



Poor student performance on state-administered tests has provoked a plethora of suggestions on how to improve the situation. At one end of the spectrum are those who believe that students should be educated in the same format as they will be tested (a strict 'teach to the test' approach). At the other end of the spectrum are those who maintain that, while test scores might be improved by teaching in the format of the tests, any improved results will represent only an ability to perform to the parameters of a particular test format, not true content comprehension or the ability to apply that knowledge to situations outside the classroom.

In his essay, *A Developmental Approach to Preparing Students for Standardized or State Tests*, Dr. Matt Larson, author of *Houghton Mifflin Math*, expresses the view that promoting student successes on state-administered tests requires teachers to:

- Use representations and models *students will see on tests*
- Develop students' comfort and confidence *with test formats*
- Reinforce vocabulary that appears *in lessons and on tests*

Dr. Larson goes on to say that students often experience difficulty with state standardized tests because material is represented in ways on the assessment "that differ from how it was presented in class or the test." Dr. Larson's model lies firmly on the side of teaching to the test, a model that focuses instruction on format—"to give students an opportunity to practice the content in the format questions will be posed so that the assessment's format does not interfere with a student's ability to demonstrate his/her understanding."

The prevailing view at the other end of the spectrum is that poor test performance can only be remedied by reforming the educational process: not by teaching to the test but by teaching with the goal of enabling students to think – by giving them the underlying skills that enable them to tackle problems they encounter, whether on a test, in the classroom, or in the real world. In this context, the solution to poor test scores is to transform the educational process so that children can use and manipulate information in practical application. As the California Department of Education describes this principle in their guidelines on academic preparations for the California Standards Test, the goal is to "improve underlying achievement rather than test scores alone."

In fact, the ability to think and perform on state standards assessment tests, just as in the real world, requires not just that content be mastered or that the format be made familiar, it also requires making certain that each child possesses the underlying skills necessary for academic and vocational success – that is, the basic skills that enable students to perceive information quickly and accurately, to recall items in sequence and identify patterns, to reorder those items and to generalize concepts about them—cognitive skills.

Cognitive skills have not typically been taught in school, in many cases simply because that would necessitate a type of individual monitoring and feedback that has previously been almost impossible to maintain in group instruction and difficult even in one-on-one instruction in a clinical setting. BrainWare Safari oversteps this barrier by providing individualized feedback automatically—allowing instruction that can be tailored to both the individual student's starting point and his or her progress; BrainWare Safari provides an unprecedented level of individualization and feedback as it develops 41 cognitive skills critical for effective, efficient learning. This allows the program to be implemented in a group setting and without extensive clinical training. Because BrainWare Safari can help students beginning at any cognitive level, it represents a quantum leap forward in educational possibilities—individualized instruction provided in a format that can be universally applied.

The attached chart(s) provide examples of how cognitive skills relate to performance on state-administered tests and how BrainWare Safari exercises develop these skills.