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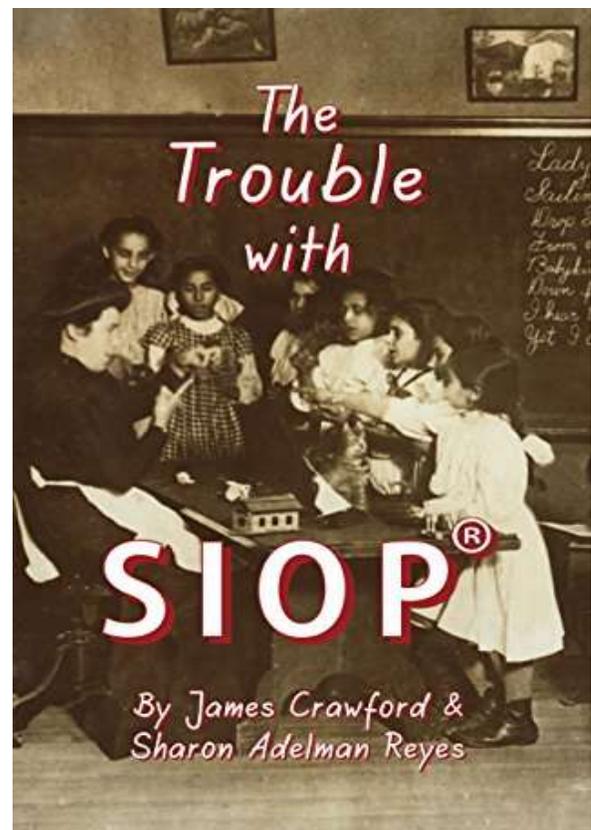
Crawford, J., & Reyes, S. A. (2015). *The trouble with SIOP®: How a behaviorist framework, flawed research, and clever marketing have come to define - and diminish - sheltered instruction for English language learners: Featuring an alternative approach to sheltered instruction and a sample unit applying that framework*. Portland, OR: Institute for Language and Education Policy.

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Reviewed by Anthony Sparks
Southern Methodist University
United States

The percentage of U.S. public school students identified as English learners (ELs) has increased from 8.7% in the 2002-03 school year to 9.2% in 2012-2013 (Kena et al., 2015). In the most recent reauthorization of No Child Left Behind, the Every Student Succeeds Act (2015) asserts that English learners “attain English proficiency and develop high levels of academic achievement in English” (p. 153). The Sheltered Instruction Observation Protocol (SIOP) claims to be one of the best models for instructing ELs in English. According to the Center for Applied Linguistics, SIOP has been implemented in school systems across all 50 states in the United States as well as in 12 countries (SIOP – FAQs, n.d.). To meet the needs of a growing EL population, schools of education, districts, and schools are increasingly turning to the SIOP framework, which promises to meet the needs of ELs.



SIOP, a Pearson product, was developed by Jana Echevarría, MaryEllen Vogt, and Deborah Short (SIOP - About, n.d.). Since SIOP's development, Pearson has published numerous books, provided professional development, and had numerous conferences pertaining to the model. Considering all the attention devoted to the SIOP model, an academic review is appropriate to determine if SIOP is as effective as the creators claim it to be. *The Trouble with SIOP* by James Crawford and Sharon Reyes is a systematic review of the SIOP model. James Crawford, the founding president of Institute for Language and Education Policy, and Sharon Reyes, who holds a Ph.D. in curriculum and design, are both well situated to critique the SIOP model. As a former math teacher with a masters in English as a second language, my own experiences using the SIOP model color my review of the author's appraisal of this well-recognized model of instruction. While the authors offer good points in their critique of SIOP, they ignore that SIOP theory is still in the early stages of development, and for other reasons that I will describe below.

In *The Trouble with SIOP*, Crawford and Reyes introduce readers to the purpose of sheltered instruction by delving into the theoretical perspective of the person who coined the term, Stephen Krashen. After this introduction, the authors start their analyses of what they believe is wrong with SIOP by framing their argument around the creators' claim that SIOP is "research-based". The analysis then shifts to look at SIOP from a theoretical perspective, and lastly from a practical perspective, calling into question whether the model is worth pursuing and providing an alternative to SIOP. Similarly, this review analyzes the author's "research-based" argument and then shifts to the theoretical and practical issues associated with SIOP.

Crawford and Reyes first address the Institution for Educational Sciences (IES) statement that studies that tested SIOP have

shown "no scientific evidence one way or another"; in other words, none of the SIOP studies have shown any meaningful effects. Of the five studies done on SIOP, four have been implemented by the creators of the model. Of those studies, one this study consisting of only 12 teachers focused on fidelity (Echevarría et al., 2011a) and found the relationship between fidelity of implementation related to student achievement did not reach statistical significance. Another study conducted by the creators of SIOP was a comparison group study related to science. Using the same 12 teachers and their students from the previous study, SIOP creators claimed all students made gains, but students in the SIOP model did better (Echevarría et al., 2011b). Again, this study did not reach statistical significance, and the disaggregated data showed ELs, who are supposedly the main benefactor of the SIOP model, had a very small effect sizes (.062 and .087),

In a writing study done by the SIOP creators, a significant difference between ELs in the SIOP group and those in the non-SIOP group was detected (Echevarría et al., 2006). However, according to Crawford and Reyes, the effect size provided by the authors of the study was not accurately portrayed because it did not take into account the growth of the students in the control group. Echevarría et al. (2006) claimed a relatively large effect size of .833, but after some recalculation, the actual effect size was only .21. In a New Jersey study, the SIOP creators analyzed the development of academic literacy among ELs through a quasi-experimental study (Short et al., 2012). The researchers did find significant differences between SIOP and non-SIOP classrooms in writing and oral language; however, the lack of information provided about the control group and the fact that teachers were not randomly selected raises concerns about the validity of the study. Finally, a reading study done by external researchers, McIntyre et al. (2010) found no significant differences on reading achievement among students who were in classrooms where teachers were "full-

implementers” of SIOP and those who were not. In summary, all of the studies done on SIOP so far have shown little to no effect.

While Crawford and Reyes found compelling evidence of no overall positive effect of the SIOP model on student achievement, there is still the possibility of obtaining positive effects for individual practices that might be masked by using the model as a whole. From a research perspective, if the authors had been provided this recommendation, they may have produced a review that was less of a critique of the SIOP’s claims and more of a recommendation to further the research base, which eventually develops richer theory.

From a theoretical perspective, Crawford and Reyes claim SIOP is a hodgepodge of theoretical underpinnings for academic learning, from behaviorism to constructivism. They discuss how the SIOP creators do not even acknowledge Stephen Krashen, the theorist who coined the terms, sheltered instruction and comprehensible input. The authors argue for SIOP to choose an academic learning framework and to stick with it (e.g., behaviorism or constructivism). They also encourage the SIOP creators to reconsider the theoretical underpinnings of second language acquisition. The authors’ case against the theoretical basis of SIOP is very well constructed; however, in critiquing the SIOP model, the authors have yet to provide constructive feedback on how to make the model better. It is my speculation that the SIOP creators might be in the early stages of theory development for second language acquisition and are currently grappling with the issues behind the theory. Providing constructive feedback would have solidified the author’s knowledge of the topic, as well as made a stronger case for the *Engage* framework, an alternative framework developed by one of the authors.

In practice, Crawford and Reyes point out that Krashen never intended his ideas to be a one size fits all approach as the SIOP creators are claiming their model to be. The

SIOP creators tout that their model can be used in almost any context, with almost any learner, even native English speakers. For example, the SIOP creators are currently creating a model for bilingual education, TWIOP. However, Krashen’s ideas were only intended for the intermediate second language learner who has a beginning understanding of the second language that they are trying to acquire. During the beginning learning phase, as the authors point out, learners should be placed in bilingual education settings, not in a sheltered environment that SIOP creators suggest would work for all learners. Practically, a framework of 30 practices for working with ELs is hard to implement into every lesson. Teachers with practical knowledge know that there are no one size fits all models. According to Killen (2006), “no strategy is better than others in all circumstances, so you have to be able to use a variety of teaching strategies and make rational decisions about when each one is likely to be most effective” (p. 74). Furthermore, teachers should know how to pull strategies, implement them, and adjust their teaching accordingly. From a practical perspective, the authors’ critique of the SIOP model could have included ways in which the strategies might work together individually, or how some of the strategies might work together better than the collective.

Readers will find that this critique of the SIOP model urges caution in implementing the model in their classrooms. Considering the tendency toward over-standardization in our current educational climate and the standardized nature of the model, it is hard to imagine that the SIOP model will be going away anytime soon. As a former math teacher who has taught ELs in a sheltered setting, I did find the author’s claims quite eye-opening. However, as an educator, I have enough practical knowledge and experience to know how and when to use certain aspects of the SIOP model when appropriate, as I am sure many other educators do as well.

The Trouble with SIOP contributes to the literature and provides educators who teach ELs insight into a well-established model of teaching. I would suggest anyone with a vested interest with the education of ELs read *The Trouble with SIOP*, and particularly, teachers who teach ELs should read this book before adopting the SIOP model as a whole. District level personnel should also read this before implementing the model in schools. It also explores the consequences of when

educational practices get meshed with corporations. Pearson adopted the SIOP model before meaningful research could occur. Although not a main point of the book, readers may get a sense that when it comes to the SIOP model, the monetary gains of education outweigh student outcomes. Finally, the SIOP creators and Pearson should read the book, to not only gain third party insight into their creation, but to make adjustments to what they have created.

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About the Reviewer

Anthony Sparks is currently a doctoral Student at Southern Methodist University. A former mathematics teacher from North Carolina, he received his M.Ed. focusing in TESOL and is currently researching ways in which to make mathematics instructions and assessment more accessible for English learners, particularly for students at the secondary level.



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