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Elementary maps triumph

Education: L.B. school on verge of failure shapes up and wins.

By Kevin Butler
Staff writer

LONG BEACH — One year into her tenure as principal at Theodore Roosevelt Elementary, Stefanie Holzman had a scare.

In 2001, her school was just one point away on its state test scores from being set on the road to state takeover. It hadn't helped that one-fourth of the school's teachers had left since she arrived.

"I beat myself up for a whole year," she says.

Roosevelt was on the brink.

But, three years later, it has become a dramatic turnaround success story, thanks in large part, she says, to circles, boxes, bubbles, trees and bridges.

The year-round school saw its academic performance index numbers — a guide to academic progress — leap 136 points in the last two years, and last year it made the largest gain among elementary and middle schools in the district.

The 1574 Linden Ave. school made those gains serving low-income students, 85 percent of whom are English-language learners and all of whom are on free-lunch programs.

"We are outperforming, given my demographics," she says. "And we are not satisfied yet."

The key to the school's recent success, she says, is "thinking maps," geometric shapes children draw to represent thought processes, such as compare-and-contrast, sequencing and cause-and-effect. The maps "show them what's in their heads," Holzman says.

"They're sort of a ... device for the children to remember the kind of thinking they are doing."

Take compare-and-contrast, which children demonstrate by drawing a "double bubble map" on a wide sheet of paper.

In one recent fifth-grade class, kids compare the traits of two story characters, Prince Brat and Jemmy, by drawing a circle around each of the characters' names.

Students then write each trait that they brainstorm, such as "loyal," in circles surrounding the two characters' names. Circles containing common traits are connected by two lines to both Prince Brat and Jemmy. Uncommon traits are connected by a single line to only one character.

Roosevelt students are taught to recognize which of the school's eight "thinking maps" to use to work through a problem, such as a bubble map to show description, a tree map to show classification and categorization, a flow map to show sequences, or a bridge map to show analogies.

The repeated use of such maps trains kids to see which thinking skills are used in solving different problems, Holzman says.

"We're really showing eight different ways to think, eight different ways to understand," she says. "So it's not a logic problem. It's really how we think, how we problem-solve."

Without maps, the child may come up with the right answer, but have no clear idea what thought process he used to find it, she says.

The child may say to himself, "I don't know how I did it, but I got it right," according to Holzman. "The teacher says, 'Do this thing.' I got it."

"Now my kid will say it's a compare-and-contrast mathematical problem," Holzman says.

"Without the thinking maps, the kids can do the activity," Holzman adds. "But they don't understand what's going on in their head. They can't generalize from one situation to another."

Fifth-grader Tony Gonzalez, working to compare Prince Brat and Jemmy, likes drawing the shapes. "You organize all your thinking in a map," he explains.

When asked how he decides which map to use, Gonzalez pauses and says, "It depends on what kind of thinking you are doing."

Teacher Amber Lane monitors the students in this more advanced fifth-grade class as they draw. She had no experience with thinking maps before coming to Roosevelt. Now she swears by them.

"I've really seen a big difference in the way students process and organize their thoughts," she says.

Thinking maps are very useful for English-language learners, Holzman says. Maps let them focus on showing what they have learned while postponing worries about grammar, vocabulary, punctuation and spelling.

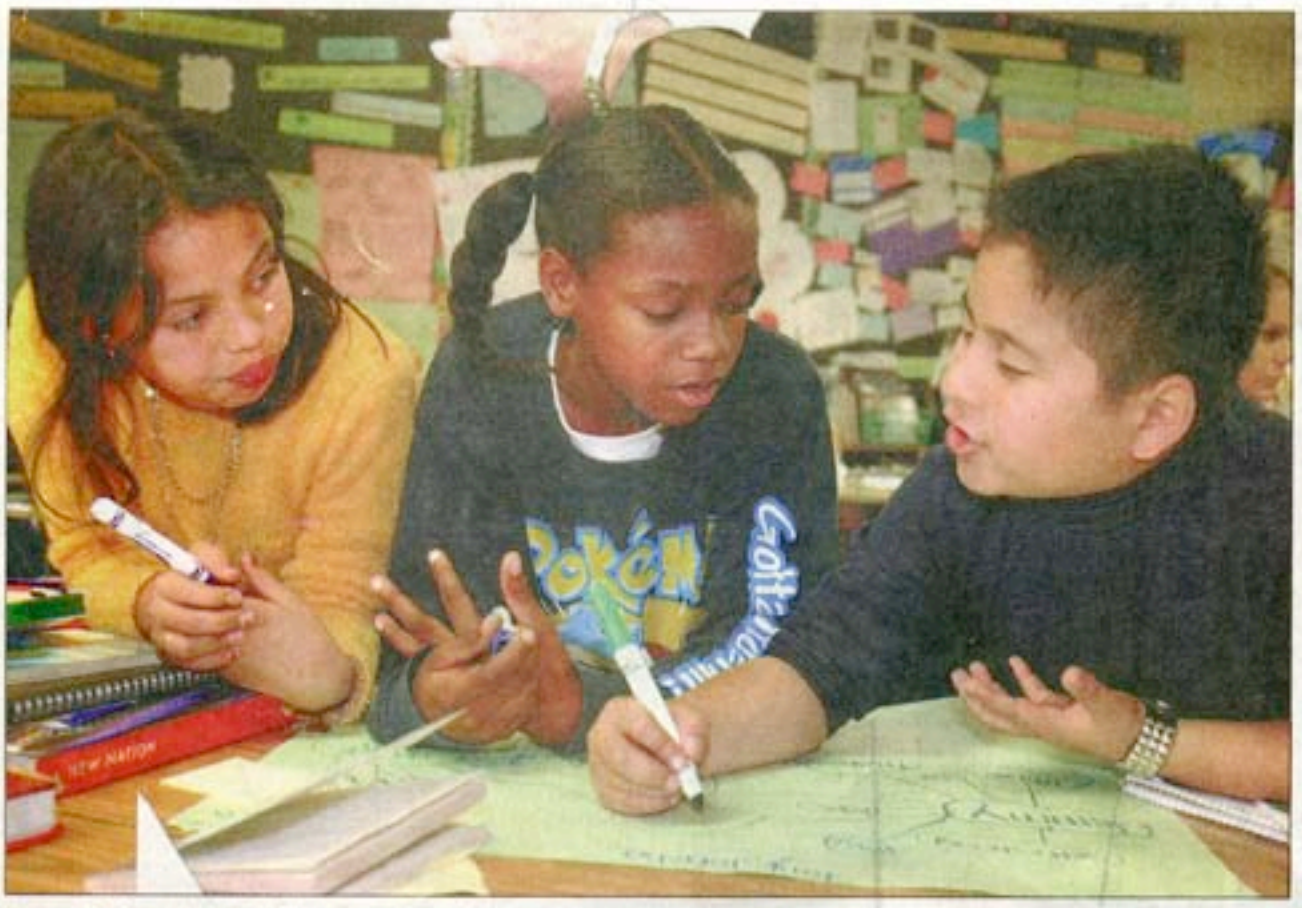
After being taught to understand maps in the early grades, children are expected to begin recognizing how to apply them, first by cluing in on key words like "after," "next" or "because."

By graduation, the children should be able to apply the maps to complex subjects, like history, where key words may not always be evident.

"It becomes their bag of strategies they use for the rest of their lives," she says.

For Holzman, thinking maps are a major reason for the school's comeback. She first came to know them in her previous job working as an administrator for the school district. Teachers have enthusiastically embraced them at Roosevelt, she says.

"We cannot teach these students like we were taught," she says. "Their needs are totally different."



Reyna Tuchez, Jericho Williams and Tony Gonzalez, from left, fifth-graders at Theodore Roosevelt Elementary School in Long Beach, work together on a "thinking map" to compare and contrast characters in a book they are reading.
Brittany Murray / Press-Telegram

Stefanie Holzman, principal of Theodore Roosevelt Elementary, reviews "thinking maps" on display at the Long Beach school. Holzman ties gains in student performance to such maps, which fifth-graders Kathleen Van Tran and Thany Oak, from left, discuss after reading.
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