

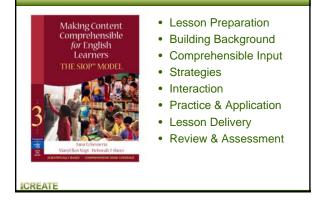


# SIOP Model: CREATE Findings and Future Directions

# Emphasizing Oral Language

Jana Echevarria & Cara Richards California State University, Long Beach

#### The SIOP Model (Echevarria, Vogt, & Short, 2008)



#### 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 the age and educational background levels of students
- 4. Supplementary materials used to a high degree, making the lesson clear and meaningful
- 5. Adaptation of content to all levels of student proficiency
- 6. Meaningful activities that integrate lesson concepts with language practice opportunities for reading, writing, listening and/or speaking

#### Sample Language Objectives

#### Students will:

•Use complete sentences to summarize reading, using sentence frames.

•Share out answers from vocabulary handout.

•Read and discuss the structures in bacteria cells.

•Formulate a question response when provided with the corresponding answer in Jeopardy.

CREATE

#### **Building Background**

- Concepts explicitly linked to students' background experiences
- Links explicitly made between past learning and new concepts
- Key vocabulary emphasized

CREATE

#### Comprehensible Input

- Speech appropriate for students' proficiency level
- Clear explanation of academic tasks
- A variety of techniques used to make content concepts comprehensible

CREATE

#### Strategies

- Ample opportunities provided for students to use learning strategies
- Scaffolding techniques consistently used, assisting and supporting student understanding
- A variety of questions or tasks that promote higher-order thinking skills

CREATE

#### Interaction

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

CREATE

# Practice and 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)

CREATE

# 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 the students' ability levels

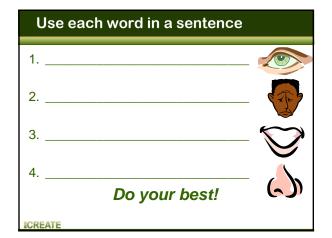
CREATE

#### **Review and Assessment**

- 27. Comprehensive review of key vocabulary
- 28. Comprehensive review of key content concepts
- 29. Regular feedback provided to students on their output
- 30. Assessment of student comprehension and learning of all lesson objectives throughout the lesson

CREATE

# Developing Oral Language How much practice is necessary?



#### **Professional Development**

#### • Summer Workshop

- 2 days SIOP training-2<sup>nd</sup> language acquisition & 8 components
- $-\frac{1}{2}$  day introduction to lessons and materials

#### Coaching

- 5 times over the 8 weeks during "intervention"
- Pre-conference, debriefing with written feedback
- Coaches reviewed teacher notes

CREATE

		1	
	Credential Area	Years of teaching Experience	EL Certificate
1	Science	15+	Yes
2	Science	11-15	Yes
3	Science	11-15	Yes
4	Science	11-15	Yes
5	Science	6-10	Yes
5	Science	6-10	Yes
7	Intern Science	3-5	No
8	Health	<1yr	No

Teacher Performance				
	Teacher	Percent on SIOP		
	1	85.30%		
	2-Teacher A	85.20%		
	3	82.75%		
	4	77.80%		
	5	66.33%		
	6	65.80%		
	7-Teacher B	62.80%		
	8	56.25%		
CREATE				

#### **Developing Student Oral Language**

Transcripts (3 minutes of instructional time)

- Teacher A:
  - Teacher words=106 words
  - Student words=16
  - Novice teacher: Coaching on incorporating peer interaction for practicing oral language skills
- Teacher B:
  - Teacher words=233 words
  - Students words=0

CREATE

# So what does it mean for students?

- The higher the teacher implementation of practices reflected in the SIOP Model, the larger the student gains on assessments.
- Fidelity to the model is critical for providing language learning opportunities for students.

CREATE

# **Current Study and Future Directions**

- Year 4 Increase quality and duration of PD
- Year 5 -Integrated model SIOP as organizing framework for research
  - Focus PD on specific components
  - Specific content interventions
    - Word Generation
    - Science
    - Social studies

CREATE

#### **SIOP Professional Development**

Jana Echevarria & Cara Richards California State University, Long Beach

Excerpted from:

Echevarria, J., Richards, C., Pham, V. & Ratleff, P. (2009) *Did they get it? The role of fidelity in improving teaching for English learners*. Manuscript submitted for publication.

#### Abstract

Use of research-based practices for improving content area literacy of English learners is important both because of their growing numbers and their overall poor academic performance. However, how do we ensure that teachers are implementing proven methods with fidelity? In the present study, we show the direct relationship between teachers' level of implementation of such practices on student achievement and suggest that ongoing, substantive professional development contributes to higher levels of implementation. Specifically, we report findings from research through the Center for Research on the Educational Achievement and Teaching of English language Learners (CREATE). In the study, teachers learned and implemented the SIOP (Sheltered Instruction Observation Protocol) Model of instruction to improve their students' language and content literacy development. How well teachers implemented the model resulted in relative improvement in student performance, underscoring the importance of teacher implementation of proven practices.

#### **SIOP Professional Development**

Teachers were randomly assigned to SIOP and control groups. The SIOP teachers participated in two and a half consecutive days of professional development in the SIOP Model where the teachers were introduced to the model, learned and practiced each component, were introduced to and provided with SIOP lesson plans for 4 science units of study, and became familiar with the materials and methods they would be using to teach science using the SIOP Model. In addition to the daily SIOP lesson plans, teachers were provided with pacing guides to ensure that all 8 teachers were teaching the same content at approximately the same time and gave pre- and post-test assessments with each unit at approximately the same time. The control

teachers used the same curriculum and were asked to follow the same pacing guide as the intervention teachers but taught using their typical classroom practices. They also gave the preand post-test assessments at approximately the same time as the intervention teachers. For the treatment teachers, follow up professional development was provided through in class coaching since coaching has been found to enhance implementation of SIOP practice (Echevarria, Short & Vogt, 2008; Kohler, Crilley, Shearer, & Good, 1997)

Although the lesson plans included a number of opportunities for students to interact with one another or work in small groups, sometimes the teachers omitted that part and used whole class instruction instead. Overall, most of the teachers did a disproportionate amount of talking which deprived students of important opportunities to practice using academic English in meaningful ways, which is a hallmark of the SIOP Model.

To make this point clearly, we have transcribed portions of the same lesson delivered by one of the teachers whose lesson on "cell theory" received the highest rating on the SIOP observation protocol and one with the lowest. In this lesson, the content objectives and language objectives were as follows:

#### Content Objectives - Students will:

- Explain the three basic concepts included in the cell theory
- Represent through pictures each of the 3 concepts of cell theory

#### Language Objectives - Students will:

- Define key terms using textbook.
- Paraphrase the cell theory

The teachers had been teaching a list of content vocabulary words and the last one was, *organism*. Notice how the two teachers' styles contrast in the amount of teacher talk compared to opportunity for student oral language practice.

TEACHER A: All right, last but certainly not least, 'organism.' Yes?

STUDENT: (unintelligble)

TEACHER A: What?

STUDENT: Life forms.

TEACHER A : Life forms. Excellent. Gabe?

STUDENT: Living things?

TEACHER A: *(she writes)* "Living things" slash "life forms." This time we're going to utilize the other strategy and it's called a Spider Map. As we go through this over the course of the next eight weeks, the course of the entire year, I want you to utilize these strategies that are best for you. You're going to have your own choice. Today is the introduction to your strategies. I want you to write the name, or the word, right in the center *(she writes)*. That's kind of the body of the spider. Out from the spider are legs. If you're going to be technical, there should probably be more legs. How many legs in a spider?

STUDENT: Eight.

STUDENT: Eight.

TEACHER A: The spider diagram, it asks for examples. Can you give me an example of what the definition is? The definition is *(she points)* "all living things and life forms." So, this is one of those questions that is really easy, so if you're really listening, you should be raising your hand. Raise your hand if you can tell me a living thing or a life form. Raise your hand if you can tell me a living thing or a life form.

STUDENTS: (various hands raised)

TEACHER A: Really? All right. Eric?

STUDENT: Humans.

TEACHER A: Humans! (she writes) Give me another one. David, in the back.

STUDENT: Raw food?

TEACHER A: What?

STUDENT: Raw food? I said "raw food."

TEACHER A: Raw... raw food. Okay, well, food, well, let's be specific. You mean --

STUDENT: Food that hasn't been cooked yet.

TEACHER A: Okay, give me any living thing or life form.

STUDENT: Parasites?

TEACHER A: Parasites (she writes). Roger.

STUDENT: Spinach.

TEACHER A: Kate?

STUDENT: Um, plants?

TEACHER A: Plants. I don't care, we'll say "spinach" *(she writes)*. And we were also talking about parasites. I want you to fill in the other three *(she points)*. You should be able to fill in three other living things.

In this transcript, there was a fairly even exchange between teacher talk and student talk. The most information Teacher A gave at one time was her introduction to the spider map graphic organizer (106 words). During the rest of this section, she encouraged student participation. As mentioned previously, the teacher had limited training in using the SIOP Model so although her lesson was more balanced than that of Teacher B, there were several opportunities for elaborated student responses that went unfulfilled.

The next teacher, Teacher B, dominated the lesson. In this segment, she used 223 words without any student utterances. Although she attempted to involve students by showing the spider map on the board and making reference to it, she had completed it herself, which didn't require thinking or participation on the students' part. Also notice how she gave a lot of information orally using vocabulary that was most likely unfamiliar to ELs without using techniques that make the content understandable for English learners.

TEACHER B: Our next word on the list is going to be *organism*. Okay, when you're ready, *organism* is our next word. *Organism* is simply just anything that's living, so *(she points to the board where she had written, a living thing)* I have "a living thing." "A living

thing." And we're trying to use different strategies, so the one that we haven't used yet is the Spider Map. You might have used this before in English class when you're doing, like, brainstorming of ideas and things like that. A lot of times you use, like, a Bubble Map or, what we call a Spider Map.

Okay so what we're going to do is we're going to write the word *organism* in the center of the map like this *(she points to board)*. And around the outside I just listed some things that are organisms, are living things. So just draw your map with the little strokes coming off the side.

Um, one example was plants. In the textbook we just looked at that picture of a giraffe eating leaves from a tree, right? So the leaves are plants, those are living things. Um, we looked at animals, and also going along with animals are, like, insects. All of those would be living things, so we would call them organisms. It's just kind of a fancy word for organism.

And that would be our last word for these two, uh, papers.

### The Sheltered Instruction Observation Protocol (SIOP) Model

#### **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 Ll 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

# **Professional Development Resources for Teaching English Learners**

#### The SIOP Model (www.siopinstitute.net):

- Echevarria, J., Vogt, M.E. & Short, D. (2010). *Making Content Comprehensible for Elementary English Learners: The SIOP<sup>®</sup> Model*. Boston: Pearson Allyn & Bacon.
- Echevarria, J., Vogt, M.E. & Short, D. (2010). *Making Content Comprehensible for Secondary English Learners: The SIOP<sup>®</sup> Model*. Boston: Pearson Allyn & Bacon.
- Echevarria, J. Short, D. & Vogt, M. (2008). *Implementing the SIOP<sup>®</sup> Model through Effective Professional Development and Coaching.* Boston: Pearson Allyn & Bacon.
- Echevarria, J., Vogt, M.E. & Short, D. (2008). *Making Content Comprehensible for English Learners: The SIOP<sup>®</sup> Model*, Third Edition. Boston: Pearson Allyn & Bacon.
- Echevarria, J., Vogt, M.E., & Short, D. (In press). *The SIOP Model for Teaching Mathematics to English Learners*. Boston: Pearson Allyn & Bacon.
- Short, D., Echevarria, J. & Vogt, M. (2008). *The SIOP<sup>®</sup> Model for Administrators*. Boston: Pearson Allyn & Bacon.
- Short, D., Vogt, M.E., & Echevarria, J. (In press). *The SIOP Model for Teaching Science to English Learners*. Boston: Pearson Allyn & Bacon.
- Short, D., Vogt, M.E., & Echevarria, J. (In press). *The SIOP Model for Teaching History-Social Studies to English Learners*. Boston: Pearson Allyn & Bacon.
- Vogt, M.E., & Echevarria, J. (2008). 99 Ideas and Activities for Teaching English Learners with the SIOP<sup>®</sup> Model. Boston: Pearson Allyn & Bacon.
- Vogt, M.E., Echevarria, J., & Short, D. (In press). *The SIOP Model for Teaching English-Language Arts to English Learners*. Boston: Pearson Allyn & Bacon.

#### **English Learners with Diverse Abilities:**

- Echevarria, J., & Hasbrouck, J. (2009). *Response to intervention and English learners* (CREATE Brief). Washington, DC: Center for Research on the Educational Achievement and Teaching of English Language Learners.
- Echevarria, J. (2009). The role of professional development in helping English learners with disabilities achieve high standards. *AccELLerate*?. 1 (3), pp.
- Echevarria, J. & Graves, A. (2007). *Sheltered Content Instruction: Teaching English Learners with Diverse Abilities, Third Edition.* Boston: Pearson Allyn & Bacon.
- Richards, C., & Leafstedt, J. (2010). *Early reading interventions: Strategies and methods for struggling readers*. Boston: Pearson Allyn & Bacon.