Applying an SIOP-Based Instructional Framework for Professional Development in Korea

Kim Hyunsook Song
University of Missouri-St. Louis, USA.
<songk@umsl.edu>

Abstract

Nonnative English speaking teachers' oral proficiency and instructional strategies are the significant factors to become effective language teachers where English is not used as a daily communication medium. The study focuses on improvement of EFL teachers' instructional strategies. The main goal of the study is to develop an EFL instructional framework. The framework consists of SIOP (Sheltered instruction observation protocol) and a backward teaching and learning cycle. The backward cycle is used as a frame to implement the SIOP Model and the reflective coaching. A pilot study is conducted with the Korean teachers who have taught five lessons in order to examine effectiveness of the framework. The pre- and post-evaluation survey data, pre- and post-conference reflections, observation field notes, and five lesson plans are analyzed to see the effectiveness of the instructional framework. The survey results indicate that 26 of 30 items show greater means in the post-evaluation, and 2 items show the statistical significance in the t-test. The results from the five reflective coaching cases illustrate that both participants have reached the reflective thinking stage of experimentation, but only one has reached the evaluation stage, with a new conceptual schemata. Implications and future directions are discussed.

Introduction

Learning English as a foreign language or as an alternative language (Warschauer, 2000; Yoon, 2008) is crucial in many countries, as the world has become more globalized. Multicultural countries like India, Malaysia, Nigeria, and the Philippines use English either as an alternative or a second language in their daily lives along with their own native languages (Warschauer, 2000). In some countries, English is not used as a communication medium in daily life, yet learning English is linked to academic and career success. South Korea is one of these countries (Choi, 2008). The primary reason for this English learning enthusiasm in South Korea (here after Korea) is access to the leading universities and companies where English is an examination requirement. Because of this requirement, average Korean parents with school-age children spend

close to 25% of their income on tutors and supplementary educational materials (Robertson, 2002).

Korean students' communication capability, given the amount of money and the number of hours spent on English education, is far from that of a native speaker (Choi, 2008). From 1955 until 2001, there were seven English curriculum policy reforms in Korea. Through these seven reforms, the government focused on two goals: 1) developing students' integrated communicative proficiency, and 2) adopting successful language acquisition strategies (Chang & Lee, 2001; Ministry of Education & Human Resources Development, 2001). However, implementing these policies has not been successful. Korean English education still focuses on raising college entrance examination scores (Choi, 2008; Li, 1998). Thus, a majority of the students who have obtained perfect scores on English examinations are found to be deficient in demonstrating communicative skills (Choi, 2008). The main reasons why Korean students fail to acquire English proficiency include an examination-oriented curriculum, teachers' poor command of English, the lack of communicative teaching strategies, large class sizes, and a lack of content resources relevant to students' lives (Dash, 2003; Li, 1998; Butler, 2004; Park, 2007). Two of these reasons, the lack of communicative teaching strategies and the lack of relevant content resources, are especially relevant to developing effective instructional strategies (Cho & Brutt-Griffler, 2015; Vasilopoulos, 2008).

Review of Literature

Two main professional development tools are reviewed for the instructional framework: (1) a backward four-step teaching and learning cycle, and (2) sheltered instruction observation protocol (SIOP) with coaching cycles.

Backward Four-Step Teaching and Learning Cycle

Based upon Sunal and Sunal's (2003) three-step learning cycle and Wiggins and McTighe's (2001) backward instructional design, Song (2008) developed a four-step teaching and learning cycle as an effective instructional tool, showing significant results with preservice teachers. The result of this study illustrated that when the preservice teachers used the teaching and learning cycle in their lesson preparation and implementation, their students demonstrated higher achievement results (Song, 2008).

The concept of Wiggins and McTighe's (2001) "backward" instructional design was adopted to align the desired results and assessment to the objectives before the instructional presentation was developed. However, the Songs' backward design included no step for extended reflection on assessment results or future lessons, which was needed to close the teaching and learning cycle. In Sunal and Sunal's (2003) learning cycle, terms such as "exploration," "development," and "expansion" were adopted for this teaching and learning cycle. In Sunal and Sunal's learning cycle, however, a "backward" assessment concept was missing. In their learning cycle, the assessment step was blended into the development stage, but it did not specify the importance of the assessment developed before the instruction (Song, 2008). In Song's (2008) study, participants included 37 senior teacher education students. This study aimed to explore if a backward teaching and learning cycle developed for this study had impact on participants' teaching and learning. The students in social studies in 2005 and

2006 were taught the four-step teaching and learning cycle, and they were required to develop the lessons based on this cycle when they delivered the mini-lessons in the practicum sites. The results showed that the participants were very positive about their backward assessment development. One participant described her student outcomes, which illustrated the transformation of teaching and learning:

> *All of the groups produced the brochures with all the criteria met.... [Eighteen] of 20 students (90 percent) received 100 percent on the ten-question quiz, and one student even wrote in some facts from the presentation on the bottom of the quiz. The two students who had one incorrect answer were retaught individually.*

Step 1 is called Pre-instructional Exploration. In this step, teachers diagnose their knowledge of community, school, classroom environment and students, assess students' prior academic knowledge, explore students' sociocultural backgrounds and their L1 development levels, and set challenging but achievable language and content objectives aligned with the Common Core State Standards (CCSS) (CCSS, n.d.) and/or grade-level expectations (GLEs).

Step 2 is Assessment Development. Teachers establish working hypotheses, respond to the results, and develop assessment strategies to meet the objectives in Step 1. Teachers also develop multiple assessment modes and approaches aligned with the learning objectives and the standards (e.g., objective test items, monitoring questions, and assessment scoring rubrics).

Step 3 is Instructional Presentation. Teachers strive to deliver the lessons with a variety of instructional activities, assignments, and resources to help the students engaged in active learning. The students are led to produce the expected outcomes developed in Step 2.

Step 4 is Reflective Expansion. Teachers assess student knowledge and collect assessment data. The teachers reflect on how their objectives or hypotheses are met and supported using the assessment data. Reflection helps the teachers connect the initial expectation or the objectives with the outcomes. Generalization may be constructed during this stage and tested in future contexts (Song, 2008; Sunal & Sunal, 2003; Wiggins & McTighe, 2001).

Sheltered Instruction Observation Protocol (SIOP)

After a careful review of teacher effectiveness research, such as backward design (Wiggins & McTighe, 2001), a natural approach (Krashen, 1989), and contextual and extensive reading (Cummins, 2000), the Sheltered Instruction Observation Protocol (SIOP) was developed by the three scholars, Echevarria, Vogt, and Short, to make English language and content comprehensible for English language learners (ELLs); it took three to four years to develop SIOP as a best teaching practice framework (Echevarria & Short, 2004, 2010; Echevarria, Vogt, & Short, 2004; Echevarria, Powers, & Short, 2006). SIOP guides English language teachers in modeling strategies that have proven successful in helping ELLs to increase content and language literacy skills needed for understanding content-area text. Echevarria and Short (2010) believe that SIOP provides teachers with a well-articulated practical model of instruction.

Two areas will be reviewed to understand SIOP as a best teaching practice framework for working with English language learners (ELLs). The first area to review is the SIOP, and the second area to review is the reflective coaching that contains reflective thinking development and SIOP coaching.

SIOP Model. The intent of the SIOP model is to facilitate high-quality instruction for ELLs in content areas. The model, based on current knowledge and research-based instructional practices, embeds the eight components and thirty critical features of high-quality instruction that could benefit ELLs in content-area learning. The eight components include lesson preparation, building backgrounds, comprehensible input, strategies, interaction, practice and application, lesson delivery, and review and assessment. Within each component, three to six features are embedded (Appendix).

The SIOP components and features demonstrate a number of aspects that are found in effective teaching and learning methods (Echevarria & Short, 2004, 2010; Echevarria, Vogt, & Short, 2004). Some examples include teaching to content and language objectives (SIOP Component (SC) 1, Features (F) 1 & 2), focusing on vocabulary development (SC2, F9; SC8, F27), explaining academic tasks in a clear fashion (SC2, F11), explicitly teaching learning strategies to the ELLs (SC3, F13), asking higher order questions (SC4, F15), grouping students to achieve the targeted objectives (SC5, F17), implementing hands-on activities (SC6, F20), pacing lesson delivery appropriate to students' ability levels (SC7, F26) and assessing student comprehension (SC8, F28 & 30) (See Appendix for eight SIOP components and thirty features).

The SIOP model offers a way to consolidate the features of effective instruction into one instrument, making it compatible with a variety of methods and approaches associated with current reform efforts (Echevarria, Vogt, & Short, 2004). For example, meaningful interaction between content language literacy and content area knowledge requires cognitive instructional strategies, such as scaffolding, asking questions, multiple hands-on activities, engaging lesson delivery and evidence-based backward assessment as in features of SIOP components (Echevarria, Powers, & Short, 2006).

A successful and coherent professional development needs to include the perspectives of all stakeholders, including teachers, administrators, and policy makers (Joyce, 1980; Livingston & Robertson, 2001). SIOP is a coherent professional development model, which takes into account teachers' professional needs at various stages in their careers (Collinson & Ono, 2001; Hargreaves & Fullan, 1992; Huberman, 1992). The SIOP professional development package also includes training for SIOP coaches who provide cohesive professional development coaching and shared instructional leadership to help both content and ESOL teachers improve their teaching performance.

Reflective SIOP Coaching. One-on-one coaching plays a significant role in SIOP by helping teachers improve their teaching (Song, 2014). The one-on-one coaching is conducted after each SIOP professional development workshop in order for teachers to apply what they have learned at the SIOP PD. The goal of SIOP coaching is not to evaluate teachers' teaching performance, but to facilitate and support their reflective teaching practice (Echevarria & Short, 2004).

Coaching can be understood as an intentional and conscious process between a coach and a teacher, in which exploration, critique, and reflection transform practice. This interpersonal process takes on unique shapes in each case because the coach and the teacher have different teaching philosophies (Sherris, Bauder, & Hillyard, 2007). There are four steps in the SIOP coaching protocol: 1) preliminary scheduling of the meetings, 2) pre-conference, 3) observation, and 4) post-conference/reflection (Sherris, et al., 2007).

Step 1 is preliminary scheduling of meetings. In this step, coaches and teachers reflect on the importance of arranging conferences and observations that work for both parties agreeing on a convenient time for pre/post-conferences and observations. The coaches and the teachers also identify ways to communicate, whether they meet physically, on the phone, or through e-mail.

Step 2 is pre-conference. In this step, teachers and coaches develop nonjudgmental conversation about practice (e.g., links between one lesson part and another to meet students' needs and curriculum). They decide on goals and select specific SIOP components and features for their teaching (Song & Eur, 2010). They also raise questions that engage students but may not have easy answers and develop a sense of inquiry, curiosity, and creativity. The teachers submit lesson plans that include language and content objectives and assessment strategies (e.g., backward design). They discuss the intangibles of the lesson, such as teacher feelings, teacher perceptions of classroom climate, teacher beliefs, and teacher intuition (Sherris, et al., 2007).

Step 3 is observation. The coaches observe the planned teaching from Step 2 with meaningful activities and supplementary materials, and the lesson is videotaped. The coaches may use SIOP 30 feature survey items (See Appendix for the items) to rate the teaching performance. The videotaped lesson, if used, is given to the teacher, and the teacher views the videotape and self-assesses the teaching using the same SIOP survey (Song & Eur, 2010).

Step 4 is post-conference. The coaches and teachers meet after the observation with the SIOP data (i.e., the survey data from the coach and the teacher, videotapes, and reflections). The SIOP data is used to generate conversation that focuses on the strengths and weaknesses of the teaching, such as why a particular part of a lesson is either strong or weak. The SIOP data is also used to deconstruct the underlying assumptions about teaching and learning (e.g., identify bias, scripts, frames, perspectives, habits of mind, and routines of practice), and ask if these factors are hindering or facilitating the implementation of the SIOP model. They use the conversation from their co-constructed exploration and critique to set new SIOP implementation goals. The coaches and teachers discuss whether all aspects of this conference have met the needs of both parties in order to remain trustworthy. The coaching provides conceptual language for a deep exploration of lesson design and implementation, and they discuss aspects of this new schema and identify other possible ways to organize the next lessons (Song, 2014; Gonzalez & Song, 2013; Sherris, et al., 2007; Taggart & Wilson, 2005).

The SIOP coaching process is "open, shared, conversational, and explicit" (Gonzalez & Song, 2013; Sherris, et al., 2007, p. 10). Successful SIOP coaches use a number of tools to enhance the process of professional development, including videotaping lessons and using graphic organizers to plan lessons, organizing ideas during a conference, setting the goal, and taking notes while observing a lesson. With videotapes, for instance, coaches can stimulate recall in which teachers are asked to reconstruct their thinking (Song & Catapano, 2007) about the SIOP features as they watch themselves teach. The coaches initiate follow-up e-mails to discuss the teaching behaviors based on assessment evidence such as SIOP survey data previously done by the coaches and the teachers (Song & Eur, 2010). SIOP coaching also provides conceptual language for a deep exploration of lesson design and implementation. In the SIOP coaching process, each teacher's personal teaching philosophy may not change, but an instructional philosophy that the teacher is not aware of might be brought into consciousness (Costa & Garmston, 2002).

Using the SIOP as one of the best teaching practice models with the backward teaching and learning cycle, this study focuses on adopting a cohesive instructional framework that English language teachers can utilize for their professional development to enhance their instructional strategies.

Goals and Research Questions

There are two goals in this study. The first goal is to describe the SIOP-based instructional framework for English as a Foreign Language (EFL) teachers in Korea. The second goal is to examine, through a small pilot case study, if the instructional framework works in Korean English classroom settings. Under the second goal, two research questions guide this pilot case study:

Research Question 1: Will the participating teachers have higher scores at the post-evaluation of the SIOP survey after adopting the SIOP-based framework?

Research Question 2: Will the participating teachers improve their reflective thinking skills after adopting the SIOP-based framework?

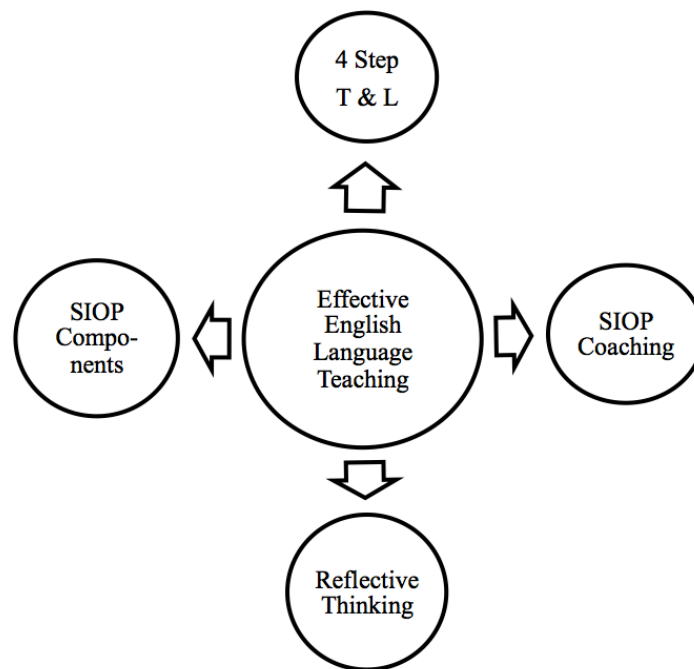### Development of Instructional Framework

The first goal of this study is to help English language teachers improve their instructional strategies using the instructional framework. The four areas of best teaching practice literature are reviewed in the literature section. In this section, the result of developing the instructional framework is shared as evidence of this goal. The four-step teaching and learning cycle is used as a step-by-step cycle in order to implement the SIOP Model. One-on-one SIOP coaching process is adopted to implement the SIOP Model. These tools will be used in a pilot case study to measure whether they improve teaching practice in EFL classrooms in Korea. In each of the four steps of the teaching and learning cycle, the SIOP components, the SIOP coaching steps, and the reflective coaching steps are incorporated (See Figure 1 and Figure 2).

In Step 1, Exploration is established when a teacher is scheduled for a pre-conference with a coach (Coaching Steps [CS] 1 & 2). In this meeting, the coach and the teachers

identify the success indicators and concerned areas the teacher has for his/her lesson (SIOP Components [SC] 1 & 2), which includes the language and the content objectives.

In Step 2, Assessment Development (SC 8), the teacher, with the help of a coach, develops multiple assessment strategies that consist of formal assessment and informal assessment. The formal assessment includes writing scoring rubrics and writing objective test items. The informal assessment includes observation logs, checklists, and individual conference notes with students and parents. Before selecting the assessment strategies, the teacher needs to make sure that all of them are aligned with the content and language objectives chosen in Step 1 and CS 2.

In Step 3, Presentation, the coach observes and videotapes the class (CS 3). This step is the highlight of the teaching and learning cycle because the teachers utilize multiple activities to actively engage the students. All of the activities are developed to meet both the language and the content objectives (SC 1) and the pre-developed assessment strategies (SC 2).

Figure 1. Instructional framework for effective academic and English language teaching

In Step 4, Reflective Expansion, the teacher implements assessment (SC 8) by using the assessment plan developed in Step 2 (SC 1 & 2, CS 2). The teacher also self-assesses the videotaped teaching performance using the SIOP survey data. At the post-conference, the teacher reflects with the coach about her/his readiness to create new schema for reframing a new problem (Sunal & Sunal, 2003). Teachers' advancement to the new schema is based on assessment data, survey results, and reflective thinking development. At this stage, if the teacher creates a new schema, he/she is ready to move back to Step 1 for new exploration (Song, 2008; Song, 2010) (See Figure 1 and 2).

Pilot Case Study

The second goal is to examine, through a small pilot case study, if the instructional framework works in English classroom settings in Korea. Within the second goal, two research questions guide this pilot case study: 1) Will the participating teachers have higher scores at the post-evaluation of the SIOP survey after adopting the SIOP-based framework? and 2) Will the participating teachers improve their reflective thinking skills after adopting the SIOP-based framework?

The reflective SIOP coaching was adopted with some modification. The modification includes the use of Korean language as a resource during the class if it helps Korean ELLs achieve the lesson objectives (i.e., SC5, Feature 19), which states "Ample opportunities are provided for students to clarify key concepts using L1 as needed." When teachers introduce a new concept and when they give directions, Korean is used to enhance ELLs' understanding. English follows immediately afterwards.

The SIOP model is mainly used in elementary school settings. However, the results of the Mathematics and Science Partnership (MSP) three-year grant with a Midwest suburban school district in the United States demonstrated that the SIOP Model could be effective in improving middle and high school teachers' strategies, content knowledge, and teachers' attitudes toward ELLs (U.S. Dept. of Ed., 2009). This grant provided professional development to 6th to 12th grade content teachers with around 42 percent of ELLs in their classes. Using the SIOP model and the reflective SIOP coaching as professional development tools over three years, the junior high school teachers have shown improvements in their teaching strategies that positively impact student achievement (U.S. Dept. of Ed., 2009). Since English is a foreign language subject in Korea, the academic and language proficiency levels of English classes in Korean high schools are equivalent to those of junior high schools and/or upper elementary classes in America.

The following was a testimonial from a principal of the Junior High School (BJH), where the Mathematics and Science Partnerships Program (MSP) grant activities were implemented, about the impact of the SIOP on student achievement:

> The NCLB (No Child Left Behind) benchmarks showed that failing grades have decreased over the last four school years by 63%. Bayless Junior High School (BJH) met average yearly progress (AYP) in both Communication Arts and Mathematics in four of the last five years. The limited English proficient subgroup demonstrated significant growth on annual Missouri State Assessment Program (MAP) in Communication Arts as evidenced by the growth of students earning proficient/advanced scores, despite ever-increasing NCLB benchmarks. Over the last three years, this is an 83% increase mainly because of the SIOP implementation in the content classes in BJH, and the principal's total commitment to the SIOP as a best teaching practice model (U.S. Dept. of Ed., 2009).

After having succeeded in implementing SIOP for the content teachers in this school district, the researcher wanted to examine the potential of the SIOP-based framework in Korean high school classroom settings.

Case Study Methods

Following Green and Preston (2005), who state that the choice of methods in a research study should be needs-based, three areas are considered in this study's design: (1) research questions, (2) audience, and (3) relevance of research to personal experience and training (Creswell, 2012). The research questions can be best answered using a mixed method of surveys, conferences, and observations to capture the variety of participants' perspectives and performances (Patton, 2002). A researcher may take the role of an observer, interpreter, or advocate as she identifies the strengths and weaknesses of the two participants.
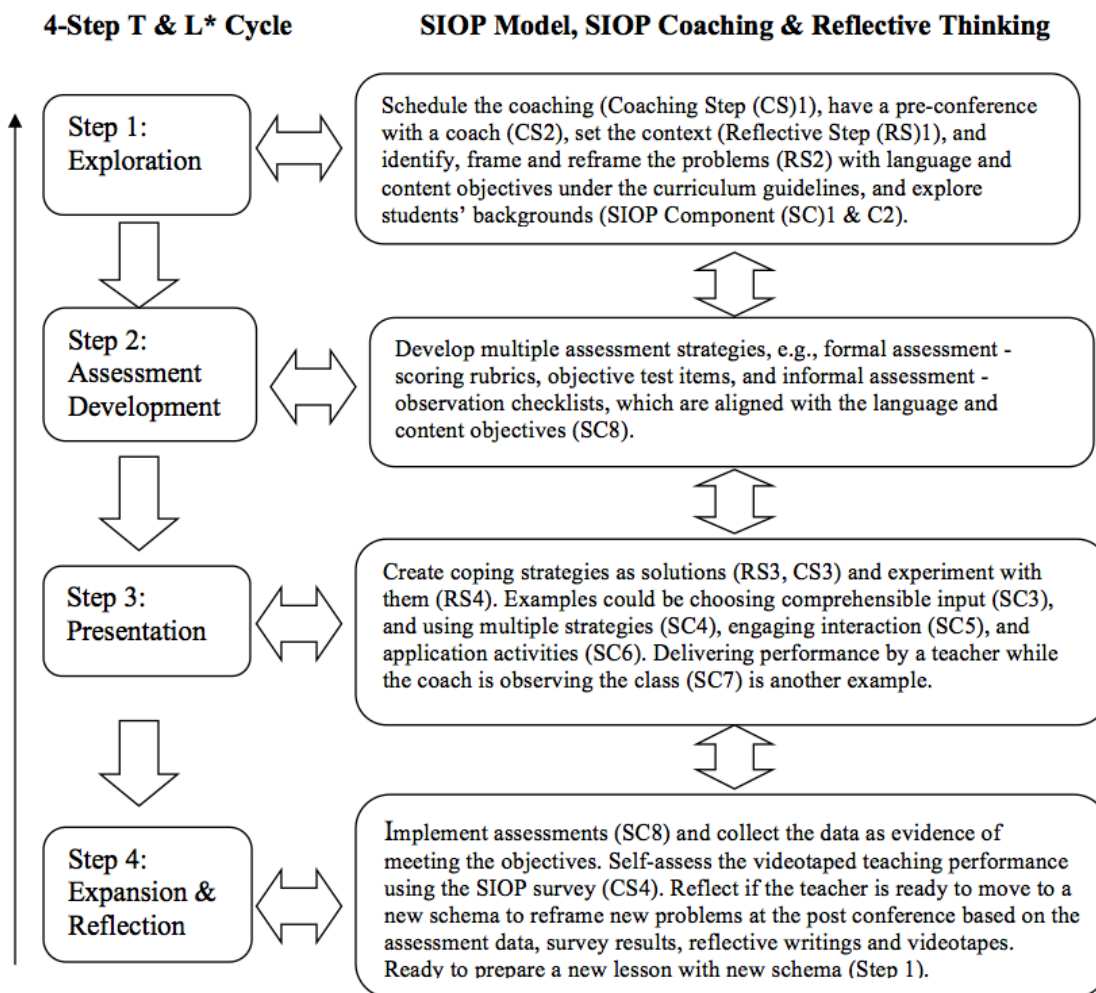
Participants. There were two participants in the study, Dan and Gina, who were English teachers in high schools in Seoul, Korea. Pseudonyms were used to protect their identity. While this sample size was considered small, as Patton (2002) pointed out, the size of the sample might not be as important as the selection of information-rich cases.

Both participants have taught English for more than ten years, and both were selected by the Seoul Ministry Office of Education to go to America for six months to improve their English fluency and teaching strategies in August 2008. The participants were introduced to the SIOP and the backward four-step teaching and learning cycle at the university where they were trained. In addition, while they were in the U.S.A., the participants met with the researcher once a week to develop the SIOP-based lessons. The researcher played the role of the SIOP coach for six months. The teachers prepared a couple of SIOP-based lessons and taught them in the eighth grade classes at BJH. The teachers had to revise their lesson plans more than three times before they implemented them. Their understanding of the SIOP Model was marginal at that time. Even with their lack of English proficiency and weak presentation skills, their language and content objectives were met because of their SIOP lesson preparation (e.g., defining the content and language objectives, using supplementary materials like YouTube and graphic organizers, and ensuring that the assessment strategies aligned with each objective including scoring rubrics and a time-line graphic organizer, among others). The student work samples (e.g., completed time lines and their writing samples) met the assessment criteria that were aligned with the learning objectives.

The teachers had to go back to Korea when they started using the SIOP Model for their teaching in the U.S.A. in January 2008. The teachers continued the conversation with the researcher through e-mail and showed their interest in learning more about the instructional framework the researcher was developing. The researcher went to Seoul in June 2009 for two months to examine if the SIOP-based instructional framework might work in Korean high school English as a foreign language classes. These two teachers agreed to participate in this pilot study.

Procedure. The procedure of the pilot case study included the following steps: 1) scheduling the conferences and the observations, 2) having a pre-conference for context setting and problem framing and reframing, 3a) observing and videotaping the teaching cases, 3b) self-evaluating and peer-evaluating of the teaching using the SIOP survey, and 4) having a post-conference for reflecting and problem-solving (Louden & Wallace, 1996; Song, 2014).

For this study, after scheduling the conferences at the pre-conference, Dan and Gina were advised to write their lesson plans with the language and the content objectives, and they followed the backward 4-step teaching cycle (e.g., the assessment rubrics and other assessments were written before presentation of the activities). The presentations were observed and videotaped. The teachers viewed their own-videotaped teachings. The two peer reviewers, who were EFL teachers in Korea, rated the teaching using the SIOP survey that uses the 30 SIOP features. During the post conferences, the participating teachers shared their own reflections about their teaching with the survey results and the reflective writings with the coach. The coach took detailed field notes while she observed each lesson. The participants' strengths and weaknesses of the presentations were reflected at the post conference with the coach. The coach collected the surveys and the reflective writings from the participating teachers. Based on the SIOP data (e.g., survey results and reflections), each participant designed the next lesson plan with reframed problems and new solutions and activities.

4-Step T & L* Cycle **SIOP Model, SIOP Coaching & Reflective Thinking**

Step 1: Exploration

Schedule the coaching (Coaching Step (CS)1), have a pre-conference with a coach (CS2), set the context (Reflective Step (RS)1), and identify, frame and reframe the problems (RS2) with language and content objectives under the curriculum guidelines, and explore students' backgrounds (SIOP Component (SC)1 & C2).

Step 2: Assessment Development

Develop multiple assessment strategies, e.g., formal assessment - scoring rubrics, objective test items, and informal assessment - observation checklists, which are aligned with the language and content objectives (SC8).

Step 3: Presentation

Create coping strategies as solutions (RS3, CS3) and experiment with them (RS4). Examples could be choosing comprehensible input (SC3), and using multiple strategies (SC4), engaging interaction (SC5), and application activities (SC6). Delivering performance by a teacher while the coach is observing the class (SC7) is another example.

Step 4: Expansion & Reflection

Implement assessments (SC8) and collect the data as evidence of meeting the objectives. Self-assess the videotaped teaching performance using the SIOP survey (CS4). Reflect if the teacher is ready to move to a new schema to reframe new problems at the post conference based on the assessment data, survey results, reflective writings and videotapes. Ready to prepare a new lesson with new schema (Step 1).

Note: T & L refers to teaching and learning.

Figure 2. Illustration of instructional framework

Instruments. A 30-item SIOP instrument was used to examine if the participating teachers improved their instructional strategies and reflective thinking in the post-evaluation compared to the pre-survey scores. The 30 items of the survey were identical with the 30 features under the eight SIOP components (Appendix). Five-point Likert scales were used: 1 for 'not evident' and 5 for 'highly evident.' Participants' lesson plans, observation field notes, and pre- and post-conference reflections were used to explore their instructional teaching performance improvement using the SIOP coaching and the reflective thinking process (Figure 1 and 2).

Results of Second Goal: Pilot Case Study

There were two research questions in this pilot case study. The first research question was, "Will the participating teachers have higher scores at the post-evaluation of the SIOP survey after adopting the SIOP-based framework?"

Since there were two participants, group variance (i.e., t-test) was not calculated. Instead, mean scores were used to examine if the participants had higher scores at the post-evaluation of the SIOP survey. Twenty-seven of thirty items (90%) of the SIOP survey showed greater mean scores at the post-evaluation. The three items that did not show higher means at the post evaluations are Items 1 (content objectives; pre x = 3.33, post x = 3.17), Item 19 (ample opportunities; pre x = 3.16, post x = 3.12), and Item 24 (language objectives supported by lesson delivery; pre x = 3.26, post x = 3.20) (Table 1). The pretest mean scores of these three items were fairly high (3.16 – 3.33) to begin with. The participants might not have paid attention to these features because they thought they knew about these four features; rather, they paid more attention to the features that introduced new strategies (i.e., language objectives, Item 2) rather than content objectives (Item 1), and meaningful activities (Item 6) rather than giving ample opportunities (Item 19).

Another interpretation could be that the participating teachers might not internalize how to deliver the language objectives (Item 24) even though they thought they improved their language objective writing (Item 2). In the pre-evaluation, Item 27 (comprehensive review of key vocabulary) had the lowest mean score (pre mean = 1.83). Even in the post evaluation, Item 27 (post mean = 2.17) had the lowest mean score of the 30 items. The participating teachers might "test" the key vocabulary, but they might not understand the connections between the key vocabulary (Item 27) and the key concepts (Item 28). In addition, the Korean participating teachers might not be used to doing the key vocabulary reviews (Item 27); they might have preferred to give the 'tests' to measure the students' comprehension of each vocabulary word (Table 1).

The items that had the highest mean score in the post-evaluation were Item 2 (language objectives, post mean = 4.16), and Item 20 (hands-on materials, post mean = 4.17). The mean scores might tell us that the teachers spent time putting extra effort to enhance their understanding and writing language objectives since this was a new strategy feature for the two Korean teachers. Having hands-on activities for Korean teachers could also be a new strategy, so they put their extra effort to prepare and implement hands-on activities. In addition, the participating teachers spent most of their time

studying and developing hands-on activities and instructional materials when they were at the TESOL courses at the University of Missouri – St. Louis.

Table 1. Mean scores of pre and post ISS surveys (n = 2)

*Note: * refers to the items that showed lower mean scores at the post-evaluation.*

Survey Items	Pre Mean	Post Mean	Significance P < .05
1. Content Objective*	3.33	3.17	.813
2. Language Objective	3.50	4.16	.177
3. Content Concept	3.33	3.67	.496
4. Supplemental Materials	3.33	4.00	.260
5. Adoption of Content	2.67	3.00	.563
6. Meaningful Activities	3.50	3.67	.765
7. Concepts Linked to Background	3.17	3.33	.664
8. Links between Past and Present	2.50	3.00	.438
9. Key Vocabulary	2.50	3.17	.388
10. Appropriate Speech Speed	3.00	3.50	.341
11. Intentional Explanation of Academic tasks	2.50	2.67	.687
12. Variety of Techniques	3.00	3.50	.270
13. Learning Strategies	2.33	2.67	.418
14. Scaffolding Techniques	2.67	2.83	.721
15. Variety of Questions	2.00	2.50	.174
16. Frequent Opportunities	3.17	3.33	.756
17. Grouping Configuration	2.33	2.67	.418
18. Sufficient Wait-Time	2.67	2.86	.765
19. Key Concepts*	3.16	3.12	.664
20. Hands-on Activities**	2.83	4.17	.025
21. Application of Content and Language Knowledge	3.33	3.83	.296
22. Integration of Four Language Modalities	2.83	3.33	.451
23. Supported Content Objectives	2.50	2.83	.401
24. Supported Language Objectives*	3.26	3.20	.664
25. Student Engagement	2.33	2.83	.296
26. Lesson Pacing	2.50	2.67	.687
27. Key Vocabulary Review	1.83	2.17	.461
28. Key Concept Review	3.50	3.56	.073

Survey Items	Pre Mean	Post Mean	Significance P < .05
29. Regular Feedback 29	3.00	3.00	1.00
30. Assessment of Student Comprehension**	2.17	3.00	.001

** *refers to the items that showed the statistical significance (p < .05).*

The second research question was, "Will the participating teachers improve their reflective thinking skills after adopting the SIOP-based framework?" The participants' post-conference reflections, observation field notes, and lesson plans were analyzed. When the coach met these two participants in Korea in the following year, they were ready to start the project. The coach and the two teachers had a pre-conference in Seoul, and the coach provided two all-day workshops to the teachers about the research questions, procedures, and a SIOP-based instructional framework (e.g., SIOP Model and SIOP Coaching) developed for this study. The guidelines for the lesson plans, the assessment rubric samples, and the reflective writing guidelines were shared and discussed at the workshops.

The following results show the reflective teaching development of the two participants, which might measure the evolution of teaching performance (Song & Catapano, 2007) after they adopted the instructional framework and the coaching procedure. Table 2 illustrated how each of the two participants showed the reflective thinking development using Taggart & Wilson's (2005) five steps of reflection (i.e., left columns) in their five lesson deliveries. The second part of the Table 1 used the number of the participants who reached each criterion of the reflective thinking steps. The third column included the description of the two participants' transformation of their teaching EFL students using the instructional strategy framework.

Dan's Five Lessons

Lesson 1. Dan was willing to participate in the study and was able to identify the students' problems. However, Dan did not understand his own problems as a teacher. When the first lesson was delivered, Dan tried to teach from the lesson plan rather than interact with the students. There was no rapport between the students and the teacher and among the students. Nevertheless, Dan continued to teach, pretending the students understood the concepts. He asked the students to answer the questions, but did not wait for their responses. He answered the questions himself. He wrote the objectives that were not measurable, and he did not review the objectives with the students (See Steps 1 & 2a in Table 2).

Lesson 2. After the post-conference on Lesson 1, Dan was trying to switch from a traditional grammar-translation approach to a communicative approach using group work, graphic organizers, and YouTube videos. Most of the students did not understand what he was talking about in his Lesson 2 delivery. His Lesson 2 included the content and the language objectives, but they were not still measurable. There were multiple instructional resources such as graphic organizers, a YouTube video, and visual aids (Step 3a & b in Table 2). He divided the groups with the four to five people in each group, but there were no specific roles for each group member. Dan prepared the poster

board for the students to post their vocabulary words on it. Only a few advanced students were able to post them, and most of the students were off-task. Dan tried to end the class by reading his content and language objectives. Dan tried to change the lesson using resources, but he was not able to understand his problem as a teacher (Step 2b in Table 2).

Lesson 3. At the post-conference after the lesson 2, Korean was recommended for the direction and new concept introduction. Dan used Korean to explain the instructional direction and new vocabulary words followed by English in Lesson 3. Dan showed the language and content objectives in a PowerPoint presentation and gave the assessment rubrics and the worksheet with the graphics for the new vocabulary words to the students. The students showed their interest in the worksheet and the assessment rubrics, but Dan did not explain about the assessment rubrics to the students. The students were divided into the five groups, and Dan tried to explain the direction for the group project using Korean and English. Students were using Korean and English to discuss about their vocabulary project.

Table 2. Frequency and development of participants' reflective thinking

Reflection Steps (RS)	Criteria of RS & Number of Participants Showing Reflective Thinking Development						
	Frequency* Criteria of RS	L1**	L2	L3	L4	L5	*Participants' Reflective Thinking Development*
Context Setting	a. Set the Context	2	2	2	2	2	Both participants were willing to participate in this process.
Problem Identifica-tion, Frame, & Reframe of Problems	a. Identify Students' Problems	2	2	2	2	2	Both participants identified students' problems, but they did not identify their own problems as teachers in L1 & 2.
	b Identify Teachers' Problems	0	0	1	2	2	One participant identified her problems in L3, and both did in L4 & 5, e.g., not trusting students, and not giving ample opportunity.
	c. Frame and Reframe the Problems	0	1	2	2	2	
Possible Solution	a. Plan the Lessons with Language and Content Objectives	0	2	2	2	2	One Participant started framing and reframing the problems in L2, and both in L3, 4, & 5.
	b. Include Multiple Resources and Activities	1	2	2	2	2	Both participants started developing the lessons with language and content objectives starting in L2.
Experi-mentation	a. Implement resources and activities in	0	0	1	2	2	One participant prepared multiple resources and activities to meet their

	Lessons						language and content objectives in L1, and both in L2, 3, 4, & 5.
Evaluation	a. Develop Assessment Strategies	0	0	1	2	2	One participant engaged the students utilizing the multiple resources including various activities starting in L3, and both in L4 & 5.
	b. Deliver Assessment Strategies	0	0	1	2	2	One participant included the assessment strategies starting in L3, and both in L4 & 5.
	c. Create a New Schema	0	0	0	0	1	One participant demonstrated their skills in delivering various assessment strategies in L3, and both in L4 and 5. Only one participant was able to inquire and scaffold the solutions with the students by creating a new schema in L5 based on the reframed problems.

Note: Frequency* refers to the number of the participants that demonstrates the reflective thinking traits in each of the reflectionsteps.

L** refers to lesson.

Dan organized the materials on his desk and stood in front of the class. Only one or two students among five in each group was working to complete the worksheet. When Dan showed the video clip, he explained the main concept of the video in Korean followed by English. The videotape was about the scarcity of materials in a third-world country. He did not provide any information about the country (e.g., location, political and economic status) to enhance students' comprehension, which is SIOP building background (SC 2). He wrapped up the lesson with the open-ended questions, but not many students were able to answer them. Dan ended up with answering to most of the questions. He failed to reframe the problem (Step 2c) and prepared the lesson resources (Step 3ab) (Table 2).

Lesson 4. At the post-conference after Lesson 3, giving each group member a role was discussed. It was suggested that Dan walk around each group to monitor the progress. It was also suggested that Dan utilize all resources to meet the language and content objectives.

In delivering Lesson 4, handouts were ready, and Dan started the class with a smile and made more effective eye contact with students. Dan explained his activities and asked several students to explain the activities. He posted the language and the content objectives on the wall and asked the students to read the objectives. However, he did not share how these objectives would be measured even though he had all the assessment strategies written in his lesson plan (Step 5a). He explained the content of the YouTube

video using Korean and English and wrote the video's content in the PowerPoint presentation. He also gave students a T-chart with the questions for the students to answer (Step 4a). The questions were matched with the language and the content objectives. This time, he showed a teacher-made sample to the students. Most of the students were able to complete the T-chart with the help of the teacher and other group members. He walked around the class and assisted the students who were lost. He wrote the roles of each member of the group, but he did not explain them, nor model them. He went back to the wall where the objectives were posted and asked the open-ended questions. Half of the students answered the questions (Step 5b) (Table 2).

Lesson 5. At the post-conference after Lesson 4, longer wait-time and ample opportunities were suggested. When delivering the lesson, Dan read the content and the lesson objectives showing all the assessment plans, and he distributed all the assessment rubrics for students' writing and the project (Step 5a and 5b in Table 2). He pre-taught the vocabulary words using Korean with the examples. The video clip was working well, and Dan explained the content of the video and how it was connected to the objectives with the key vocabulary words. His spoken English improved, and this lesson plan included activities and multiple resources. In the process of experimentation, Dan was rather successful in delivering the content and the language objectives through the resources and the activities. The students were not engaged meaningfully, but they were trying to complete the worksheet.

For the evaluation, Dan asked open-ended questions to check for understanding, rather than asking yes/no questions. Dan now had some assessment evidence (e.g., completed worksheets, Step 5b) that proved that the students achieved the objectives. More than half of the students completed the worksheet. Dan was able to frame and reframe the problems (Step 2c), or determine the solutions and implement them with resources (Step 3, 4 and 5ab). However, Dan did not reach the level of creating a new schema (Step 5c) independently yet. He needed a lot of coaching sessions to prepare and deliver the transformational lessons (Table 2).

Gina's Five Lessons

Lesson 1. Gina was able to identify students' problems (Step 2a). However, Gina did not realize her problems as a teacher. Gina did not prepare comprehensible input for the students, reachable objectives, or assessment strategies. The lesson included multiple resources (Step 3b), including a video clip, graphic organizers, hands-on activities (drawing), and collaborative learning. The students had fun, but not much academic learning occurred (Table 2).

Lesson 2. Gina's Lesson 2 included language and content objectives with multiple resources as in Lesson 1. Instead of just including fun elements, her Lesson 2 contained the academic content with student-centered activities such as cooperative learning Step 2b, 3ab). Most of the students were engaged without understanding the expectation of the lesson. The graphic organizers helped the students focus on the activities (Step 2c). Gina did not expect the students were ready for mastering the vocabulary even though she taught it to them. Gina did not have much to evaluate student learning. There was a writing assignment the students had to produce, but Gina did not give any assessment

scoring rubrics for the writing. Gina also did not allow the students to present their writing in Lesson 2. She did not post the language and the content objectives even though she wrote them in Lesson 2 (Table 2).

Lesson 3. At the post-conference, Gina clearly shared her weaknesses and suggested what she should do for the next lesson (Step 2b). Gina noted that she would do more research on students' academic backgrounds and include all the vocabulary as her input and give more ownership to the students. In delivering her Lesson 3, she posted the language and the content objectives on the wall and asked the students to read them. However, she did not ask the students to explain the objectives in their own words. She posted the key vocabulary words on the wall and included them in her PowerPoint (Step 3a and 3b). She gave a timeline worksheet with the five different time eras and the criteria the students needed to include. The scoring rubrics were also distributed for the writing the students needed to do after the lesson on a book, Giver. She did not walk around to check each group. However, she posted a teacher-made timeline using her life-style like those of the characters in Giver (Step 3a and 3b). Gina did not give the roles to each group member. At the end of the lesson, the students posted their group timelines and presented to the class (Step 4a). Nevertheless, the presentations were not done well. Gina did not think about giving the assessment rubrics for the presentations (Table 2).

Lesson 4. At the post-conference for Lesson 3, it was recommended that Gina create assessment plans for each assignment and/or activity and prepare the roles for each group member since this was almost the first time for her students to do the cooperative group work. In delivering her Lesson 4, she asked several students to explain each language and content objective using their own words. The students were hesitant in the beginning, but when Gina helped them explain the objectives using paraphrasing, more students raised their hands (Step 5b). She gave the assessment rubrics to the students (Step 5a). She also wrote the roles for each group member and gave them to the groups, but she did not go over the roles with the students (Table 2).

Lesson 5. At the post-conference of Lesson 4, Gina stated that she should have shared her expectations for the presentations and modeled how to do them. In delivering Lesson 5, Gina used a YouTube video about public speech. Gina went ahead and prepared her lesson with a new schema (e.g., modeling a public speech). She even asked the students to evaluate her speech using the same presentation assessment scoring rubric she gave to them. The students were engaged. The student presentation at the end was much better, and their English was not bad. The group members evaluated the presentations using the rubrics (Step 5a and 5b). Gina closed the lesson by reviewing the language and content objectives with student work samples and the assessment data collected after the presentations. Gina was ready to reframe the objectives for the next lesson with new ideas (Step 5c) (Table 2).

Discussion of Pilot Case Study

In the mean analysis of the 30 items of the instructional strategies survey, it was obvious that the two teachers tried to improve in the areas of language objectives and hands-on activities, which were "new" attempts for the Korean EFL teachers. Perhaps the

participating Korean teachers have practiced writing content objectives in their teaching careers, but for this study, they seem to put more effort into creating language objectives. Both participants rated low in the review and assessment component (SC 8). The research shows that a key element for the academic success of English language learners is to increase essential academic vocabulary (Cobb, 2004; Freeman & Freeman, 2004). In their reflection, the participants actually wrote about their low expectation of their students' academic vocabulary competence. For instance, even though she taught the academic vocabulary, Gina neither reviewed nor assessed it. As Gina showed in her Lessons 1 and 2, she did not even check for her students' key vocabulary comprehension.

In the independent t-test analysis, there were two items that showed statistically significant differences. These differences included items about hands-on materials and comprehensive review of key vocabulary. As it was discussed in the mean score analysis, Item 20 (hands-on activities) was the most improved item as well. The participating teachers might have put more effort to preparing more hands-on activities since they might have wanted to move away from the prescribed instructional approaches they were used to. For Item 30 (assessment of student comprehension), even though it showed the statistical significance, the pre- and the post-mean scores were rather low (pre mean = 2.16, post mean = 3.0). Research has indicated that lesson delivery and reviewing and assessing key vocabulary words are the areas that most English language teachers need to improve (Cobb, 2004; Freeman & Freeman, 2004); these participating teachers might not be an exception (Table 1).

Even though there were only two items that showed statistical significance (i.e., Item 20 and Item 30), the mean score analysis showed that 26 of 30 items showed improvement in the post-evaluation. The mean analysis of the SIOP survey supported that the participating teachers perceived that they improved their teaching strategies throughout the five lessons with the guided reflective coaching and SIOP-based instructional framework.

The results of the reflective thinking development illustrated that the participants showed significant improvement in their reflective thinking skills. Both of them started with a willingness to participate in this project. They were able to identify their students' problems and plan lesson activities with multiple hands-on resources and activities. In the reflection on Lesson 2, only one of two participants showed improvement in understanding their own problems, although not at a satisfactory level. The improvement was in the areas of identifying the problems of teachers, and of utilizing and experimenting with multiple resources and activities to help students acquire academic and language competence (Table 2).

After each post-conference and their own reflection, the participants started showing improvement in delivering the SIOP-based lessons (e.g., Lessons 3 through 5). The results illustrated that both participants reached the evaluation stage, and only Gina was able to move to create a new schema (e.g., model the presentation and lead the students to assess the teacher and their own performance). Dan still needed a lot of guided coaching. As it was illustrated, Dan also did not initiate reflection; he followed the suggestions from the coach, which Gina did not need to do. Gina always started

reflecting on her own teaching, and she was sometimes too critical about her teaching. Both of them showed their ability to identify students' problems, and they effectively created lesson activities that contained multiple resources and hands-on activities. Using the SIOP-based instructional framework, the participating Korean teachers started showing their application of the SIOP strategies and reflective practices when delivering their activities to Korean English language learners at Lesson 3. The guided one-on-one SIOP coaching worked well even though both of the teachers needed more training.

Implications and Future Directions

An instructional framework was developed by the researcher using the SIOP model with a backward four-step teaching and learning cycle and a reflective SIOP coaching process (See Figure 1 and 2). First, using this SIOP-based instructional framework, a pilot case study was carried out. The participants had pre- and post-conferences both before and after the coach observed their teaching. They wrote language and content objectives, developed the assessment strategies before the lesson presentation, delivered the five lessons, and wrote reflections. The participants had pre-conferences with a coach/researcher (Cycle 1), created the assessment strategies (Cycle 2), taught the lessons and had the coach observe them (Cycle 3), and participated in post-conferences with a coach (Cycle 4) after their self-rated survey and reflection with assessment evidence (Jones, 2013). Then, the participants' reflective thinking development was analyzed by using Taggart and Wilson's (2005) reflective thinking steps.

The SIOP model has not been often used to measure its effectiveness in the secondary school settings since this model was created for mainly elementary school teachers. High school teachers are usually expected to focus more on content teaching, rather than instructional pedagogy. The curricular content of Korean English as a foreign language (EFL) classes are equivalent to the sixth to eighth-grade American English classes. In addition, the Bayless Junior and High Schools located in Midwestern area in the US adopted the SIOP model since 2006, and demonstrated English language learners' achievement improvement after utilizing the SIOP model and the reflective SIOP coaching on content teachers in the 6th through 12th grades (U.S. Dept. of Ed., 2009). The researcher was a principal investigator of Bayless SIOP initiative grant and participated as an external evaluator. The results of this grant showed positive results in terms of participating junior and senior high school teachers' professional growth and their attitude toward English language learners (Song, 2016). Due to the EFL curricular content in Korean high schools and Bayless Junior and Senior high school teachers' professional growth due to the SIOP model, the researcher decided to adopt the SIOP model for this pilot study. The assumption was that if English teachers in Korea bring developmentally appropriate and meaningful resources that Korean high school students can relate to, the SIOP-based instructional framework could be a tool for the Korean English teachers to grow professionally.

Nevertheless, a longitudinal study needs to be replicated with more representative subjects, more participating teachers, more time, and with more coaches to develop the inter-rater reliability. The researcher for this study plays multiple roles, including a coach, a professional development provider, a teacher aid, and a researcher. In addition,

the students' language and academic content improvement may need to be measured to examine the significant effectiveness of the instructional framework with a control group. Even with the weaknesses, the study shows promising significance for applying the SIOP-based instructional framework as a means of improving Korean English teachers' instructional strategies as well as their English command.

Conclusion

This study explored if the instructional framework based on the instructional framework for teachers with ELLs in the US might work to the EFL non-native English speaking (NNES) teachers in the high schools in South Korea. The four-step backward teaching and learning cycles (Song, 2008) was adopted as a framework that incorporated the SIOP as an instructional model and reflective coaching for the Korean teachers followed as their instructional framework. The study assumed that Korean EFL NNES teachers would improve their instructional strategies and reflective thinking skills when following this instructional framework. A mixed method approach was used to see the participating teachers' improvement in their English language teaching practice. In the independent t-test analysis, there were two of thirty items that showed statistically significant differences, and they were the items about 'hands-on activities,' and 'assessment of students'. In the mean score analysis, however, there were 26 of 30 items that showed improvement in the post-evaluation, which demonstrated the possibility of improving the language teaching strategies when followed the instructional framework. The five lessons of the two participating teachers were videotaped and analyzed using the reflective coaching cycles. The results of this qualitative study showed that the participating Korean teachers started showing their application of the SIOP strategies and reflective practices when delivering their activities to Korean English language learners at Lesson 3. The guided one-on-one reflective coaching worked well even though both of the teachers needed more training to reach the final step (i.e., evaluation) of the reflective thinking. This study, with limitations, may contribute to the improvement of EFL NNES teachers when following the instructional framework adopted for this study.

About the Author

Kim Song, who is a bilingual speaker of English and Korean, is Principal Investigator (PI) for the 2011 NPD grant, Quality Teachers for English Learners (QTEL). Song is Associate Professor of TESOL, bilingual education, and Associate Chair at the Department of Educator Preparation. Song developed a TESOL program, a Seminars in Bilingual Education course, and a graduate-level online TESOL certification program. Song has more than 25 years experience teaching and researching in the areas of linguistically and culturally responsive teaching (LCRT) for ELLs, nonnative English speaking teachers, and online TESOL practicum using guided online coaching. Song's publications include a book and more than 25 refereed journal articles and chapters with her most recent article examining teacher's attitude towards ELLs, and linguistic and cultural intelligence. The future research agenda is bridging language education to

dual language teaching and learning, and she is now one of the founders of Missouri Dual Language Immersion Network (MODLAN).

References

Butler, Y. G. (2004). What level of English proficiency do elementary school teachers need to attain in order to teach EFL? Case studies from Korea, Taiwan, and Japan. *TESOL Quarterly, 38*(2), 245-278.

CCSS (n.d.). Common Core State Standards initiatives. Retrieved from http://www.corestandards.org/the-standards.

Chang, B. M., & Lee, J. K. (2001). *Korean curriculum reforms and the progressivism*. Retrieved from http://www.paaljapan.org/resources/proceedings/PAAL9/pdf/ChangBok.pdf.

Cho, H., & Brutt-Griffler, J. (2015). Integrated reading and writing: A case of Korean English language learners. *Reading in a Foreign Language, 27*(2), 242-261.

Choi, I. C. (2008). The impact of EFL testing on EFL education in Korea, *Language Testing, 25*(1), 39-62.

Cobb, C. (2004). *Improving adequate yearly progress for English language learners*. Naperville, IL: Learning Point.

Collinson, V., & Ono, Y. (2001). The professional development of teachers in the United States and Japan. European Journal of Teacher Education, 24, 223-248.

Costa, A., & Garmston, R. J. (2002). *Cognitive coaching: A foundation for renaissance schools*. Norwood, MA: Christopher-Gordon Publishers, Inc.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston, MA: Pearson.

Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, England: Multilingual Matters.

Dailey, A. (2009). *Implementing task-based language teaching in Korean classrooms*. Birmingham. UK: University of Birmingham.

Dash, P. (2003). Culture rejected as an individual difference in the SLA process, *The Asian EFL Journal, 5*(2), Retrieved from http://www.asian-efl-journal.com/june2003subpd.php.

Echevarria, J., & Short, D. (2004). Using multiple perspectives in observations of divers classrooms: The Sheltered Instruction Observation Protocol (SIOP). In H. Waxman, R. Tharp & S. Hilberg (Eds.). *Observational research in U.S. classrooms: New approaches for understanding cultural and linguistic diversity*. Boston: Cambridge University Press.

Echevarria, J., & Short, D. (2010). Programs and practices for effective sheltered content instruction. In California Department of Education (Eds.). *Improving education for English learners: Research-based approaches*. Sacramento, CA: CDE Press.

Echevarria, J., Vogt, M.E., & Short, D. (2004) (2nd ed.). *Making content comprehensible to English language learners: The SIOP model*. Boston: Allyn & Bacon.

Echevarria, J., Powers, K., & Short, D. (2006). School reform and standards-based education: A model for English language learners. *Journal of Educational Research, 99*(4), 195-211.

Freeman, D. E., & Freeman, Y. S. (2004). *Essential linguistics: What you need to know to teach*. Portsmouth, NH: Heinemann.

Gonzalez, A., & Song (2013, March). *Don't think for them. Think with them through cognitive coaching*. Paper presented at the International TESOL Convention in Dallas, TX.

Green, A., & Preston, J. (2005). Editorial: Speaking in tongues – diversity in mixed methods research. *International Journal of Social Research Methodology, 8*(3), 167-171.

Hargreaves, A., & Fullan, M. G. (1992). Introduction. In A. Hargreaves & M. G. Fullan (Eds.), *Understanding teacher development* (pp. 1-19). New York: Teachers College Press.

Huberman, M. (1992). Teacher development and instructional mastery. In A. Hargreaves & M. G. Fullan (Eds.), *Understanding teacher development* (pp. 122-142). New York: Teachers College Press.

Jeon, M., & Lee, J. (2006). Hiring native-speaking English teachers in East Asian countries. *English Today, 4*, 53-58

Jones, J. (2013). Teaching reflective practice: Implementation in the teacher-education setting. *Teacher Education, 48*(1), 73-85.

Joyce, B. (1980). The ecology of professional development, In E. Hoyle & J. Megarry (Eds.), *World yearbook of education, 1980: Professional development of teachers* (pp. 19-41). London: Kogan Page.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *The Modern Language Journal, 73*, 440-464.

Li, D. (1998). It's always more difficult than you plan and imagine: Teachers' perceived difficulties in introducing the communicative approach in South Korea. *TESOL Quarterly, 32*(4), 677-703.

Livingston, K. & Robertson, J. (2001). The coherent system and the empowered individual: Continuing professional development for teachers in Scotland. *European Journal of Teacher Education, 24*, 183-194.

Louden, W., & Wallace, J. (1996). *Quality in the classroom: Learning about teaching through case studies*. Rydalmere, NSW: Hodder Education.

Ministry of Education & Human Resources Development. (2001). *The development of education: National report of the Republic of Korea*. Seoul, Korea: Seoul Board of Education.

Park, J. S. (2007). Development and perception of English education in Korea. In C. Yoon (Ed.), *English, the colonialism in my mind* (pp. 45-66), Seoul: Doseo Publishing Company Dangdae. (In Korean)

Patton, Q. P. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage Publications, Inc.

Robertson, P. (2002). The pervading influence of neo-Confucianism on the Korean education. *Asian EFL Journal, 4*(2), Retrieved from http://www.asian-efl-journal.com/june2002.conf.php.

Sherris, A., Bauder, T. A., & Hillyard, L. (2007). *An insider's guide to SIOP coaching.* Washington, D.C.: Center for Applied Linguistics.

Song, K. (2008). Impact of backward assessment and guided reflection on social studies education: A four-step teaching cycle, *International Journal of Social Education, 23*, 118-139.

Song, K. (2010). Hybrid pedagogical frameworks for teaching English as an international language. *ELT Forum: Proceeding of International Omani ELT Conference* (pp. 16-26). Muscat, Oman, Sultan Qaboos University.

Song, K. (2014). Meeting emerging needs of online coaching in teacher education: Communication, pedagogy, technology, and reflection. In T. V. Yuzer & G. Eby (Eds.). *Emerging Priorities and Trends in Distance Education: Communication, Pedagogy, and Technology.* Hershey, PA: IGI Global.

Song, K. (2016, February). Systematic professional development training and its impact on teachers' attitudes toward ELLs: SIOP and guided coaching. *TESOL Journal.* Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/tesj.240/full doi: 10.1002/tesj.240

Song, K., & Catapano, S. (2007). Reflective professional development for urban teachers through videotaping and guided assessment. *Journal of In-Service Education, 34*(1), 75-96.

Song, K., & Eur, D. (2010, March). *Professional development of Korean EFL teachers using hybrid pedagogical framework.* Paper presented at the annual meeting of Teaching English to Speakers of Other Languages (TESOL) Boston, MA.

Sunal, C. & Sunal, D. (2003). Teacher candidates' conceptualization of guided inquiry and lesson planning in social studies following web-assisted instruction. *Theory and Research in Social Education, 31*, 243-264.

Taggart, G. L. & Wilson, A. P. (2005). *Promoting reflective thinking in teachers: 50 action strategies.* Thousand Oaks, CA: Corwin Press.

UK Answers (2014). *Is it true South Korea is going to stop hiring foreign teachers next year to teach English?* Retrieved from http://uk.answers.yahoo.com/question/index?qid=20131108040233AAaVAaF.

US Dept. of Education. (2009). *Report of SIOP initiatives grant for mathematics and science teachers in Bayless School District, 2008-2009.* Washington D.C.: U.S. Department of Education Mathematics and Science Partnerships Program (MSP). Retrieved from http://apr.ed-msp.net.

Vasilopoulos, G. (2008). Adapting communicative language instruction in Korean university. *The Internet TESL Journal, 14*(8), Retrieved from http://iteslj.org/Techniques/Vasilopoulos-CLT.html.

Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly, 34*(3), 511-535.

Wiggins, G. & McTighe, J. (2001). *Understanding by design*. Alexandria, VA: Association for Supervision & Curriculum Development (ASCD).

Yoon, K. E. (2008). CLT theories and practices in EFL curricula: A case study in Korea. *Asian EFL Journal*. Retrieved from http://www.scribd.com/doc/4054035/Clt-in-Korean-Curriculum

Appendix

ISS survey items: 8 components and *30 features of SIOP

Component 1. Lesson preparation

1. Content objectives are clearly defined, displayed and reviewed with students.

2. Language objectives are clearly defined, displayed and reviewed with students.

3. Content concepts are appropriate for age and educational background level of students.

4. Supplemental materials are used to a high degree, making the lesson clear and meaningful.

5. Links are made explicitly between past learning and new concepts.

6. Key vocabulary is emphasized for students to see.

Component 2. Building background

7. Adoption of content is made to all levels of student proficiency.

8. Meaningful activities are used to integrate lesson concepts with language practice opportunities.

9. Concepts are explicitly linked to students' background experience.

Component 3. Comprehensible input

10. Speech appropriate for students' proficiency levels is modeled.

11. Clear explanation of academic tasks is intentionally made.

12. A variety of techniques are used to make content concepts clear.

Component 4. Strategies

13. Ample opportunities are provided for students to apply learning strategies.

14. Scaffolding techniques are consistently used to assist and support student understanding.

15. A variety of questions or tasks are used to promote higher-order thinking skills.

Component 5. Interaction

16. Frequent opportunities are provided for interaction and discussion.

17. Grouping configuration is used support language and content objectives of the lesson.

18. Sufficient wait time is provided for student responses consistently provided.

19. Ample opportunities are provided for students to clarify key concepts as needed.

Component 6. Practice and application

20. Hands-on material and/or manipulatives are provided for students to practice.

21. Activities are provided for students to apply content and language knowledge.

22. Activities are used to integrate all language skills.

23. Content objectives are clearly supported by lesson delivery.

Component 7. Lesson delivery

24. Language objectives are clearly supported by lesson delivery.

25. Students are engaged approximately 90% to 100% of the class period.

26. Pacing of the lesson is appropriate to students' ability levels.

Component 8. Review and Assess

27. Comprehensive review is provided to review of key vocabulary.

28. Comprehensive review is provided to review of key content concepts.

29. Regular feedback is provided to students on their output.

30. Assessment is done for student comprehension and learning of all lesson objectives.

30 features have become the 30 SIOP survey items used in this study.