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## Effect of Sheltered Instruction Observation Protocol Model on Students' Achievement and Language Creativity: A Review

Shivani\*, Dr. Kanwalpreet Kaur\*\*

\*Research Scholar, Department of Education, Panjab University, Chandigarh

\*\*Assistant Professor, IETVE, Panjab University, Chandigarh

### INTRODUCTION

We cannot really teach a language; we can only create conditions under which it will develop in the mind in its own way.

- Von Humboldt, as paraphrased in Noam Chomsky, 2015

English, the first global lingua franca, dominates all spheres of activities at both national and international level, including communication, research, industry, aviation, culture, diplomacy, etc. English plays a vital role as a medium of instruction while teaching the foreign students in majority of the countries. It brings people of multiple languages and backgrounds together. The importance of English is perceptible for people residing either in the village or in the city in almost all fields and in the same way. Although English is introduced to millions of children at the primary level throughout India as a second language, yet the declining performance of English-language learners disturbs all those who seek to promote English-language teaching in India.

"Models of Teaching" emerged from Joyce and Weil's search to find a variety of approaches or teaching strategies that match the different learning styles. Teaching models provide the steps needed to achieve the desired result. According to Joyce and Weil (1980), A Models of Teaching is plan or pattern that can be used to shape curriculum (long term courses of studies) to design instructional material and to guide instruction in the classroom and other settings. According to Learning Technology Service, NC State University (2006) "Instructional Models are guidelines or sets of strategies on which the approaches to teaching by instructors are based. Effective instructional models are based on learning theories. Learning Theories describe the ways that theorists believe people learn new ideas and concepts. Often, they explain the relationship between information we already know and the new information we are trying to learn."

### THE SIOP MODEL

The SIOP Model was developed 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 later evolved into a model. SIOP components focus teachers on the instructional strategies crucial for ELLs (Read, 2009; WWC, 2009).

The SIOP Model became a framework for teachers to present curricular content concepts to English 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 SIOP model includes eight specific components: Lesson Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice and Application, Lesson Delivery, and Review and Assessment. These eight components of SIOP Model and their thirty features take place in three phases, that are-

- *Phase 1- Focus*
- *Phase 2- Practice*
- *Phase 3- Closure*

The SIOP model is advantageous in that it is not driven by one single theory but exhibits influences from several theoretical perspectives. The SIOP model borrows elements from the humanistic, social interaction, cognitive, and behavioral learning theories as well as from theories of second-language acquisition including the works of Krashen, Cummins, and Vygotsky.

## **ACHIEVEMENT**

Achievement is the end-product of all educational endeavours. The main concern of all educational efforts is to see that the learner achieves. It is all about what students can actually do when they have finished a course of study. Morgan (1961) in his book "Introduction to Psychology" defines achievement as the "accomplishment on a test of knowledge (or) skills also a personal motive". Academic achievement is all about what students can actually do when they have finished a course of study. Simpson and Weiner (1989) state that achievement is defined as successful completion, through effort, of the acquisition of academic content and skills. Achievement is defined as measurable behavior in a standardized series of tests. Ollendick (2003) defines achievement as the knowledge and skills that an individual learns through direct instruction. Achievement test measures what a person has learned whereas aptitude tests (including tests of intelligence) assess a person's potential for learning. In modern world achievement is very important. Achievement has become a benchmark of self image and accomplishment. Achievement is something that has been accomplished, especially by hard work, ability or heroism. (Collins English Dictionary, 2015)

## **LANGUAGE CREATIVITY**

Creativity is the process of bringing something new into being. Creativity requires passion and commitment. It brings to our awareness what was previously hidden and points to new life. Malhotra and Kumari (1990) defined Language creativity as the multi-dimensional attitude that is differently distributed among the people and includes mainly the factors of fluency, flexibility, originality and elaboration. Fatemi (2003) defined Creativity of Language is born out of breaking the fences, getting out of the boxes, violating the rules, and breaching the familiar horizons. There is not any form of familiarity or acquaintance in breeding the creative flux of thoughts and its crystallization in Languages. Swann and Maybin (2007) argue that we need to develop a more socially oriented, contextualized, and critical perspective in attempting to understand linguistic creativity and how it works in everyday context. They identified creativity broadly as a property of all language use in that language users do not simply reproduce but recreate, refashion, and re

contextualize linguistic and cultural resources in the act of communicating, a position taken within several areas of sociolinguistics and applied linguistics. Conklin (2012) believes that Creative thinking skills as well as critical-thinking skills come together under the heading of higher-order thinking skills that are grounded in lower level thinking. Students have to know the basic facts, understand the concepts, and apply what they know so that they can pick the topic apart through analysis, make a judgment call, or create something new based on the idea.

## **METHODOLOGY**

A preliminary search was carried out in which all the abstracts, published articles, full research papers, international and educational journals, dissertations, and conference/seminar proceedings related to SIOP Model were inquired into. The main consideration was given to the studies which studied and analyzed the relationship between SIOP Model, Achievement and Language Creativity.

## **STUDIES RELATED TO SIOP MODEL AND ACHIEVEMENT**

The ultimate objective for all educators is to help students and provide the necessary skills they need to succeed. Several studies have found that students who are taught by teachers who implement the SIOP model significantly improve their scores on high-stakes assessments compared to students who are taught by teachers who do not implement the SIOP model.

Echevarria & Short (1999) worked with the Center for Research on Education, Diversity & Excellence (CREDE), to develop the Sheltered Instruction Observation Protocol. They first studied the SIOP model in four large urban school districts where they trained middle school teachers in implementing effective sheltered instruction strategies in their classes. Significant differences favoring the SIOP Model were found for overall achievement among students.

Brooks and Brooks (2001) conducted a study on Teacher perceptions towards change can greatly affect the academic success of students. This study examined the perceptions of 16 teachers towards the SIOP model as a method to differentiate instruction for ESOL students.

Whittier & Robinson (2007) conducted a research and used SIOP Model to teach a unit on evolution to 29 seventh and eighth grade students to study the effect of the SIOP Model on students' academic achievement. The results of pre and post-tests revealed significant gains in students' understanding of concepts in evolution. Average gains between the pre-test and the post-test were 15.4%. Results showed a significant improvement in students' academic achievement by using SIOP Model instructions.

The National Mathematics Advisory Panel (2008) examined the impact of SIOP Model on the student's achievement in mathematics at secondary level. Results revealed that students underperforming in mathematics respond well to instruction that provides students with opportunities for practice and application in the use of real world contexts. The authors of the study concluded that the SIOP model improved student scores in mathematics.

McIntyre, Kyle, Chen, Munoz, and Beldon (2010) conducted a study on the effectiveness of the SIOP model in raising student reading achievement. These five researchers worked with a large urban school district in the Midwest to compare the reading achievement growth of students in classrooms with a teacher trained and implementing the SIOP model to the reading achievement

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growth of students in classrooms without a teacher implementing the SIOP model. Twenty-three classroom teachers participated in the project. The study established that SIOP Instruction made significant contribution to the students' reading achievement.

Cisco & Padron (2012) state that when lessons include instructions and materials in the students' native languages, the students are better able to make connections to known words and understand content. By using the students' native language to explain concepts, the students are better able to understand the content while still trying learn the meanings of the English words themselves and hence improves their achievement in English.

Turkan (2014) also emphasized the importance of the use of native language in the classroom. The paper states that "by permitting the use of students' native languages in the classroom, teachers respect, affirm, and legitimize their roles in helping students to read and write in English and to engage in discussions of text"

### **STUDIES RELATED TO SIOP MODEL AND LANGUAGE CREATIVITY**

Sheltered instruction was introduced for the purpose of using English as a Second Language (ESL) techniques in the content area. This model uses English as a medium of instruction in content areas and allows students to be immersed in using the English language. Several studies have found that sheltered instruction has been proven to be a successful way to build English and academic content for students who are learning English as a second language and thus helps in enhancing their language creativity.

Echevarria, Short & Powers (2006) conducted a study at one West Coast public school district and two East Coast school districts. Three hundred forty six students in grades 6-8 made up the intervention group of the study. The teachers of the intervention were provided with training and professional development in SIOP. The results of this study indicated that even though the intervention groups scored lower on the pretest, their post test scores were higher than the comparison group. The authors of the study concluded that the SIOP model improved student scores in writing (language creativity) by using SIOP Model instructions.

Farstrup & Samuels (2008) state that Strategies such as word play and word puzzles are used to enhance vocabulary in students. Word play is a strategy that includes activities such as riddles, puns, jokes, and the use of words and board games that increase student's fluency of words. The strategy of word puzzles involves using crossword puzzles, jumbles, the unscrambling of words, and an alphabet antonym tables to enhance vocabulary instruct.

Using instructional strategies connected to each of the components of SIOP Model, teachers are able to design and deliver lessons consist of various activities that address the academic and linguistic needs of English learners.

Nichols(2012) states that there are a variety of methods being used in education to teach students who use English as a second language. The study takes a look at one method being used in schools today called Sheltered Instruction Observation Protocol (SIOP). The study done for this thesis compared the reading comprehension of two first grade classrooms, one classroom which received reading instruction with SIOP and one which received reading instruction without. The results from



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this study showed that the classroom that received the reading instruction with SIOP had more growth in reading comprehension than the classroom without SIOP

Short, Fidelman & Louguit (2012) conducted a study examining the effects of Sheltered Instruction Observation Protocol (SIOP) model instruction on the academic language performance of middle and high school English language learners. Using a quasi-experimental design, the research was conducted in content area and English as a second language classes in two districts in northern New Jersey over 2 years. The analysis presents student's achievement data from state-mandated language proficiency tests in the final year of the intervention, after most of the treatment teachers had completed their professional development in the SIOP model. There were statistically significant differences in the average mean scores in favour of the treatment student group on Writing, Oral Language, and Total English scores of the IDEA Language Proficiency Tests with small to medium effect sizes. The results from this study show that the SIOP model offers a promising approach to professional development that can improve the quality of instruction to English language learners and increase their English language achievement.

Klinger (2017) conducted a study to measure the impact of an instructional model utilized for kindergarten students, Walk to Language, on English language development and on English language arts skills. The study included 67 kindergarten students from a school participating in the pilot as a treatment group and 96 students from a control group within the district. Results indicated significantly higher scores for native English speaking students in language skills from the treatment group ( $p = .04$ ). These findings indicate that this early intervention model shows inconclusive results as to the potential to elevate the academic performance and growth levels of students from a variety of backgrounds.

Gates and Feng (2018) conducted a study to examine the effect of the Sheltered Instruction Observation Protocol (SIOP) model on reading fluency of ELLs in a Title I school. Over a period of 5 weeks, one group of ELLs received reading instruction using the SIOP model for 45 minutes daily, and the other group received reading instruction as usual with the SIOP model. Both groups were assessed in reading fluency (words per minute) using Reading A-Z before and after the intervention. Results show the ELL group under the SIOP model had significant gains in reading fluency, and the SIOP model is effective in improving ELLs reading performance.

## CONCLUSION

SIOP provides teachers with a range of tools to help them plan, teach and reflect on the lesson they are learning. These three aspects of an educator's responsibilities are vital to the success of the teaching and the learning. The SIOP Model has been used widely in classrooms that have a mix of English learners and English-speaking students. For many years, school district personnel around the U.S. have reported anecdotally that English speakers and English learners alike benefit when teachers use the SIOP Model in their classes, and they point to increased student achievement data to substantiate their reports. However, these were not controlled research studies. Recently, though, research studies have shown that all students in SIOP classes performed better than comparison or control groups (Echevarría, Richards-Tutor & Short, 2011). According to several studies we can conclude that SIOP Model offers a solution to one aspect of school reform needed for English learners' acquisition of English and academic achievement, namely classroom instruction and also helps in enhancing language creativity.

## RECOMMENDATIONS

From the literature reviewed above, it can be concluded that SIOP Model uses specific teaching methods that make content assessable to English language learners while at the same time increasing their English proficiency. SIOP is a model for teaching grade level content in a way that is understandable for ELs while at the same time promoting their English language development (Rothenberg and Fisher, 2007). The review of several studies reveals that Sheltered Instruction Observation Protocol Model helps English language learners to improve their academic achievement not only in English but in other subjects too. But much research evidence is not available on effect of SIOP Model on language creativity especially in Indian context. There is need to implement this model in Indian schools to find out how this model could be effective here. The government of India adopted a language policy that encouraged the teaching and learning of English in India. Thus, a three - language - formula was adopted - the Mother Tongue along with the national and international languages and this made it obligatory that every school or college student in India should acquire the skills of speaking, reading and writing English. The ideology of the SIOP model of teaching, wherein the teacher follows the learning styles of all the students would be a great appeal. More research studies need to be conducted to discover the effectiveness of SIOP Model in various subjects and variables. It is also significant to recommend that future research should involve more diverse learners and populations in Indian settings.

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