teachers should be to facilitate and guide students' learning rather than to simply direct it. If the teachers will immerse their ELLs in student-centered classrooms, the ELLs will be more flexible in knowledge attainment and therefore will have more opportunity to develop their potential from within.

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APPENDIX A

Suggested Lesson Plan for Elementary School Students (Bottom-up Model)

Stage 1 - Desired Results
Established Goals:
➢ Students will know the meaning of six animals; and
➢ Students will identify the CVCe phonetic pattern.

Understandings: Students will understand…	Essential Questions:
1. the meaning of six different animals is.	1-1 (Knowledge) What is "panda" in Mandarin?
2. how to specifically describe what animals have on their hands.	2-1 (Knowledge) Who does Mr. Panda talk to?
	2-2 (Comprehension) Can you describe the color of doughnut the panda has?
3. how to pronounce a word with a CVCe phonetic pattern.	3-1 (Knowledge) How do you pronounce the vowel with consonants before and after a vowel plus 'e' at the end?
	3-2 (Application) How do you pronounce "whale" and "note"?
	3-3 (Analysis) What is the structure of "take"?
Students will know…	Students will be able to . . .
➢ A vocabulary of animal words.	➢ Memorize and correctly read the words.
➢ CVCe phonetic pattern.	➢ Use the target sentence "What do you see? I see a/an _____."
➢ A polite way to talk with people.	➢ Pronounce CVCe words (e.g., note and whale).
	➢ Use the word "please" for any request they make.

Stage 2 - Assessment Evidence
Performance Tasks:	Other Evidence:

Performance Tasks:	Other Evidence:
➢ Worksheet	➢ Oral responses to given questions.
➢ Be able to recognize and read the words in the Hopscotch game.	➢ Oral and written responses in group discussions.
➢ Discuss provided questions with your group members and present your group's answers in front of the class.	➢ Explanation of peers' questions in their presentations.
	➢ Homework: a response journal.

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Stage 3 - Learning Plan			
Time	Teacher's (T) Teaching Steps	Students' (Ss) Responses	Materials/Aids
5 min	**1. Warm-up activity** **a.** Review a vocabulary of color words taught last week. **b.** Ask Ss to read every word (letter and word) aloud and match the word with its corresponding color.	**a.** Listen and watch. **b.** Read letters and words, and match words with correct colors.	**1.** Word cards **2.** Picture cards
10 mins	**2. Present new vocabulary** Vocabulary: **panda skunk penguin lemur whale ostrich** **a.** Show the flash cards to Ss and pronounce each vocabulary twice. **b.** Use gestures to teach the vocabulary. **c.** Review all vocabulary with gestures.	**a.** Listen and watch. **b.** Listen and repeat. **c.** Read words and do actions.	**1.** Word cards **2.** Picture cards

17 mins	**3. Present the marker sentences (MS) with new vocabulary**
	a. Stick the MS on the white board.
	b. Put the eyes card under one of the vocabulary.
	➢ panda skunk penguin lemur whale ostrich
	c. Say the MS with an action and ask students to repeat.
	➢ I see <u>panda</u>. It has a <u>pink</u> doughnut on its hands.
	d. Put flash cards into the MS and ask to repeat.
	➢ A: I see a <u>skunk</u>. It has a <u>pink</u> doughnut on its hands.
	e. Ask one student to ask questions and other students to answer the questions.
	➢ Q: What animal do you see?
	   A: I see a <u>(skunk)</u>.
	   Q: What does it have on its hands?
	   A: It has a <u>pink</u> doughnut.
		a. Watch.
		b. Listen and watch.
		
		c. & d. Listen, read, and repeat.
		
		e. Listen, ask questions, and answer questions.
			1. Word cards
			2. Picture cards
			3. Sentence cards

8 mins	**4. Do the worksheet** **a.** Stick the worksheet on the whiteboard and explain how to do it. **b.** Give the worksheet to Ss. **c.** Ask Ss to match the correct words with the pictures. **d.** Choose some students to match the words with pictures on the whiteboard.	**a. & b**. Listen and watch. **c.** Complete the worksheet. **d.** Match the words with pictures.	**1.** Word cards **2.** Picture cards **3.** Sentence cards **4.** Worksheets
	Break Time		
3 mins	**5. Review the vocabulary and MS** **a.** Show flash cards one by one and stick them on the board. **b.** Stick the MS on the board. **c.** Put flash cards into the MS.	**a.** Read and say the words. **b.** Watch. **c.** Read and say the sentences.	**1.** Flash cards **2.** Word cards **3.** Sentence cards
12 mins	**6. Hopscotch** **a.** Put a board with pictures covered by a cloth at the back of the classroom. **b.** Put words/pictures on the board and some words/pictures into some squares of each team on the floor. **c.** One player from each team needs to unfold a cloth and then play hopscotch. **d.** Playing hopscotch, he/she needs to speak aloud words/pictures on which he/she steps. **e.** The player who finishes playing hopscotch first needs write down the word on the whiteboard according to what they see under the cloth. **f.** Have all students ask the player "what animal do you see?" **g.** The player needs to use the MS, "I see a ____. It has a ____ doughnut on its hands." to response.	**a. & b.** Watch. **c. & d.** Unfold a cloth and play hopscotch. **e.** Read and write. **f.** Ask the player the question. **g.** Response by using the MS with the information on the lot.	**1.** Flash cards **2.** Word cards **3.** Sentence cards

| 8 mins | **7. Teach Focused Phonics.**
a. Stick a word (e.g., whale) on the board.
　　CVCe patterns:
　　a_e (whale)
　　e_e (Steve)
　　i_e (bike)
　　o_e (home)
　　u_e (cute)
b. Model the word (think aloud):
　　Teaching example:
　- Say the word "bike".
　- Point to the letter b and say /b/.
　- With two fingers, point to the letters i and e and
　　say "i here sounds like its own letter".
　- Say the word "bike" again.
c. Lead the word (ask students to repeat after you)
　　Teaching example:
　- Say the word "bike".
　- Point to the letter b and say /b/.
　- With two fingers, point to the letters i and e and
　　say "i here sounds like its own letter".
　- Say the word "bike" again.
d. Check the word (ask students to pronounce the word by themselves).
　- Show the word: tide | **a. & b.** Listen and watch.

c. Listen, watch, and repeat.

d. - Say /t/.
　- Say "*i here sounds like its own letter*".
　- Say the word "*tide*". | **1.** Word cards |
| 12 mins | **8. Read a picture book (Please, Mr. Panda) written by Steve Antony**
a. Write two questions on the board and ask students to find the answers from the contents.
　- What animals does Mr. Panda talk with?
　- What do other animals want from Mr. Panda?
　- When will he use the word "please"? | **a. & b.** Listen, watch, and respond to the questions. | **1.** Questions
2. A picture book |

	b. Start reading the book by using CROWD and PEER techniques. **c.** Ask students to describe to the group their family structure and what activity they did last weekend. **d.** Remind students that they have to use "Present Tense and Past Tense" at least twice. **e.** Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter." **f.** Give Ss 4 mins to discuss the questions. **g.** Record the answers on the whiteboard & give feedback to the Ss and the whole class. (*Reminder*: Remember to encourage students who give wrong answers to answer again.) **h.** Highlight any great response & give a conclusion to end this section.	**c. ~ e.** Listen and watch. **f.** Organize their answers. **g.** Share their answers and listen. **h.** Listen and Watch.	
5 mins	**7. Closure** **a.** Tell Ss that some of them will be chosen to share what they learn today. **b.** Pick 3-5 Ss to share what they learn today. **c.** Share T's reflection of their learning to the whole class. **d.** Ask Ss to keep a learning log in their learning journal. *Requirement*: 1. Minimum 3 sentences. 2. Two questions need to be answered: - What did you learn from today's lesson? - Other than the teacher, whom did you learn from the most? Why? 3. Deadline: Next class	**a.** Listen & watch. **b.** Report & listen. **c & d.** Listen & watch.	

APPENDIX B

Suggested Lesson Plan for Middle School Students (Top-down Model)

Stage 1 - Desired Results

Established Goals:
- ➢ Students will describe the past and current family structures in Taiwan and the United States; and
- ➢ Students will identify the similarities and differences between an American and a Taiwanese family's structure.
- ➢ (Language Aim) Students will identify the difference between present tense and past tense.

Understandings:	Essential Questions:
Students will understand that…	1-1 (Knowledge) What is the main historical reason for baby boomers?
1. Baby boomers contributed to the change of family structure.	1-2 (Knowledge) How baby boomers influenced the change of family structures and roles?
	1-3 (Comprehension) Why did people want to have more children in 1950s?
2. Whenever the family structure changed, family care changed.	2-1 (Knowledge) How does the change of parents' roles affect childcare?
	2-2 (Synthesis) If you were a parent, how would you find a balance between child care and the job?
3. Different countries have different family roles, but their values are somewhat interrelated.	3-1 (Application) How does the change in family structure influence your family roles?
	3-2 (Analysis) What is the structure of American family and Taiwanese family?
	3-3 (Evaluation) How would you defend yourself if you support the family structure of a father and a mother with no children?
Students will know . . .	Students will be able to . . .
➢ The key factors that cause demographic changes.	➢ Express their opinions and ideas regarding the issues of family structures and roles.
➢ Key-terms, such as family, parent, adult, children, couple, born, generation, young, and elder.	➢ Describe the similarities and differences of family values between the USA and Taiwan.
➢ Family roles and structures in the past and now.	➢ Use presentation skills to share their perspectives on a given topic.

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➢ The different family values for the Americans and the Taiwanese.	➢ Use analysis skills to answer questions and decision-making skills to decide what answers they are going to present to the class.

Stage 2 - Assessment Evidence	
Performance Tasks: ➢ Family Tree ➢ Description of your family structure ➢ Discuss provided questions with your group members and present your group's answers in front of the class.	Other Evidence: ➢ Oral responses to given questions. ➢ Oral and written responses in group discussions. ➢ Explanation of peers' questions in their presentations. ➢ Homework: a response journal.

Stage 3 - Learning Plan			
Time	Teacher's (T) Teaching Steps	Students' (Ss) Responses	Materials/Aids
1 min	**1. Greet the Ss** **a.** Tell Ss today's topic "Family Structures."	**a.** Watch and listen.	

9 mins	**2. Introduction**
	a. Show some pictures about a family in 1950s and 2000s.
	b. Show a semantic map to talk about pictures and family related vocabulary students have known (e.g., mother and father).
	d. Show 2-3 questions related to the clip (https://www.youtube.com/watch?v=azvdwHySVjI).
	   i. What was the role of father and mother in the family in 1950s and 2000s?
	   ii. How many siblings do your father and mother have?
	   iii. How many siblings do you have?
	   (If time is not enough, please choose two of them for Ss to discuss.)
	e. Divide Ss into six groups (5 Ss in each group).
		a ~ f. Watch and listen.	**1.** Pictures
			2. A semantic map

	f. Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter." **g.** Give Ss 2 mins to discuss the questions. **h.** Record the answer on the blackboard & give feedback to the Ss and the whole class. (*Reminder*: Remember to encourage students who give wrong answers to answer again.) **i.** Highlight great response & give a conclusion to end this section.	**g.** Discuss with their members. **h.** Report answers and listen. **i.** Watch and listen.	

23 mins	**3. Teaching The Content**
	a. Show multiple pictures about different family structures and the content map.
	b. Ask students to read the content.
	c. Explain and teach the content.
	   E.g.: What is Family Structure?
	d. Tell students they will do group discussions.
	e. Show 2-3 questions related to the content and explain how these questions are related to today's topic.
	
	  i. *What is the structure of American family and Taiwanese family?*
	  ii. *How does the family structure change influence their roles in family?*
	  iii. *How would you defend yourself if you support the family structure of a father and a mother with no children?*
	
	f. Ask Ss to discuss as a group.
	g. Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter."
	h. Give Ss 4 mins to discuss the questions.
	i. Record the answers on the whiteboard & give feedback to the Ss and the whole class.
		a. Listen and watch.
		
		b. Read the content.
		c. Take notes about what the teacher says.
		d~g. Watch and listen.
		
		h. Discuss with their members.
		i. Report answers and listen.
			1. Questions
			2. Pictures
			3. A video clip

	(*Reminder*: Remember to encourage students who give wrong answers to answer again.)		
	j. Highlight great response and give a conclusion to end this section.	**j.** Watch and listen.	
	k. Explain the "Present Tense and Past Tense".	**k.** Watch and Listen.	
	l. Provide Ss with pictures and a timeline, and have them describe the pictures by using "Present Tense and Past Tense".	**l.** Practice.	
12 mins	**4. Vocabulary Worksheet**		**1.** Worksheets
	a. Project the target words on the board and explain the reason why the words need to be learned.	**a. & b.** Listen and watch.	
	b. Use a magnified worksheet to explain how to complete the worksheet.		
	c. Ask Ss to listen as T reads words.	**c.** Listen and watch.	
	d. Ask Ss to lead the class in reading the words aloud.	**d.** Say the words aloud.	
	e. Distribute vocabulary worksheets and ask students to look for the meaning of a work from the reading content and the semantic map. (3 minutes to finish the worksheet)	**e.** Match the word with its definition.	
	f. Pair Ss up and ask them to check each other's answer.	**f.** Check each other's answer.	
	g. Show the correct answer and pair up to check their answer.	**g.** Listen and watch.	
	Break Time		
15 mins	**5. Making a Family Tree**		**1.** Two examples of a family tree
	a. Give two examples of a family map to each student. (2 minutes)	**a.** Listen and watch.	
	b. Ask each student to make his/her own family tree. (8 minutes)	**b.** Make a family tree.	
	c. Ask each group to present their family tree. (5 minutes)	**c.** Present a family tree.	
20 mins	**6. Storybook Reading: Who's in My Family written by Robbie H. Harris**		**1.** A story book **2.** Questions
	a. Write two questions on the board and ask students to find the answers from the book.	**a. & b.** Listen, watch, and respond to the questions.	

	- How many people are there in your family? **-** Do you have breakfast every morning? **b.** Start reading the book by using CROWD and PEER techniques. **c.** Ask students to describe their family structure and what activity they did last weekend with their group. **d.** Remind students that they have to use "Present Tense and Past Tense" at least twice. **e.** Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter." **f.** Give Ss 4 mins to discuss the questions. **g.** Record the answers on the whiteboard & give feedback to the Ss and the whole class. (*Reminder*: Remember to encourage students who give wrong answers to answer again.) **h.** Highlight great response & give a conclusion to end this section.	**c. ~ e.** Listen and watch. **f.** Organize their answers. **g.** Share their answers and listen. **h.** Listen and Watch.	

10 mins	**7. Closure**
	a. Tell Ss that some of them will be chosen to share what they learn today.
	b. Pick 3-5 Ss to share what they learn today.
	c. Share T's reflection of their learning to the whole class.
	d. Ask Ss to keep a learning log in your learning journal.
	Requirement:
	1. Minimum 50 words.
	2. Three questions need to be answered:
	   - What did you learn from today's lesson?
	   - How did you perform in today's lesson?
	   - What can you do to perform better next time?
		a. Listen & watch.
		
		b. Report & listen.
		
		c. & d. Listen & watch.	

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	3. Use "Present Tense and Past Tense" at least twice. 4. Deadline: Next class		

Suggested Lesson Plan for High School Students (Interactive Model)

Stage 1 - Desired Results	
Established Goals: ➢ Students will describe how phone apps can be embedded into health care to help track results; ➢ Students will describe functions and features of any healthcare apps; ➢ Students will compose a letter to request information or clarification; and ➢ (Language Aim) Students will use present tense with the use of causative verbs when describing phone apps.	
Understandings: Students will understand that… 1. Phone technology changes humans' living styles. 2. CareKit helps doctors track their patients' health conditions.	Essential Questions: 1-1 (Knowledge) What were your living styles before you used phone technology? 1-2 (Comprehension) Why did people start using phone technology? 1-3 (Synthesis) How could you expand the phone technology to your current living style? 2-1 (Analysis) What motives does a doctor have for inventing CareKit? 2-2 (Synthesis) What might happen to your health conditions if you use CareKit? 2-3 (Evaluation) How would you decide to use CareKit if your doctor recommends it?
Students will know . . . ➢ Key functions and features of CareKit and other healthcare apps. ➢ A formal way to introduce phone apps. ➢ A formal way to compose an English letter ➢ Key terms, such as medical, disease, condition, demonstrate, and monitor. ➢ Family roles and structures in the past and now. ➢ The different family values for the Americans and the Taiwanese.	Students will be able to . . . ➢ Express their opinions and ideas regarding the healthcare apps. ➢ Introduce the function and features of any phone apps by using a concept map. ➢ Compose a formal English letter to request information and clarification. ➢ recognize the words with suffix "-able" and "-less" ➢ Use simple present tense with causative verbs.

Stage 2 - Assessment Evidence	
Performance Tasks: ➢ A Concept Map. ➢ English Letter Writing. ➢ Discuss provided questions with your group members and present your group's answers in front of the class.	Other Evidence: ➢ Oral responses to given questions. ➢ Oral and written responses in group discussions. ➢ Explanation of peers' questions in their presentations. ➢ Homework: a response journal.

Stage 3 - Learning Plan			
Time	Teacher's (T) Teaching Steps	Students' (Ss) Responses	Materials/Aids
2 min	**1. Greet the Ss** **a.** Tell Ss today's topic "Health apps."	**a.** Watch and listen.	
10 mins	**2. Introduction** **a.** Show some pictures about commonly used phone healthcare apps (e.g., Health Tracker app). **b.** Show a concept map about Health Tracker app **c.** Explain the features of Health Tracker app and why the app is related to today's topic. **d.** Display a video entitled "the best fitness tracker apps". *(https://www.youtube.com/watch?v=1DbMIaR1ImI)* **e.** Show 2-3 questions related to the clip: *i. What did the YouTube video maker recommend for people to use if they do not want to wear the Fitbit but still want to stay on top of their activity goals?* *ii. What are the features of the fitness tracker app?* *iii. What are the advantages of the fitness tracker app?* (If time is not enough, please choose two of them for Ss to discuss.)	**a. ~ g.** Watch and listen.	**1.** Pictures **2.** A video clip

	f. Divide Ss into six groups (5 Ss in each group). **g.** Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter." **h.** Give Ss 2 mins to discuss the questions. **i.** Record the answer on the blackboard & give feedback to the Ss and the whole class. (*Reminder*: Remember to encourage students who give wrong answers to answer again.) **j.** Highlight great response and give a conclusion to end this section.	**h.** Discuss with their members. **i.** Report answers and listen. **j.** Watch and listen.	
13 mins	**3. Vocabulary Worksheet** **a.** Project the target words on the board and explain the reason why the words need to be learned. **b.** Use a magnified worksheet to explain how to complete the worksheet. **c.** Ask Ss to listen as T reads words. **d.** Ask one S to lead the class and read the words aloud. **e**. Distribute vocabulary worksheets and ask students to look for the meaning of a word from the reading content and the semantic map. (3 minutes to finish the worksheet). **f.** Pair Ss up and ask them to check each other's answer. **g.** Show the correct answer and pair up to check their answers.	**a. & b.** Listen and watch. **c.** Listen and watch. **d.** Say the words aloud. **e.** Match the word with its definition. **f.** Check each other's answer. **g.** Listen and watch.	**1.** Worksheets

25 mins	**4. Teaching The Content**
	a. Show the picture of the CareKit app and the concept map of the CareKit app.
	b. Ask students to read the content.
	c. Explain and teach the content.
	   E.g.: What is CareKit?
	      How does it relate to healthcare?
	d. Tell students they will do group discussions.
		a. Listen and watch.
		
		b. Read the content.
		c. Take notes about what the teacher says.
		
		d~g. Watch and listen.
			1. Questions
			2. A video clip

e. Show 2-3 questions related to the content and explain how these questions are related to today's topic.
 	
    i. What is the purpose for Apple to develop CareKit?
    ii. If you were a doctor, would you introduce it to your patients? Please explain<u>!</u>
    iii. If you were a developer of CareKit, how would you make it easier to use for the people who are not technology users?
    iv. As to healthcare equipment, we care more about its accuracy and precision. How would a developer make sure the results of CareKit are accurate and precise?
    (If time is not enough, please choose two of them for Ss to discuss.)
 	
f. Ask Ss to discuss as a group.
g. Remind Ss of "taskmaster; recorder; timekeeper; checker; reporter."
h. Give Ss 4 mins to discuss the questions.
i. Record the answers on the whiteboard & give feedback to the Ss and the whole class.
(*Reminder*: Remember to encourage students who give wrong answers to answer again.)
j. Highlight great response and give a conclusion to end this section.
k. Explain the "Causative Verb".
l. Provide Ss with pictures and have them describe the pictures by using "Causative Verbs".
m. Teach suffix "-able" and "-less".
  "-able":
   i. able to be (e.g., countable and usable)			

	h. Discuss with their members. **i.** Report answers and listen. **j.** Watch and listen. **k.** Watch and Listen. **l.** Practice. **m.** Watch and Listen.		

	"-less": i. not having (childless) ii. unable to be acted on or to act in a specified way (countless; dauntless; priceless)		
Break Time			
15 mins	**5. Making a Concept Map** **a.** Give two examples of a concept map to each group. **b.** Ask each group to make their own concept maps with the information they collected. (10 minutes) **c.** Ask each group to present their concept maps. (6 minutes) **d.** Announce homework: Each group needs to make a concept map about their apps by using Microsoft PowerPoint. Next week, each group needs to introduce their maps in front of the whole class.	**a.** Listen and watch. **b.** Make a concept map. **c.** Share their concept maps. **d.** Listen and watch.	**1.** Two examples of a concept map
25 mins	**6. Opinion-gap Activity: Compose a Letter** **a.** Write two questions on the board and ask students to find the answers from the video. **-** What is the purpose of the app? **-** What are the features of the app? **b.** Show a video entitled **"**Nudge: A healthcare app for type two diabetes." *(https://www.youtube.com/watch?v=YA_jV_3bbX4)* **c.** Give students 2 minutes to prepare their answers. **d.** Choose 3 students to share their answers. **e.** Tell students that they are going to write a letter to Dr. Eric Topol. **f.** Explain to students why they need to write a letter. **g.** Show them a written example of a formal letter. **h.** Introduce today's writing focus: 1. The purpose/aim/goal(s) of ____	**a. & b.** Listen and watch. **c.** Organize their answers. **d.** Share their answers and listen. **e. ~ i.** Listen and Watch	**1.** Blank letters **2.** A video clip

	is/are to ____. 2.____focus(es) on_____. **i.** Remind students that they have to use "simple present tense with the use of causative verbs" at least twice when writing a letter, as well as use "today's writing focus." **j.** Give students a blank letter. **k.** Give students 6 minutes to finish the letter. **l.** Collect the letters and tell Ss that their letters will be given back next class.	**j.** Receive a blank letter. **k.** Write a letter. **l.** Hand in their letters.	
10 mins	**7. Closure** **a.** Tell Ss that some of them will be chosen to share what they learn today. **b.** Pick 3-5 Ss to share what they learn today. **c.** Share T's reflection of their learning to the whole class. **d.** Ask Ss to keep a learning log in your learning journal. *Requirement*: 1. Minimum 150 words. 2. Two questions need to be answered: - What did you think about this lesson? - What did you learn from today's lesson? - Other than the teacher, who did you learn from the most? Why? 3. Use "Causative Verbs" at least twice. 4. Deadline: Next class	**a.** Listen and watch. **b.** Report and listen. **c. & d.** Listen and watch.	