

Using the SIOP Model for Effective Content Teaching with Second and Foreign Language Learners

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Abstract

In this paper we present a comprehensive model of instruction for providing consistent, high quality teaching to L2 students. This model, the SIOP Model (Sheltered Instruction Observation Protocol), provides an explicit framework for organizing instructional practices to optimize the effectiveness of teaching second and foreign language learners. The SIOP Model includes features that promote acquisition of both subject area content (e.g., math, science, literature) and language development (the target language). The SIOP Model is presented in the context of three settings: immigrant students who may or may not have grade-level literacy in their mother tongue, bilingual students who are learning content through a foreign language and students of English as a foreign language who are learning professional content in English through English for Specific Purposes (ESP) course. Our experience from all three settings indicates that there is significant improvement in achieving the learning outcomes for English Language Learners by using this model of instruction.

Keywords: SIOP, language, content, instruction, ESP

1. Background

Due to increased migration and an emphasis worldwide on learning English, schools are faced with teaching second language learners to meet the same academic requirements as other students and, in some settings, to make their academic programs more relevant for current employment opportunities by emphasizing English. In some situations, students are learning a new language through content teaching (such as Spanish-speaking students in Mexico learning science through English) while others are learning new content in a new language (such as immigrant Chinese-speaking students in Barcelona being taught with Catalan as the medium of instruction). In countries where English is learned as a foreign language (as in Macedonia, a former Yugoslav Republic) as a result of globalization and the aspirations for EU and NATO integration, in order to have better opportunities for employment, students also need to learn different professional content in English and at the same time become more fluent in it.

1.1 Learning Needs of L2 Students

The cognitive and linguistic demands of learning through a second language are significant. With high quality instruction that includes linguistic accommodations, students have access to the core curriculum and learn the kind of academic language they need to be successful in school. The research literature provides guidance on practices that are effective for making instruction understandable for second language learners (August & Shanahan, 2006; Calderon, et al, 2011; Genesee, et al., 2006; Pray & Jiminez, 2009; Short, 2013). One approach that reflects many of these practices is sheltered instruction.

Sheltered Instruction is a way of teaching that makes lessons meaningful and understandable for second language learners. Sheltered instruction is used for content area instruction in all subjects, e.g., social studies, math, science, reading and language arts instruction, and across grade levels. The goal of sheltered instruction is to provide access to the core curriculum by teaching in a way that is meaningful and understandable for second language learners and through these modified lessons, students learn academic language. Sheltered instruction gives students an

opportunity to learn the target language as they master important content and skills. Sheltered teachers are cognizant that these students are learning a new language at the same time they are learning new concepts, information, and skills -- and they make adjustments in lesson planning and delivery to facilitate their learning.

Sheltered instruction is not a watered-down version of grade level instruction but is a means for making cognitively challenging lessons comprehensible to second language learners. If second language learners are to be successful academically, they must have access to content material and opportunities to practice academic skills and tasks common to mainstream classes (Echevarria & Graves, 2010; Cloud, Genesee & Hamayan, 2009; Short, 2002).

Other terms for sheltered instruction include sheltered English immersion (SEI), content and language integrated learning (CLIL), and specially designed academic instruction in English (SDAIE). All terms represent classrooms in which students are learning content in a language that is not their mother tongue.

In the past, approaches for teaching content such as sheltered instruction lacked a clear operational definition which lead to inconsistent and sometimes ineffective practice. Further, there was not an explicit focus on consistently developing language proficiency in each lesson, especially academic language. Language acquisition was more of a byproduct of sheltered lessons than a central focus. Even when teachers were aware of research-based practices, they did not use them consistently in every lesson. Thus, researchers set out to develop and test a model of sheltered instruction that would help teachers in lesson planning and consistent delivery of high quality lessons that explicitly addressed content and academic language for second language learners (Echevarria, Vogt & Short, 2000).

2. The SIOP Model

The SIOP Model (Echevarria, Vogt, & Short, 2000; 2013) was developed through a 7-year research study (1996-2003) sponsored by the National Center for Research on Education, Diversity & Excellence (CREDE) and funded by the U.S. Department of Education. The researchers collaborated with teams of teachers to identify best practices from the professional literature and organize combinations of these techniques to build a model of sheltered instruction. The SIOP (Sheltered Instruction Observation Protocol) was initially an observation tool for researchers to measure teachers' implementation of sheltered instruction techniques and evolved into a lesson planning and delivery approach with 30 features of instruction grouped into eight components—Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice & Application, Lesson Delivery, and Review & Assessment (See Appendix A).

The SIOP Model became a framework for teachers to present curricular content concepts to second language learners through strategies and techniques that make new information comprehensible to the students. While doing so, teachers develop student academic language skills across the domains of reading, writing, listening, and speaking. The model was designed to combine features recommended for high quality instruction for all students, such as cooperative learning and reading comprehension strategies (August & Shanahan, 2006; Genesee, et al., 2006) with specific features for second language learners, such as language objectives in every lesson, opportunities for oral language practice, and the development of background knowledge and academic vocabulary (Ellis, Tanaka, & Yamazaki, 1994). As a result, attention should be paid to academic literacy in each lesson. The model allows for some natural variation in teaching styles and lesson delivery; it is not a step-by-step process but a guide for effective lesson planning and delivery.

2.1 Components of the SIOP Model

2.1.1 Lesson Preparation

The focus for each SIOP lesson is content and language objectives that are clearly defined, displayed, and orally reviewed with students. These objectives are linked to subject area material and the academic vocabulary and language that students need for success. For teachers, the goal is to help students gain important experience with key grade-level content and skills as they progress toward fluency in the second language. Students know what they are expected to learn and/or be able to do by the end of each lesson although it can be challenging for teachers to teach both language and content in a lesson (Lyster, 2007). However, students benefit because they have a plan at the start of each lesson so that they can focus on what is important and take an active part in the learning process. Also within this component, teachers provide supplementary materials (e.g., visuals, multimedia, adapted or bilingual texts, and study guides) because grade-level material may be difficult for many second language learners to comprehend. Adaptations are provided through a number of ways such as special texts, supportive handouts, and audio-taped selections such as those that may come with texts or are available online. Also, meaningful activities provide access to the key concepts and provide opportunities for students to apply their content and language.

2.1.2 Building Background

In SIOP lessons, teachers connect new concepts with students' personal experiences and past learning. Teachers build background knowledge because many immigrant second language learners have not attended schools in the new country, or are unfamiliar with the cultural references in texts. At other times, it's necessary to activate students' prior knowledge in order to learn what students already know, to identify misinformation, or discover when it's necessary to fill in gaps. Immigrant students may have knowledge that is different from majority language speakers and teachers can use their experiences as resources, perhaps in lessons related to short story characters or plots, poetry, L1 nursery rhymes, songs they have learned previously, universal themes in literature, and so forth. As teachers prepare lessons, they can examine the anthologies, novels, and other texts used for cultural biases or idiomatic speech so potential problems can be anticipated, or potentially confusing concepts can be pre-taught. The SIOP Model places great significance on building a broad vocabulary base for students. Studies of vocabulary instruction show that second language learners learn more words through explicit instruction; by working with words that are embedded in meaningful contexts; by having many opportunities for repetition and use of the words in reading, writing, listening, and speaking; when the words are posted and reviewed; and when they are working with words in multiple texts and contexts (Beck, McKeown, & Kucan, 2002; Carlo, et.al, 2004).

SIOP teachers increase attention to vocabulary instruction across the curriculum so students become effective readers, writers, speakers, and listeners. Most reading or literature teachers explicitly teach key vocabulary and word structures, word families, and word relationships. However, all content teachers should teach these aspects of L2 learning. In addition teachers might teach strategies such as using context clues, word parts (i.e., affixes), visual aids (e.g., illustrations), and cognates (a word related in meaning and form to a word in another language). Effective SIOP teachers design lesson activities that give students multiple opportunities to use new vocabulary orally and in writing. In order to move words from receptive knowledge to expressive use, vocabulary needs reinforcement through different learning modes (.

2.1.3 Comprehensible Input

If information is presented in a way that students cannot understand, such as an explanation that is spoken too rapidly, or reading selections that are far above students' reading levels with no visuals or graphic organizers to assist them, many second language learners will be unable to learn the necessary content. Reducing the complexity of language is effective when used judiciously. Oversimplification of spoken and written language limits exposure to varied sentence constructions and language forms (Crossley, et.al., 2007).

SIOP teachers realize that L2 learners cannot learn as if they were majority language speakers and their instruction includes a variety of SIOP techniques so students comprehend the lesson's key concepts. Examples of language accommodation techniques include teacher talk that is appropriate to student proficiency levels; restatement, paraphrasing, repetition, and written records of key points; and previews and reviews of important information. In addition, visual representations, not just language-based explanations, provide students with needed, additional support (Short, Fidelman & Longuit, 2012). Some of these techniques include demonstrations and modeling of tasks, processes, and routines; gestures, pantomime, and movement to make concepts more clear; opportunities for students to engage in role-plays, improvisation, and simulations; visuals and supplementary materials, such as pictures, real objects, illustrations, charts, adapted texts, audiotapes, CDs or online resources, perhaps in the L1, if available; and hands-on, experiential, and discovery activities.

SIOP teachers explain academic tasks clearly and in steps, both orally and in writing for second language students. Teachers cannot assume immigrant students know how to do an assignment because it is a regular routine for the rest of the students. SIOP teachers talk through the procedures and use models and examples of good products and appropriate participation, so students know the steps they should take and can envision the desired result.

2.1.4 Strategies

This SIOP component addresses student learning strategies, teacher-scaffolded instruction, and higher-order thinking skills. Some students aren't familiar with learning strategies and benefit from receiving explicit instruction in how to use learning strategies flexibly and in combination (Ardasheva & Tetter, 2012; Dole, Duffy, Roehler, & Pearson, 1991). In fact, teaching learning strategies has a long history of research supporting its efficacy (Vaughn, Gersten, & Chard, 2000).

By explicitly teaching cognitive and metacognitive learning strategies, teachers equip students for academic learning inside and outside the classroom. SIOP teachers capitalize on the learning strategies students already know and use in their mother tongue because those can transfer to the second language.

SIOP teachers frequently "scaffold" instruction (provide support) so second language students can be successful

with academic tasks. As L2 learners master a skill or task, teachers remove the supports that were provided and add new ones for the next level. The goal, of course, is the gradual release of responsibility so that second language learners can work independently by achieving independence one step at a time.

Finally, SIOP teachers ask second language learners a range of questions, many of which should require higher levels of thinking (Genesee, et.al, 2006). It is easy to ask simple, factual questions and sometimes teachers mistakenly believe that L2 learners can only respond to simple questions. However, teachers must go beyond questions that can be answered with a one- or two-word response and instead, ask questions and create projects or tasks that require students to think more critically and apply their language skills in a more extended way. Their answer may contain few words but those words may represent complex thinking.

2.1.5 Interaction

Students learn both conversational and academic language through interaction with one another and with their teachers. However, it is academic proficiency that is associated with school success. In SIOP classes, oral language practice helps students to develop and deepen content knowledge and support their second language speaking, reading and writing skills. In pairs and small groups, second language learners practice new language structures and vocabulary that they have been taught as well as important language functions, such as asking for clarification, confirming interpretations, elaborating on one's own or another's idea, citing evidence in the text to support comments, and evaluating opinions. Interactive activities should mix second language learners and more-proficient second language learners (or majority language speakers) and involve carefully structured tasks to produce effects on language-learning outcomes (Saunders & Goldenberg, 2010). SIOP teachers make sure that there is a balance in the classroom discourse between teachers and students, and among students, avoiding a teacher-dominated linguistic environment. Opportunities for oral language practice are especially important since oral language proficiency impacts all aspects of educational achievement: higher grades and achievement test results (August & Shanahan, 2006; Suarez-Orozco, Suarez-Orozco & Todorova, 2008); vocabulary development (Brouillette, 2012) and the acquisition of skilled reading (Lesaux & Giva, 2008).

2.1.6 Practice and Application

Practice and application of new material is important for all learners since it is well established that practice and application helps one master a skill (Jensen, 2005; Marzano, Pickering & Pollock, 2001). Typically, teachers present new material through lecture and neglect the opportunity for students to practice the new language and content knowledge through multiple modalities. SIOP teachers ensure that lessons include a variety of activities that encourage students to apply both the content and language skills they are learning through means such as hands-on materials, group assignments, partner work and projects. For second language learners to learn the language, it is imperative that they practice and apply content information as well as literacy and language processes (reading, writing, listening and speaking) in every lesson.

2.1.7 Lesson Delivery

Throughout the lesson in a SIOP classroom, the tasks, activities and teaching support the content and language objectives. SIOP teachers have clear routines to follow and they make sure students know the lesson's content and language objectives so everyone stays on track. This is particularly important since second language learners need much richer and more extensive teaching procedures than majority speakers (August, Carlo, Dressler, & Snow, 2005; Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006). Further, SIOP teachers introduce (and revisit) meaningful activities that appeal to students, they provide appropriate wait time so students can process concepts, and the classroom instruction fosters high student engagement. A lesson doesn't move either too slowly or too quickly; student comprehension of key concepts is the goal so teachers monitor carefully throughout each lesson.

2.1.8 Review and Assessment

As part of each SIOP lesson, teachers make time for review and assessment throughout a lesson.. In fact, a lesson may begin with a review of previous learning or a check of students' knowledge of a topic. SIOP teachers check on student comprehension frequently to determine whether additional explanations or re-teaching are needed. By doing so, they can also provide feedback on correct and incorrect responses, a practice shown to benefit second language learners (August & Shanahan, 2008). Effective SIOP teachers also review key vocabulary and concepts with students throughout the lesson and as a final wrap-up they review the content and language objectives.

2.2 *Research Evidence for the SIOP Model*

The SIOP is a research validated lesson planning and instructional delivery model that reflects best practices from the research literature, and has a growing research base from empirical studies conducted on the SIOP Model itself. Some of the research conducted thus far includes the following:

- The observation protocol has a 5-point scale for each feature on the SIOP Model which measures its level of implementation. A sample of a feature on the protocol is seen in Figure 1. A study was conducted to establish the validity and reliability of the SIOP protocol and found the SIOP instrument to be a highly reliable and valid measure of sheltered instruction (Guarino, et al., 2001);
- A professional development process was developed including training materials and videotapes, and it has been shown to be effective in improving teachers' practice as they work with L2 learners (Echevarria, Vogt, & Short, 2000; Short, Fidelman, & Louguit, 2012);
- When the features of the SIOP Model are implemented to a high degree, the achievement of second language learners improves (Echevarria, Short, & Powers, 2006; Echevarria, Richards, Chinn & Ratleff, 2011);
- The features of the SIOP Model provide the language accommodations that English learners need to improve literacy skills. When teachers applied the features effectively, student reading scores in L2 improved (McIntyre, Kyle, et al, 2010);
- In content classes (mathematics, science, and social studies) with SIOP-trained teachers, students scores on the IDEA Language Proficiency Tests (IPT) improved significantly, indicating that the SIOP Model had a positive impact on the development of English language proficiency among the second language learners in content classes (Short, Fidelman, & Louguit, 2012).
- There are a multiple schools and districts who report increased student performance when teachers implement the SIOP Model (Echevarria, 2012; Echevarria, Short & Vogt, 2013),

These and other ongoing studies show that the SIOP Model is a scientifically validated way for teachers to provide effective instruction to L2 learners. Second language learners will learn content and academic language at an accelerated pace when the feature of the SIOP are part of everyday teaching.

3. SIOP Model Programs and Contexts

The SIOP Model has multiple applications such as a guide for effective lesson planning and delivery, a teacher self-reflection tool, and an instrument for observation of lessons by peers, school administrators or university supervisors. The SIOP is used in classrooms of all grade levels and across all content areas. The model has evolved to apply to specific content areas such as math (Echevarria, Vogt & Short, 2010), reading/language arts (Vogt, Echevarria & Short, 2010), science (Short, Vogt & Echevarria, 2010), and history (Short, Vogt & Echevarria, 2010).

There are a number of ways the SIOP model is used such as in dual immersion programs, Newcomer programs, with immigrant students in classrooms where instruction is in the majority language, majority-language speaking students who are learning content through a minority language and students of English as a foreign language who learn English for different professional purposes (ESP). It is the last three cases that we present here.

3.1 Learning New Content through a New Language

Educating immigrant students involves more than just good pedagogy. These students face many challenges inside and outside of the classroom. However, their best chance for success in their new country is to receive an education that will help them learn and become productive citizens.

In many mainstream classes, little or no accommodation is made for the specific language needs of second language learners placing them at a deficit when they are expected to achieve high academic standards in the new language. In some countries, all students are expected to pass end-of-grade tests in order to be promoted and graduate, or to continue with their education. In the U.S. and other countries, L2 learners have experienced persistent underachievement. On nearly every measure second language learners tend to lag behind their peers and demonstrate significant achievement gaps on assessments (Olson, 2003; Snow & Biancarosa, 2003). Research has shown academic and social problems immigrants students suffer in mainstream classrooms (Harklau, 1994; Lantolf & Pavlenko, 2001). The dramatic increase in the number of immigrant students has resulted in a shortage of teachers qualified to offer appropriate instruction to these students. Many teacher preparation programs still do not provide teacher candidates with sufficient information and techniques for teaching culturally and linguistically diverse students (Hutchinson, 2013). Large numbers of second language learners in mainstream classes have teachers who are not prepared to teach them in ways that facilitate their acquisition of language and content (Warren, et.al, 2010). In many programs for second language learners, teachers teach little more than the new language, neglecting the importance of grade-level content learning.

For students that are faced with such issues, SIOP teachers offer high-quality instruction that has features such as having clear content and language objectives for each lesson. Instructions and expectations are made extremely

clear, e.g., through modeling a procedure or completing together part of a task and students are actively engaged and participate in lessons, not sitting passively in class. There are opportunities to practice new learning, including attention to vocabulary development. Information would be provided in multiple ways (visual clues, physical gestures) and ideas would be presented verbally and in writing. Students have frequent opportunities for meaningful oral language practice including working with their peers. These features combine to provide students with the best chance for learning and being successful in school.

3.1.1 SIOP in the United States

The academic achievement of second language learners in the U.S. is of particular concern because of their large and growing numbers. There are over 5 million second language learners in U.S. schools, with the largest numbers living in California, Texas and Florida but many of whom are living in states not typically associated with having minority populations such as Kentucky, Indiana and Tennessee. Although it is assumed that most L2 learners are immigrants, more are native born than foreign born. In elementary grades, 24% of second language learners are foreign-born (first generation Americans), while 44% of secondary L2 students are foreign-born (<http://www.ncela.gwu.edu/expert/fastfaq/2.html>). The fact that these students have attended American schools exclusively forces educators to take a close look at how they are educating this ever-growing population of students.

The SIOP Model has recently become popular as a way for teachers to learn to work more effectively with second language learners. Schools report that students whose teachers use the SIOP Model have experienced improved academic performance. One such example comes from a school in Boston, Massachusetts. The school population of 502 elementary students is poor, and 90% are Spanish-speaking. Almost half of the students do not speak English proficiently. Every teacher in the school was introduced to the SIOP Model, then learned and practiced a component of the model for a period of time so that over the course of a year, they were able to implement all eight components. After three years of systematic implementation of the SIOP model with observations and feedback, student performance improved significantly. State assessment scores on reading and language went from 20 points below the state average to .2 points above the state average. In math, scores improved from 28 points below the state average to 20 points higher than the state. (For additional examples, please see the Research Brief, *Effective Practices for Increasing the Achievement of English Learners* at www.cal.org/create/pubs)

3.1.2 SIOP in Macedonia

Due to the lack of English language admission criteria at private universities in Macedonia, some students enter university with very poor knowledge of English. However, English is taught as a foreign language and some courses of study require that students reach a certain level of proficiency in English in the subject matter. To illustrate the difficulty that students faced in learning English, an example is provided from students studying Public Administration at South East European University. These students struggled a lot with their ESP (English for Special Purposes) course and in one semester, twelve of the nineteen students in the class failed the course. With the beginning of the new semester, another teacher took responsibility for this course. It had ten new students, but also eight of those who had failed it previously. The teacher organized the course according to the same syllabus in terms of the content and assignments, but changed the approach to teaching using the SIOP Model and its components.

Every lesson was carefully prepared to make sure that it contained both content objectives and language objectives. As recommended in the SIOP model, “all the content and language objectives should evolve from the lesson topic and be part of the instructional plan” (Echevarria et al, 2013, p. 31). Since this was an ESP course, very often these objectives were interrelated. For instance, the key vocabulary in this course referred to the technical or specific terms and a language objective such as, being able to define the term *accession*, required some content knowledge of how countries acquire membership in international organizations.

Further, all lessons were created so that they focused on developing of all four language skills: listening, speaking, reading and writing. Activities were designed in order to teach directly and practice reading for gist and reading for details, summarizing, drafting reports, developing paragraphs into argumentative essays, discussing, and debating. More attention was given though, to developing students’ production skills -- speaking and writing -- because these skills were cited as being critical by both the students themselves and their potential employers in a needs analysis. Therefore, language functions, referring to the ways students use language in the lesson, were intentionally neglected.

Linking background experiences to the new material was also taken care of while designing the lessons. Techniques such as brainstorming, structured discussion, and KWL charts were very useful instructional tools to reinforce learning experiences. It was also critical to provide structured opportunities for students to use the language as much as possible. Such practice was especially important considering that English was a foreign language for all students and they did not have other opportunities to practice using it outside of the classroom.

The assessment was both formative, through different components, and summative. There was a final exam at the end of the term. Evaluative activities followed the learning activities and matched the lesson objectives. The grading components for both courses were the same: attendance and class participation – 20%, homework – 10%, cover letter and CV – 10%, quizzes – 10%, project (presentation) – 20% and final exam – 30%. The project work, which in the previous semester consisted of a written research activity, was replaced by an oral presentation. This was done in order to match the needs of students and provide more opportunities for oral practice (a SIOP component) since the needs analysis showed that for their future career, students would benefit more from using the language for speaking than from doing research in the field. The final exam remained essentially the same as the previous semester. For all the exercises that were included on the final exam, there had been a lot of practice in class (SIOP practice and application component).

Students achieved higher scores on every grading criterion, from class attendance and participation, to the final exam. All students passed the course, including the eight who had failed it previously. What is more, they expressed high satisfaction from the course informally and through the evaluation provided at the end of the course.

4. Conclusion

Learning content through a language that is not one's mother tongue is a challenging process for students, whether they are immigrants, were born in the country in which they are schooled, are majority students learning through a minority language or learn the content in the foreign language for the purposes of their future careers. The SIOP Model provides a framework for guiding teachers to improve their instruction and use the kinds of practices that will assist these students in learning both content and academic language.

References

- Ardasheva, Y., & Tretter, T. R. (2012). Perceptions and Use of Language Learning Strategies Among ESL Teachers and ELLs. *TESOL Journal*, 3, 552–585. <http://dx.doi.org/10.1002/tesj.33>
- August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners: A report of the National Literacy Panel on Language-Minority Children and Youth*. Mahwah, NJ: Lawrence Erlbaum Associates. <http://dx.doi.org/10.1080/10862960903340165>
- Beck, L., McKeown, M., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York, NY: Guilford.
- Blachowicz, C. L. Z., Fisher, P., Ogle, D., & Watts-Taffe, S. (2006). Vocabulary: Questions from the classroom. *Reading Research Quarterly*, 41, 524–539. <http://dx.doi.org/10.1598/RRQ.41.4.5>
- Brouillette, L. (2012). Advancing the speaking and listening skills of K–2 English language learners through creative drama. *TESOL Journal*, 3(1), 138–145. <http://dx.doi.org/10.1002/tesj.8>
- Calderon, M., Slavin, R., & Sanchez, M. (2011, Spring). Effective instruction of English learners. *The Future of Children*, 21(1), 103–127. <http://dx.doi.org/10.1353/foc.2011.0007>
- Carlo, M. S., August, D., McLaughlin, B., Snow, C. E., Dressler, C., Lippman, D. N., Lively, T. J., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly*, 39(20), 188–215. <http://dx.doi.org/10.1598/RRQ.39.2.3>
- Cloud, N., Genesee, F., & Hamayan, E. (2009). *Literacy instruction for English language learners*. Portsmouth, NH: Heinemann.
- Crossley, S., McCarthy, P., Louwse, M., & McNamara, D. (2007). A linguistic analysis of simplified and authentic texts. *The Modern Language Journal*, 19(2), 15–30. <http://dx.doi.org/10.1111/j.1540-4781.2007.00507.x>
- Dole, J., Duffy, G., Roehler, L., & Pearson, P.D. (1991). Moving from the old to the new: Research in reading comprehension instruction. *Review of Educational Research*, 61, 239–264. <http://dx.doi.org/10.3102/00346543061002239>
- Echevarria, J. (2012). *Effective practices for increasing the achievement of English learners*. Washington, DC: Center for Research on the Educational Achievement and Teaching of English Language Learners. Retrieved from <http://www.cal.org/create/resources/pubs/>
- Echevarria, J., Short, D., & Powers, K. (2006). School reform and standards-based education: An instructional model for English language learners. *Journal of Educational Research*, 99(4), 195–211.
- Echevarria, J., Vogt, M. E., & Short, D. (2000). *Making content comprehensible for English learners: The*

- SIOP® Model*. Boston, MA: Allyn & Bacon.
- Echevarria, J., Vogt, M. E. & Short, D. (2013). *Making Content Comprehensible for English Learners: The SIOP® Model*, Fourth Edition. Boston: Allyn & Bacon.
- Echevarria, J., & Graves, A. (2010). *Sheltered content instruction: Teaching English learners with diverse abilities* (4th ed.). Boston, MA: Allyn & Bacon.
- Echevarria, J., Richards-Tutor, C., Chinn, V., & Ratleff, P. (2011). Did they get it? The role of fidelity in teaching English learners. *Journal of Adolescent and Adult Literacy*, 54(6), 425-434. <http://dx.doi.org/10.1598/JAAL.54.6.4>
- Echevarria, J., Short, D., & Vogt, M. E. (2008). *Implementing the SIOP® Model through effective professional development and coaching*. Boston, MA: Allyn & Bacon.
- Echevarria, J., Vogt, M. E., & Short, D. (2010). *The SIOP Model for Teaching Mathematics to English Learners*. Boston: Allyn & Bacon.
- Ellis, R., Y. Tanaka, & Yamazaki, A. (1994). Classroom Interaction, Comprehension and the Acquisition of Word Meanings. *Language Learning*, 44, 449–91.
- Genesee, F., Lindholm-Leary, K., Saunders, B., & Christian, D. (2006). *Educating English language learners: A synthesis of research evidence*. New York, NY: Cambridge University Press.
- Guarino, A. J., Echevarria, J., Short, D., Schick, J., Forbes, S., & Rueda, R. (2001). The Sheltered Instruction Observation Protocol. *Journal of Research in Education*, 11(1), 138–140.
- Harklau, L. (1994). ESL versus Mainstream Classes: Contrasting L2 Learning Environments, *TESOL QUARTERLY*, 28(2), 241-272. <http://dx.doi.org/10.2307/3587433>
- Hutchinson, M. (2013). Bridging the gap: Preservice teachers and their knowledge of working with English language learners. *TESOL Journal*, 4(1), 25–54, <http://dx.doi.org/10.1002/tesj.51>
- Jensen, E. (2005). *Teaching with the brain in mind* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Lantolf, J. P., & Pavlenko, A. (2001). “(S)econd (L)anguage (A)ctivity theory: understanding second language learners as a people”. In Breen, M. P. (ed.), *Learner contributions to language learning* (p. 141-171). Harlow: Longman.
- Lesaux, N., & Giva, E. (2008). Development of literacy in second-language learners. In D. August & T. Shanahan (Eds.), *Developing reading and writing in second-language learners: Lessons from the Report of the National Literacy Panel on Language-Minority Children and Youth*. New York: Routledge, the Center for Applied Linguistics, and the International Reading Association.
- Lyster, R. (2007). *Learning and teaching languages through content: A counterbalanced approach*. Philadelphia, PA: John Benjamin.
- Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that works*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McIntyre, E., Kyle, D., Chen, C., Muñoz, M., & Beldon, S. (2010). Teacher learning and ELL reading achievement in sheltered instruction classrooms: Linking professional development to student development, *Literacy Research and Instruction*, 49(4), 334-351. <http://dx.doi.org/10.2307/3587433>
- Pray, L., & Jiminez, R.(2009). Literacy and English language learners: What researchers and policy makers should know. *Educational Researcher*, 38(5), 380–385. <http://dx.doi.org/10.3102/0013189X09339353>
- Saunders, W., & Goldenberg, C. (2010). Research to Guide English Language Development Instruction. In California Department of Education (Eds). *Improving Education for English Learners: Research-Based Approaches*. Sacramento, CA: CDE Press.
- Olson, L. (2003, May 14). State debate exam policies for diplomas. *Education Week*, XXII(36), 1-22.
- Short, D. (2002). Language learning in sheltered social studies classes. *TESOL Journal*, 11(1), 18–24.
- Short, D. (2013). Training and sustaining effective teachers of sheltered instruction. *Theory Into Practice*, 52(2), 118-127. <http://dx.doi.org/10.1080/00405841.2013.770329>
- Short, D., Fidelman, C., & Louguit, M. (2012). Developing academic language in English language learners through sheltered instruction. *TESOL Quarterly*, 46(2), 333-360. <http://dx.doi.org/10.1002/tesq.20>

Short, D., Vogt, M. E., & Echevarria, J. (2010). *The SIOP Model for Teaching Science to English Learners*. Boston: Allyn & Bacon.

Short, D., Vogt, M. E., & Echevarria, J. (2010). *The SIOP Model for Teaching History-Social Studies to English Learners*. Boston: Allyn & Bacon.

Snow, C. E. & Biancarosa, G. (2003). Adolescent literacy and the achievement gap: What do we know and where do we go from here? Carnegie Corporation of New York Adolescent Literacy Funders Meeting Report.

Suarez-Orozco, C., Suarez-Orozco, M., & Todorova, I. (2008). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Harvard University Press.

Vaughn, S., Gersten, R., & Chard, D. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children*, 67, 99–114.

Vogt, M. E., Echevarria, J., & Short, D. (2010). *The SIOP Model for Teaching English-Language Arts to English Learners*. Boston: Allyn & Bacon.

Warren, S. R., Reeder, G. M., Nofle, J. T., Kaiser, G. J., & Jurchan-Rizzo, J. (2010). Preparing teachers to support English language learners. *TESOL Journal*, 1, 291–314. <http://dx.doi.org/10.5054/tj.2010.226826>

The Sheltered Instruction Observation Protocol (SIOP®)

Observer(s): _____ Teacher: _____
 Date: _____ School: _____
 Grade: _____ Class/Topic: _____
 ESL Level: _____ Lesson: Multi-day Single-day (circle one)

Total Points Possible: 120 (Subtract 4 points for each NA given: _____)

Total Points Earned: _____ Percentage Score: _____

Directions: Circle the number that best reflects what you observe in a sheltered lesson. You may give a score from 0-4 (or NA on selected items). Cite under "Comments" specific examples of the behaviors observed.

LESSON PREPARATION				
4	3	2	1	0
<p>1. Content objectives clearly defined, displayed, and reviewed with students</p> <p>Comments:</p>		<p>Content objectives for students implied</p>		<p>No clearly defined content objectives for students</p>
<p>2. Language objectives clearly defined, displayed, and reviewed with students</p> <p>Comments:</p>		<p>Language objectives for students implied</p>		<p>No clearly defined language objectives for students</p>
<p>3. Content concepts appropriate for age and educational background level of students</p> <p>Comments:</p>		<p>Content concepts somewhat appropriate for age and educational background level of students</p>		<p>Content concepts inappropriate for age and educational background level of students</p>
<p>4. Supplementary materials used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)</p>		<p>Some use of supplementary materials</p>		<p>No use of supplementary materials</p>

Figure 1.

Appendix A

The Sheltered Instruction Observation Protocol (SIOP) Model
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Lesson Preparation

1. **Content objectives** clearly defined, displayed and reviewed with students
2. **Language objectives** clearly defined, displayed and reviewed with students
3. **Content concepts** appropriate for age and educational background level of students
4. **Supplementary materials** used to a high degree, making the lesson clear and meaningful (e.g., computer programs, graphs, models, visuals)
5. **Adaptation of content** (e.g., text, assignment) to all levels of student proficiency
6. **Meaningful activities** that integrate lesson concepts (e.g., interviews, letter writing, simulations, models) with language practice opportunities for reading, writing, listening, and/or speaking

Building Background

7. **Concepts explicitly linked** to students' background experiences
8. **Links explicitly made** between past learning and new concepts
9. **Key vocabulary emphasized** (e.g., introduced, written, repeated, and highlighted for students to see)

Comprehensible Input

10. **Speech** appropriate for students' proficiency levels (e.g., slower rate, enunciation, and simple sentence structure for beginners)
11. **Clear explanation** of academic tasks
12. **A variety of techniques** used to make content concepts clear (e.g., modeling, visuals, hands-on activities, demonstrations, gestures, body language)

Strategies

13. Ample opportunities provided for students to use **learning strategies**
14. **Scaffolding techniques** consistently used, assisting and supporting student understanding (e.g., think-alouds)
15. A variety of **questions or tasks that promote higher-order thinking skills** (e.g., literal, analytical, and interpretive questions)

Interaction

16. Frequent opportunities for **interaction** and discussion between teacher / student and among students, which encourage elaborated responses about lesson concepts
17. **Grouping configurations** support language and content objectives of the lesson
18. Sufficient **wait time for student responses** consistently provided
19. Ample opportunities for students to **clarify key concepts in L1** as needed with aide, peer, or L1 text

Practice & Application

20. **Hands-on materials and / or manipulatives** provided for students to practice using new content knowledge
21. Activities provided for students to **apply content and language knowledge** in the classroom
22. Activities integrate all **language skills** (i.e., reading, writing, listening, and speaking)

Lesson Delivery

23. **Content objectives** clearly supported by lesson delivery
24. **Language objectives** clearly supported by lesson delivery
25. **Students engaged** approximately 90% to 100% of the period
26. **Pacing** of the lesson appropriate to students' ability levels

Review & Assessment

27. Comprehensive **review of key vocabulary**
28. Comprehensive **review of key content concepts**
29. Regular **feedback** provided to students on their output (e.g., language, content, work)
30. **Assessment of student comprehension and learning** of all lesson objectives (e.g., spot checking, group response) throughout the lesson



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