

The Strategic Instruction Model

When the Center for Research on Learning opened in 1978, its mission was to research classroom interventions for students with learning disabilities in middle and high school. However, it soon became evident that many students, not just those with disabilities, had trouble learning in the upper grades. The reason for this difficulty is not surprising: the center found that most secondary teachers focused class time on their content areas (e.g., science, history, or literature) rather than on reading and writing skills. Teachers therefore experienced difficulty teaching subject matter to students who did not have the literacy skills to fully absorb it. To address this problem, the center broadened its mission to dramatically improving the performance of all at-risk adolescents in grades 4–12.

One of the most significant results of the center's research is the Strategic Instruction Model (SIM), a collection of interventions designed to help students learn how to learn, and to help teachers teach more effectively. Literacy instruction is a major component of SIM.

The Content Literacy Continuum

SIM's approach to improving adolescent literacy is summarized in its Content Literacy Continuum (CLC), a framework that describes five levels of literacy support that should be in every secondary school. (The graph below illustrates the five levels of the CLC.)

A Continuum of Literacy Instruction (CLC)

Level 1—Enhance content instruction: mastery of critical content for all, regardless of literacy levels

Level 2—Embedded strategy instruction: routinely weave strategies within and across classes using large group instruction methods

Level 3—Intensive strategy instruction: mastery of specific strategies using intensive-explicit instructional sequences

Level 4—Intensive basic skill instruction: mastery of entry-level literacy skills at the fourth-grade level

Level 5—Therapeutic intervention: mastery of language underpinnings of curriculum content and learning strategies

Tutoring—Strategic tutoring: extending instructional time through before-school or afterschool tutoring

At Level 1, to ensure that all students learn basic content that allows them to succeed in their coursework, teachers use a set of practices that make curriculum content more accessible and interesting to students. Teachers use tools such as unit maps and comparison tables to show students the relevance of each lesson to a larger unit and to clarify difficult parts by highlighting important details and background information. These teaching routines not only help teachers directly teach course material, they also provide effective means to help students remember and organize information that they can use in the future.

Level 2 of the CLC incorporates learning strategies into classroom activities so students can practice using them independently. For instance, by modeling a comparison chart on the blackboard, teachers demonstrate how to compare two concepts. Once they model an effective chart, teachers enlist student help in creating another comparison chart on the blackboard. Eventually, students work in small groups, in pairs, or even individually to use the comparison strategy to understand a variety of concepts throughout the year.

Level 3 arms students with strategies to master a continuum of elements that are crucial to reading comfortably and effectively: decoding, word recognition, fluency, vocabulary, and comprehension. Because students in the same classroom have different skill levels, they use different learning strategies. Students first master strategies to improve decoding and knowledge of advanced phonics, and then move to word recognition. By learning word identification techniques, which show students how to break down unknown words into familiar roots, prefixes, and suffixes, students progress to improving fluency, reading quickly and accurately enough to avoid frustration. Eventually, students master reading comprehension by using a variety of tools, including the Visual Imagery Strategy, in which students create a picture in their minds of the narrative they are reading to help them remember and identify important concepts in the passage.

At Levels 4 and 5, students who are very far behind receive intensive instruction in basic reading and language development. This may require the partnership of a teacher with another staff member, such as a literacy coach or speech-language specialist. Additional literacy or basic skills programs may also be used at this level.

Strategic Tutoring

Strategic tutoring assists students with specific assignments before or after school. But beyond homework help, tutors instruct a student in specific learning strategies. Tutors and students form a “learning apprenticeship,” in which the tutor demonstrates effective learning techniques for the student to eventually use on his or her own. Through this model, students not only learn strategies such as the LINC'S Vocabulary Strategy, which uses mental pictures and self-testing to help students remember words and use them appropriately, but also develop a positive, close relationship with an instructor. Once students work with their tutors to use learning strategies on specific assignments, they are empowered with a variety of tools to use on assignments inside or outside of class. Tutors use student and peer evaluations to ensure that they are addressing students’ needs most effectively.

Schoolwide Implementation

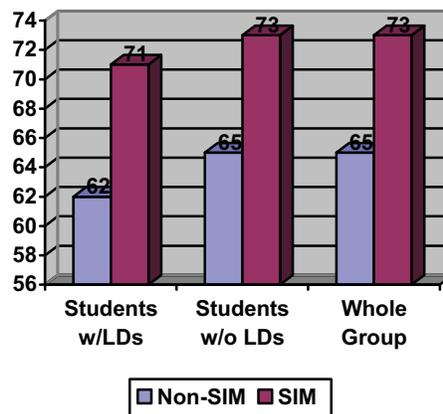
To implement SIM effectively, a number of structural supports are available for teachers, schools, and districts. The center's website offers explanations of a variety of teaching practices and learning tools that teachers can download as well as more detailed explanations of each strategy, which schools, teachers, and districts can purchase for about \$15. Before implementing SIM, teachers are trained by a certified SIM trainer, who demonstrates the everyday practicalities of using SIM in the classroom. Teachers who have implemented SIM and have sufficient interest can become certified SIM trainers themselves. While working with SIM, teachers can form decisionmaking teams to discuss the most appropriate way to implement SIM in their schools. To implement SIM effectively, both schools and districts must commit a substantial portion of their time and resources to the program, especially in the early stages.

SIM is used across the country in more than 3,500 school districts in many different states, including California, Kansas, Texas, Virginia, Michigan, and Washington. As of 2004, more than 175,000 teachers have sought out training in SIM.

SIM in Action: Muskegon High School

The improved test scores of Muskegon High School students demonstrate that SIM's popularity is not unsubstantiated. In 2002, the physical science teachers at Muskegon introduced SIM into their classrooms to help teach their material in a more effective and engaging way. To determine the necessary and appropriate content that all students needed to learn to master the course, teachers examined the state science benchmarks and synthesized readings and lectures they currently used. With the help of SIM, teachers developed graphic devices that compared and contrasted different physical science concepts and situated individual concepts in the context of the larger physical science unit. On average, the unit test scores of both low-achieving adolescents (including those with learning disabilities) and high-achieving adolescents improved (see graph below). As the teachers continued to use SIM for each new unit, the average student score continued to rise.

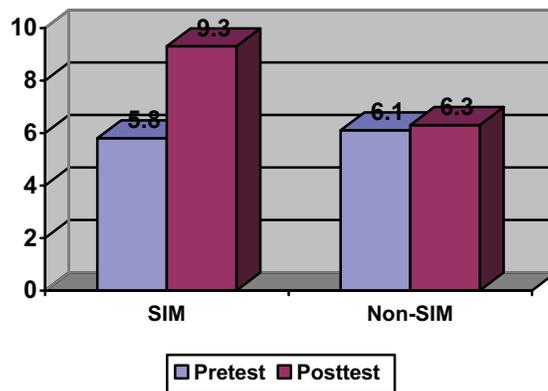
Physical Science Unit Test Scores



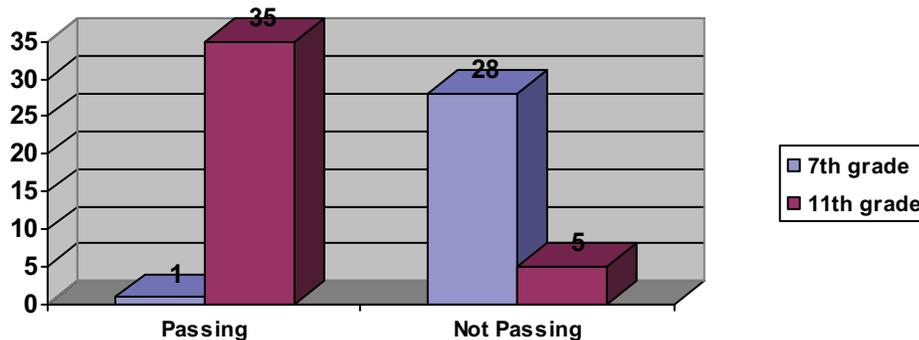
Muskegon English teachers addressed Level 2 of the CLC by modeling effective strategies for students to improve their reading comprehension. After 4 years of learning these strategies in high school, students' reading comprehension had improved—34 more students passed the state's minimal reading competency exam in 12th grade than had passed in 7th grade, before teachers had shown SIM strategies to students.

Muskegon teachers also implemented Level 3 of the CLC in classrooms in which students needed more intensive literacy instruction. After these students learned SIM's word identification techniques, their scores on advanced phonics and decoding exams increased by more than 20 raw points and three grade levels, whereas comparison group students' scores had increased by fewer than 5 raw points and less than half a grade level (see graphs below). The scores of African-American males and students with learning disabilities in the SIM group increased by almost four grade levels, showing marked progress in Muskegon's efforts to close the achievement gap.

Word Identification Strategy Course Results--Mean Grade Level Score



Comprehension Strategies Course Results



Contact Information

Name: Janet Roth
Director of Professional Development
Phone: (785) 864-4780
Email: crl@ku.edu
Website: <http://www.kucrl.org/>

For More Information

Donald Deshler, Jean Schumaker, & Susan Woodruff. (2004). Improving literacy skills of at-risk adolescents. In Dorothy Strickland & Donna Alvermann (Eds.), *Bridging the literacy achievement gap, grades 4–12*. New York: Teachers College Press.

