

## THE FORUM

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### *Shifting Attention Back to Students Within the Sheltered Instruction Observation Protocol*

**SHANNON M. DANIEL**

*Vanderbilt University  
Nashville, Tennessee, United States*

**LUKE CONLIN**

*Stanford University  
Stanford, California, United States*

The Sheltered Instruction Observation Protocol (SIOP) is increasingly used as an instructional framework to help elementary and secondary teachers support English language learners (ELLs). This useful tool has helped teachers gain the knowledge, skills, and dispositions they need to support ELLs learn subject-area content and skills while learning English, but the SIOP can still be improved to enhance teacher learning. Specifically, the authors of this study worry that the SIOP prompts teachers to focus on themselves rather than attending and responding to students' thinking, actions, and sense-making in the classroom. They provide three suggestions that could complement the current SIOP model: (1) additional features that help teachers attend and respond to students' contributions, (2) supplementary reflective prompts to help teachers consider how their instructional choices impact students, and (3) principles from successful professional development programs that support teachers' abilities to respond to students during moment-to-moment instructional interactions.

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■ Students face significant challenges for learning and achievement in classrooms where the language of instruction is different from their native language. These challenges contribute to sizable achievement gaps found internationally between students who are native speakers and those who are not proficient in the language of instruction, particularly among first and second generation immigrants (Schneeweis, 2011). Around the globe, educational policies aimed at supporting nonnative speakers have focused on reducing school segregation between language learners and native-language speakers, engaging students in learning subject-area skills and content and language learning simultaneously, and increasing professional development to equip teachers with intercultural competence and skills to work with multilingual learners (Nusche, 2009).

In the United States, policies are shifting away from offering supplemental English language classes or native-language content instruction for English language learners (ELLs) and toward a *sheltered instruction* approach in which language supports are integrated into English-language content classrooms (Harper & de Jong, 2009; Janzen, 2008; Li, 2013). Undergirded by theories of second language acquisition that ELLs should have a low-anxiety environment and access to comprehensible input (Krashen, 1985), sheltered instruction emerged as a popular means of content-based instruction for language learners in the United States in the 1980s and 1990s. Earlier conceptualizations of sheltered instruction aimed to protect ELLs from the anxiety of regular academic courses through temporarily separating them from native-English-speaking peers until they gained enough English proficiency to join mainstream content classes (Fritzen, 2011). Currently, as political shifts lead to ELLs' rapid immersion into mainstream classrooms, sheltered instruction is often interpreted as a means of making grade-level academic content accessible to ELLs through the instructional application of second language acquisition theories.

## THE SIOP MODEL

What is perhaps the most influential model of sheltered instruction—the Sheltered Instruction Observation Protocol (SIOP)—was developed by researchers at the Center for Research on Education, Diversity, and Excellence (Short, 2013; Short & Echevarria, 1999). The model was originally developed as a tool for researchers to evaluate lessons, based on a 30-item instructional framework of best practices for sheltered instruction (Echevarria, Vogt, & Short, 2008; Short & Echevarria, 1999). From its inception the framework was

shared with collaborating teachers, who then started using it as a checklist to help plan their lessons and to reflect on them afterwards (Short & Echevarria, 1999). Subsequently, professional development interventions based on the SIOP model have incorporated multiple uses of the protocol, such as using the model as a tool for planning, observation, and reflection.

The goal of the SIOP model is to prepare teachers in helping ELLs to navigate the dual challenges of learning subject-area skills and content and learning language through building students' background knowledge, making content comprehensible, and attending to other key components of sheltered instruction. The eight components of SIOP are (Echevarria et al., 2008):

1. Preparing lessons with content and language objectives and meaningful activities and materials.
2. Building background knowledge of students through linking concepts with prior knowledge and emphasizing key vocabulary.
3. Providing comprehensible input with clear speech and a variety of techniques.
4. Using strategies to scaffold and question learners and get them to practice learning strategies.
5. Providing opportunities for student interaction.
6. Developing manipulatives and activities for students to practice and apply content and language knowledge.
7. Delivering the objective-aligned lesson with appropriate pacing and high student engagement.
8. Reviewing key concepts and vocabulary and assessing student comprehension.

The SIOP model has led to positive results in language and literacy for ELLs in K–12 schools (Echevarria, Richards-Tutor, Chinn, & Ratleff, 2011; Short, Echevarria, & Richards-Tutor, 2011; Short, Fidelman, & Louguit, 2012). This improved student performance after SIOP implementation has increased its popularity in teacher training in the United States and internationally (Pearson Education, 2012).<sup>1</sup>

Despite its success, there are hints that the model may be interpreted in ways that were not intended by its authors. For instance, Settlage, Madsen, and Rustad (2005) reported that developing teachers interpreted the model to encourage frontloading of vocabulary at the beginning of a lesson, which they found created tension with

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<sup>1</sup> Pearson states that SIOP is used internationally, but we were unable to find any peer-reviewed, empirical studies of SIOP implementation in countries other than the United States.

teaching science through inquiry. Echevarria (2005) countered that “the components of SIOP are often misinterpreted as a step-by-step process,” and that vocabulary instruction should come “where it makes the most sense” (p. 61). In her response, however, she does not consider what may be leading to misinterpretations of the model. Echevarria et al. (2011) also describe a wide range of fidelity of SIOP implementation, which included some traditional teacher-dominated instruction.

One quasi-experimental study compared a group of ELLs whose teachers participated in SIOP training versus a control group whose teachers did not. Results showed that ELLs with SIOP-trained teachers developed greater oral proficiency than the control group but that the two groups of ELLs earned similar reading proficiency levels (Short et al., 2012). The authors dedicate a significant portion of their article to discussing reasons for the “small to medium effect sizes” or why reading proficiency scores of ELLs in SIOP classrooms might not be greater (Short et al., 2012, p. 353). The authors speculate about external factors that may have affected fidelity, such as longer professional development or more intensive coaching (Echevarria et al., 2011; Short et al., 2012). The creators of SIOP, however, do not consider anything about the model itself when suggesting causes for the teacher-centered practices they observed.

In this article, we suggest one reason why SIOP might lend itself to misinterpretation: the model focuses heavily on the teachers’ actions, rather than on the students’ ideas. We do not believe this to be the intention of the SIOP authors, who ultimately want the model to improve subject-area instruction for nonnative speakers of English by considering their particular needs. Rather, the focus on the teachers’ actions appears to be an unintended consequence of how the model was originated, that is, as a checklist for evaluating teachers’ lesson delivery. These mixed messages can lead to misinterpretations by teachers, teacher educators of preservice and in-service teachers, and school district administrators alike, which in turn can lead to missed opportunities to leverage students’ rich cultural, conceptual, and linguistic resources.

As the SIOP model continues to grow in popularity both in the United States and internationally, we believe our suggestion provides an important opportunity to reflect on the model and improve it. To that end, we recommend the SIOP be supplemented with an emphasis on getting teachers to attend, notice, and respond to student thinking in K–12 classrooms.

In what follows, we provide an analysis of the mixed messages SIOP may be sending, share an example of the SIOP’s use, and identify features that we think might enhance this highly influential model.

## SIOP'S MIXED MESSAGE

The creators of the SIOP consider the model as a means of guiding teachers toward supporting students who are learning English as an additional language by responding to their particular needs and strengths. But of the 30 features of the SIOP, 25 focus solely on teacher actions (e.g., *clear explanation of academic tasks, scaffolding techniques consistently used, language objectives clearly supported by lesson delivery*<sup>2</sup>). Only 3 of the 30 features focus on what *students* do in the classroom (e.g., *ample opportunities for students to clarify key concepts in L1 as needed with aide, peer, or L1 text and students engaged approximately 90% to 100% of the time*).

While some features of the SIOP, such as those related to the strategies, interaction, and practice and application components certainly prompt teachers to consider students' interactions with peers and the teacher, the authors nevertheless prompt teachers to think of themselves more than they encourage teachers to observe students' actions. For example, the SIOP guides teachers to plan student grouping configurations, provide opportunities for interaction, and give wait time (Items 16, 17, 18 of SIOP), but successfully accomplishing these tasks does not necessitate meaningful learning occurs. Rather, "student learning depends on the *nature* and *quality* of student interactions" (Klingner & Vaughn, 2000, p. 72, emphasis added).

Given this disproportionate focus on teacher actions, well-intentioned teachers (and perhaps facilitators of professional development) may unwittingly enact *teacher-centered* practices in their instruction when they engage in SIOP-driven professional development, use the SIOP for instruction, and reflect on their practice using the model. Teacher-centered instruction, in our view, is when teachers treat learning as a mostly passive act in which students gain information from the teacher rather than co-constructing new knowledge together. Teacher-centered practices can be manifested not only in transmission-based approaches to instruction but also in teachers' prioritization of their own actions and the elicitation of "correct" knowledge from students instead of attention and uptake of the substance of students' thinking (Coffey, Hammer, Levin, & Grant, 2011; Gill, Ashton, & Algina, 2004; Hiebert et al., 1996).

As Coffey and colleagues (2011) argue, "the focus on instructional strategies can undermine everybody's attention to the *very ideas those strategies were supposed to make visible*" (p. 1120). Instead, Coffey et al. posit that we might do well to focus teachers' efforts on "adopting

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<sup>2</sup> For a complete list of the 30 features of the SIOP model, see Appendix A in Echevarría et al. (2008, pp. 222–229).

stances of ‘respecting students as thinkers’” instead of drawing teachers to “focus on particular, discrete strategies” (p. 1124). Attending to students’ thinking can then enable teachers to help students develop their understandings (Levin, Hammer, & Coffey, 2009), form personal relationships with students (Hawkins, 2002; Lieberman & Miller, 1992), lower the affective filter (Krashen, 1985), show care and increase rapport (Noddings, 1984), and ultimately expand instructional possibilities (Lieberman, 1995).

Our main concern is that, despite the intentions of the SIOP developers, the model inadvertently places the emphasis on teacher actions, rather than on student thinking. To instantiate our concerns, we next describe how a preservice teacher implemented the SIOP to demonstrate how teachers can and do take up the SIOP approach.

## **AN EXAMPLE OF HOW ONE PRESERVICE TEACHER USED THE SIOP**

Many teachers use the SIOP checklist (e.g., Echevarria et al., 2008, pp. 228–229) for quick reflection on whether or not they considered each feature. As Short (2013) mentions, the checklist can serve as a tool for teachers to “self-assess their lesson delivery” (p. 125). To illustrate this use of the SIOP, we provide a brief example of how the SIOP helped one prospective elementary teacher, Becca (names are pseudonyms), to improve her lesson plans but limited her engagement in deeper reflection of students’ perspectives. At the time of data collection, Becca was a prospective teacher conducting her year-long student teaching in a class with a majority of ELLs during her Master’s with Certification in Elementary Education program. Becca was a participant in the first author’s dissertation study of teacher candidates’ learning in the preservice program in which neither of the authors were official participants. As a preservice teacher, Becca was in the process of learning ambitious practice. Her learning was impacted by the structures, supports, and communities of her overall program. While we recognize that Becca was still developing as an educator, we also consider preservice programs to be spaces in which teachers can learn to respond to students (Levin et al., 2009) with a “focus on the relationship between teaching practice and student thinking” (Thompson, Windschitl, & Braaten, 2013, p. 609).<sup>3</sup> We do not make claims that this

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<sup>3</sup> While some context sets up this example, describing or analyzing candidates’ overall learning opportunities in the program is beyond the scope of this article. For further analysis, see Daniel (in press) and Daniel and Percy (2014). This description of Becca’s teacher learning is limited to focus specifically on how she used the SIOP; Becca’s stalwart efforts to improve instruction continued beyond this snapshot of her learning.

example is generalizable; nevertheless, we find that this example illustrates teachers' potential interpretation of the teacher-centeredness of the SIOP when they use the checklist to self-assess and reflect on how they support ELLs in grade-level classrooms.

In her second-grade science lesson with the objective of having students identify renewable and nonrenewable resources, Becca began the lesson by asking students to write in their journals for an ungraded warm-up activity. Becca explained afterward that she did so to "see what they already knew, to see where they were on recycling, since they should be familiar and they've heard plenty about it." By activating students' knowledge about the lesson topic, Becca was linking concepts to students' background knowledge and experiences (SIOP Items 7 and 8). After students had a few moments to write, Becca asked, "What's recycling? Who can tell me what they wrote?" to which five students responded with comments such as "to use the same thing to make a new thing." Becca responded to each student with an evaluation such as "I like that," or "I like how we remember that." After about 2 min of students providing brief responses followed by Becca's evaluations, Becca transitioned into preteaching vocabulary by saying, "very good. So that leads us into our vocabulary."

During what Becca called "the main presentation" of the lesson, she showed images such as Figure 1 to make input comprehensible for ELLs (Item 12 of the SIOP checklist). In describing the lesson afterward, Becca explained, "I made sure I did a lot of visuals to help the ELL students," but she lamented "I was hoping the visuals would help Luis [an ELL in her class], but he's at the point where I don't think he pays attention at all, because he just is so far gone. He just looks at you and shakes his head" (Daniel, 2012).

Becca also appropriately attempted to emphasize vocabulary (Item 9 in the SIOP) by showing the word *renewable* and drawing students' attention to morphology with her question, "What words do you already know within this word?" After the lesson, Becca commented, "The students saw the word *new*, and I got a little bit stuck—how does

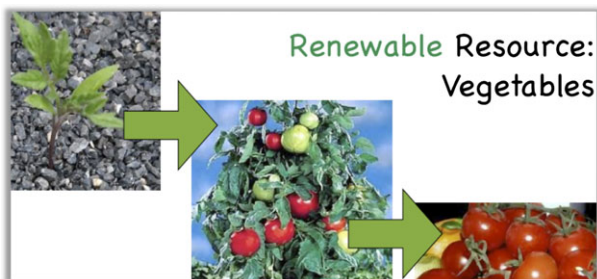


FIGURE 1. Becca's visual.



*new* fit in there really? It's more just *renew*. I couldn't think of a way, so I just went on to tell them what renewable is."

A month later, the first author observed Becca teach and conversed with her afterwards. Becca continued to use the SIOP checklist to help structure her instruction. While she pointed to items such as scaffolding, grouping, and strategies on the SIOP checklist in a SIOP book, Becca explained, "The SIOP model is so great... Having something like this—that you actually have to make sure you hit certain things with the lesson, and you're more aware of the fact that you're hitting them—instead of just planning them in your head—is definitely very helpful for classroom teachers" (Daniel, 2012).

In Becca's case, the SIOP helped her to become intentional, explicit, and mindful of her actions in lesson planning and her delivery of instruction. Both Becca and the first author noticed Becca's increased awareness of supporting students learning English as an additional language through incorporating hands-on activities (Item 20), using visuals (Item 12), and letting students interact (Item 16). However, Becca's reflection on how to support ELLs in her class seemed to focus primarily on formulaic changes to her lesson planning, through changing her behaviors in ways that enabled her to check these items off of her lesson-planning list. Although the SIOP authors do not intend SIOP to be a "step-by-step approach" (Short et al., 2012, p. 337), teachers such as Becca seem to take it up that way, which can in turn create tension between the SIOP and certain teaching approaches such as scientific inquiry (cf. Settlage et al., 2005).

In this case, Becca made a conscious effort to further support ELLs in overcoming linguistic demands to access the content. We would argue, however, that simply including visuals is insufficient; teachers must consider *how* they use visuals to support ELLs in overcoming linguistic demands and *why* students did or did not actually comprehend the input. With Figure 1, for instance, Luis could have reasonably surmised that "renewable" means "tomato plant" because there were no arrows, symbols, or clear explanations to help him recognize the meanings of this visual.

SIOP certainly helped Becca gain awareness of supporting students' academic vocabulary growth, but it neither provided explicit support for her to anticipate the specifics of how students might respond nor how she could build upon students' ideas to develop their knowledge within the context of the lesson. Without this support, she had difficulties attending to and building on students' ideas about the content and language of recycling and renewable energy. In the warm-up activity she engaged in the classic initiation-response-evaluation interaction



pattern (Mehan, 1979) instead of revoicing and building upon their ideas. In helping her students make sense of the word *renewable*, she got stuck because she did not anticipate what her students' responses would be or how to connect them to the desired language goal.

Despite these issues, Becca's approach to building students' background knowledge mimics closely the SIOP authors' explanations and examples. In their section on building background knowledge, the authors write that eliciting students' ideas may be unproductive if "some ELs have little or no prior knowledge about a content topic" (Echevarria et al., 2008, p. 58). As such, they recommend that teachers read books to students, preteach vocabulary, ask students to sort words, or use other activities to build ELLs' background. The authors also give an example of a teacher guiding a rich discussion with students to help them identify themes in literature, but their example stops at the *teacher's* questioning rather than describing what the students contributed and how the teacher responded and built upon their ideas. Similarly, instead of following up on students' thinking in this lesson, Becca used students' comments as a transition into her preplanned vocabulary instruction.

As teacher educators and researchers, we would have liked to see Becca consider her students' actions and interactions in class more deeply than simply considering that, even though she planned with the SIOP, some students were "too far gone" to be helped. In this case, using the SIOP checklist did not lead her to consider students' perspectives, question her assumptions about their understandings, bring in their linguistic and conceptual resources or consider their related needs, or reflect on ways she could enhance her clarity during her lessons. To become a master teacher, this candidate still needed to learn about and develop deep relationships with her students, plan ways to make space for student ideas, anticipate student contributions, and attend and respond to student contributions in moment-to-moment instruction. Becca likely developed her skills more toward and beyond the end of her preservice program, but we use this example to show that the SIOP led her to focus on her own actions rather than students' actions. As Levin et al. (2009) warn, "a teacher who is not predisposed to think of . . . teaching in terms of attention to student thinking will not necessarily reconsider his or her practice on his or her own without outside support" (p. 152). In the next section, we show how supplements to the SIOP framework could afford teachers this additional support to shift their attention to students' contributions.

## SUGGESTIONS FOR THE SIOP

While the issues Becca encountered support the idea that SIOP implementation must be nested within a teacher education or professional development program that emphasizes the dispositions of learning about, affirming, and leveraging students' backgrounds,<sup>4</sup> we also view this case as pointing toward an opportunity to reconsider the framework itself. To shift the emphasis off of the teachers' actions, we suggest including items in the 30-item checklist that focus on student ideas. Such change would hopefully encourage teachers to make space for and build upon their students' ideas in a way that may currently be overshadowed by a focus on their own teaching moves. In what follows, we provide a rationale and examples for this recommendation.

### Refining the Checklist: Attending to Students' Ideas

While the SIOP protocol can help teachers think about how they support ELLs in overcoming linguistic demands such as understanding content-specific vocabulary through teacher scaffolding, these linguistic supports should not preclude or distract teachers from attending and responding to students' sense-making in the moment. Effective scaffolding includes not only curricular structures that occur in lesson planning and delivery, but also dynamic processes (Walqui, 2006) and contingency, which include "responsive, tailored, adjusted, differentiated, titrated, or calibrated support" (Van de Pol, Volman, & Beishuizen, 2010, p. 274). To support students, teachers must respond to student thinking (Levin et al., 2009) and adapt their instruction (Van de Pol et al., 2010) based on the ever-changing, fluid nature of students' demonstrated strengths and needs. We refer Wells and Arauz's (2006) argument to the considerations of teachers of ELLs: "what matters for the quality of the interaction [in classroom discourse] is not so much how the sequence starts, but *how it develops*, and this ... depends critically on the teacher's choice of roles and on *how he or she utilizes the follow-up move[s]*" (p. 421, emphasis added). The following possible additions to the SIOP could help shift attention to student thinking and doing:

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<sup>4</sup>We agree with Echevarria et al. (2011) that processes of professional development among teachers implementing the SIOP can affect teacher practices, and so we question the value of short-term *distance delivery* and *one-week-long SIOP training* that are offered (Echevarria, Short, & Vogt, 2007), given these potential misinterpretations. However, evaluating professional development models is beyond the scope of this article.

- Anticipate students’ contributions (including questions and ideas) to classroom discussion, and consider a menu of possible responses and next moves to promote and expand upon student thinking and encourage elaborative discussion.
- Elicit students’ input, feedback, and questions, and take time to *respond* to students’ thinking appropriately.
  - Push students to respond to and build upon one another’s comments.
  - Revoice student comments to build disciplinary language.
  - Ask follow-up questions that help students elaborate their descriptions of their conceptual understandings and develop disciplinary skills in seeking out, developing, and refining individual and collective knowledge.
  - Press students for explanations, persuasions, argumentation, and evidence-based rationale.<sup>5</sup>
- Observe students’ reactions to comprehensible input, reflect upon whether or not input is indeed comprehensible, and be ready to refine your instruction as needed.
- Observe students interacting with one another and consider when and how students foster one another’s disciplinary engagement<sup>6</sup> with simultaneous content and language learning and the ways in which teachers can further promote engagement during such interactions.

Adding these features to the SIOP checklist could help teachers support multilingual students in learning content, disciplinary processes, and language, because “knowledge of children . . . is crucial to teaching for understanding” (D. B. Ball, 1994, p. 4).

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<sup>5</sup> Researchers across the disciplines of science (Moorthy et al., 2014; Sandoval & Reiser, 2004), mathematics (Staples, 2014), social studies, and literacy (Boyd, 2012; Nystrand & Gamoran, 1991) have identified and analyzed teacher moves that demonstrate attending to and leveraging students’ contributions in class, but a full literature review is beyond our scope. Suffice to say, we see much potential in collaborative educational research across disciplines of TESOL/educational linguistics, mathematics, sciences, literature, and social education.

<sup>6</sup> Here, we use disciplinary engagement to refer to what students are doing that align with the practices of a discipline. Examples of disciplinary engagement among students can include “recognizing a confusion, making a new connection among ideas, or designing something to satisfy a goal” (Engle & Conant, 2002, p. 403). Often, literature regarding the instruction of ELLs focuses on learning both language and content at the same time. We argue, though, that learning the *processes* of a discipline, such as asking questions about a scientific phenomenon, is also important learning that takes places as students learn to become scientists, writers, editors, or engineers. In school, then, ELLs engage in learning subject-specific disciplinary processes, content, and language.

## Supplementing the SIOP's Reflective Framework

Along with supplementing the SIOP with items that push teachers to respond to students' contributions, some additional questions might spark more generative reflection among teachers. When a teacher engages in generative learning, she "connect[s] her personal and professional knowledge *with the knowledge she gains from her students* to produce knowledge that is useful ... *in pedagogical problem solving and in meeting the educational needs of her students*" (A. F. Ball, 2009, p. 47, emphasis added). Regarding SIOP reflection, Short (2013) suggests, "teachers may use it to self-assess their lesson delivery" (p. 125) and "teachers may evaluate student work" (p. 122). We stress, however, that teachers must reflect upon student work and students' discursive, in-class contributions. Because teacher reflection prompted by and with instructional coaches is considered an integral part of effective SIOP implementation with high fidelity (Echevarria et al., 2007), we have developed potential post-lesson reflection prompts to shift teachers' attention toward students' contributions in relation to the current 30-item SIOP model:

- How did my students show me that I made input comprehensible (Items 10, 11, 12) for them?
- When I gave students opportunities to interact during this lesson (Item 16), how rich were their interactions? How did the opportunities for interaction engage students in productive disciplinary engagement and negotiation of meaning? How did students bring their linguistic, cognitive, and social resources into their interactions to support one another's understandings?
  - How could I have built upon students' resources further? Could students have elaborated more while problem solving?
- How did my students use the supplementary materials I provided (Item 4) to enhance their understandings (of content and language) and to practice new skills?
- In this lesson, *I emphasized key vocabulary* (e.g., introduced, wrote, repeated, and highlighted) (Item 9), but how did my *students apply* this vocabulary in personalized and content-related contexts?
- *I think* I asked questions that challenged students to use higher-order thinking skills (Item 15), but how did I see and

hear *students apply* higher-order thinking skills in our time together?

- *I assume* I have given students regular feedback (Item 29), but did students interpret my comments as purposeful feedback? How did students respond to my feedback? How do I know if my feedback increased their understandings and abilities?
- I provided instructional scaffolds (Item 14) in this lesson. Based on what students produced and said, could I have challenged them more and scaffolded less or vice versa?

Moving teachers beyond their own actions and into considerations of children's perceptions of content and school practices can help teachers engage in deeper and more generative learning, which in turn can enhance students' progress in achieving academically and developing their linguistic repertoires.

## **Borrowing Lessons From Teacher Education Projects Across the Disciplines**

We have suggested that the SIOP items may be misinterpreted as being teacher-centric and recommended adding SIOP items that focus more on the students. But as Echevarria (2005) notes, there is always the chance of an instructional model being misinterpreted, and this applies to our suggestions as well. What we are proposing, like the rest of the SIOP, takes a lot of training and support. The question remains what sort of training and support could help teachers attend to and build upon their students' ideas in-the-moment in the ways we suggest.<sup>7</sup> To address this question, we briefly discuss potential barriers to attending to student thinking, and distill several principles from successful professional development projects that have helped teachers learn to attend to and build upon students' ideas, including in classrooms where the majority of the students are ELLs.

One barrier to attending to student thinking in the moment is the tendency to attend too closely for whether the idea or the student's way of expressing it is "correct," which can shut down the students' sensemaking processes. To counteract this difficulty, professional development projects can include a component that gives teachers opportunities to engage in complex problems within their discipline, where *their* ideas are valued and built upon (Gupta, Elby, & Conlin, 2014; Hammer, Goldberg, & Fargason, 2012). For example, Gupta

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<sup>7</sup> Thank you to an anonymous reviewer for posing this insightful question.

et al. (2014) describe the case of “Lynn,” a teacher in their summer workshop. During an inquiry into motion, Lynn used the “wrong” ontology of gravity in making sense of why heavier objects fall at the same acceleration as lighter ones. Instead of correcting her, the instructors worked to understand Lynn’s idea and supported her in building it into the essentials of Galileo’s original argument. A year later, she described the process as being “probably one of the most exhilarating intellectual moments I’ve ever had in my life. . . . I started using it in [my] classroom” (p. 17). By attending to what was productive in Lynn’s ideas, the professional developers allowed her to experience the joy of figuring things out for herself, which inspired her to bring that joy to her own students by valuing their ideas and trusting their sensemaking capabilities.

For the untrained eye, it can be difficult to see the productive aspects of students’ thinking in real time, let alone decide how to respond (Kennedy, 1999). Video-based professional development in which teachers can “slow down and study the details of student thinking as it arises in instruction” is a valuable approach to help teachers develop the skills of “focusing on student thinking” (Van Es, Tunney, Goldsmith, & Seago, 2014, p. 353). Several successful professional development projects have used video recordings of classroom interactions to support teachers’ noticing and responding to student ideas (e.g., Gupta et al., 2014; Hammer et al., 2012; Van Es et al., 2014). With the benefits of being able to pause and rewind the video, teachers can focus on certain interactions, offer interpretations of students’ contributions, debate explanations of why a student may have made a certain comment, and discuss what is potentially productive in students’ thinking (Van Es et al., 2014). SIOP has several exemplar videos, and hopefully professional development materials and journals will use emerging technologies for the inclusion of more classroom video data. Still, video-based professional development is not immune to the risk of overattending to the teachers’ actions. To help teachers notice student contributions, teacher educators such as those we cite here can support teachers in focusing on the students’ moves.

A third obstacle to increasing focus on students’ thinking is that it can make instruction less predictable. To uptake students’ contributions productively, teachers may need to challenge their view of curriculum as a preset, narrow pathway towards content targets. Hammer et al. (2012) describe how such a reframing can still do justice to content goals while being more authentic to disciplinary practices. In a school where 90% of the students were ELLs, a teacher implemented a unit on energy that was responsive to the students’ ideas and was driven by their investigations. Although an initial concern might be that teaching responsively could hinder students’ access to rapidly paced,

standards-based content and skills, Hammer et al. (2012) suggest that when teachers act as “responsive guides for student exploration ... the students eventually make their way to key landmarks” (p. 69).<sup>8</sup> When teachers use SIOP *and* presume that children have rich linguistic, conceptual, and cultural resources and the abilities to make sense of new content and language, teachers can uptake and build upon students’ contributions more aptly and frequently during instruction. Developing a responsive curriculum that is built around a “menu of possibilities” that allow for teachers “to listen carefully to the substance of students’ ideas, assess the merits of those ideas, and make next-move decisions accordingly” (Hammer et al., 2012, p. 68) can help teachers who are learning with the SIOP.

We have distilled three lessons from professional development projects that have successfully supported teachers’ attention to student thinking: (1) engage teachers in reasoning over complex problems in their disciplines, (2) use collaborative video analysis to support teachers in a focus on students’ ideas, and (3) help teachers to reframe their epistemological views of curriculum. Using these guiding principles, teacher educators can better support teachers in enacting the types of in-the-moment attention and valuing of students’ contributions during instruction. Borrowing these lessons from other teacher education and professional development programs, adding SIOP items focused on student thinking and building opportunities for teachers to reflect on students’ contributions during SIOP-structured instruction might help practitioners to avoid misinterpreting SIOP as being a teacher-centered, step-by-step process.

## CONCLUSION

The aim of SIOP is to support English language learners’ subject matter learning by being responsive to their particular needs and strengths. Despite these intentions and the promising results of SIOP implementation, this is not how the model always plays out in practice. Although the SIOP authors recognize that teachers often misinterpret the model to be more teacher-centered than intended, they have not yet examined how the model itself might be refined to counter this misreading. Instead, they point only to environmental factors that might diminish fidelity of implementation. To maintain high fidelity of implementation, they advise that SIOP training be extensive, and

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<sup>8</sup> In fact, this teacher taught responsively for the remainder of the school year, and students in her class outpaced the rest of the school on the district assessments (Goldberg & Fargason, personal communication).



that teachers might need more support. We are proposing that some of this support should come from the model itself. Including items that emphasize the ways in which teachers can attend and respond to students and reflect on multiple perspectives in future editions of the SIOP could encourage teachers to not only be mindful of the ways they can improve their instruction relative to a general framework, but also help them to consider how their lesson adaptations actually affect *students*. In addition, we provide prompts to support teachers (and perhaps their coaches or teacher educators) to shift their attention back to students within the current 30-item SIOP model.

We appreciate the authors' motivation to create the SIOP, and we have used the SIOP to enhance our own teacher education practices. Based on our experiences as teacher educators and researchers, however, we worry that preservice and in-service teachers too often share an experience similar to that of Becca, the preservice teacher who changed *her* actions without reflecting deeply on her *students'* perspectives. We applaud and thank the authors of the SIOP for developing a tool that teachers, teacher educators, and district administrators use to enhance their abilities to support ELLs, but we also suggest that with the increasing influence of SIOP comes greater responsibility to ensure it truly incorporates *students'* rich resources and knowledge—a key tenet of culturally responsive pedagogy (Ladson-Billings, 1995; Villegas & Lucas, 2002). This may be the intent of the SIOP authors, but the many misinterpretations of the model indicate that a more explicit focus on the students is called for. While our recommendations are insufficient, we at least hope the authors—or teacher educators, teachers, and administrators who use SIOP—will consider these and other ways to draw attention back to students.

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## THE AUTHORS

Shannon M. Daniel is a lecturer specializing in language, literacy, and culture in the Department of Teaching and Learning in Peabody College, Vanderbilt University. She investigates how teachers navigate tensions between over-scaffolding and contingently scaffolding literacy tasks for emergent bilingual students/English language learners (ELLs), how emergent bilingual students support one another's

literacy development through interacting in schools, and how elementary teachers learn during their ELL endorsement programs.

Luke Conlin is a postdoctoral scholar in the Graduate School of Education at Stanford University. He studies the ways students engage in scientific inquiry, with a focus on student reasoning, and how that reasoning is influenced by the ways students and teachers frame science lessons. He has conducted professional development for K–8 teachers looking to infuse their science curricula with inquiry, and in that context has taught and conducted research in science classrooms where the majority of students were ELLs.

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