

## **Have You Ever Wondered about The Academic Performance Index (API)?**

*by the CMC Executive Board*

During the last five years, several laws were passed in the state of California to develop a testing and accountability process for public schools. This article will review the law and compare it to what is actually taking place.

### **What is the STAR Program?**

In 1997, Senate Bill 376 created the Standardized Testing and Reporting (STAR) program. Beginning with the 1997-98 school year, the STAR program required districts to use a nationally-normed, standardized test designated by the State Board of Education (SBE) to test all pupils in grades two through eleven. In November 1997 the SBE designated the Stanford Achievement Test, Ninth Edition (SAT 9), for five years use. Students in grades two through eight are tested in reading, written expression, spelling, and mathematics; students in grades nine through eleven are tested in reading, writing, mathematics, history-social science, and science.

The SAT 9 is a norm-referenced test reflecting the NCTM *Standards* and measures the basic skills of California students as compared to a nationally normed group that reflected the student population of our nation at the time of the norming. The normed group, however, has been shown to not reflect the current student population in California. For further information on standardized tests, refer to the article "*Have You Ever Wondered about the Meaning of Standardized Tests?*"

Beginning with the 1999 test administration, additional test items that addressed SBE adopted content standards in language arts and mathematics were required for the California Content Standards Test (previously referred to as STAR augmentation). This assessment is made up of multiple-choice questions for mathematics, language arts, science and social studies for students in grades 2–7. Language arts and mathematics portions of this test are required while science and social studies are optional. In grades 8–11 for mathematics, science, and history/social science, questions will be based on specific courses such as Algebra 1, Biology, or American History. But not all courses in each subject area will be assessed. A writing assessment for grades 4 and 7 was also required as of spring 2001.

## **What is the Academic Performance Index (API)?**

The Public Schools Accountability Act of 1999 (PSAA) made schools accountable for improving students' academic performance and established an incentive system to provide awards for schools that demonstrate growth as well as sanctions for underperforming schools. Schools are ranked according to the Academic Performance Index (API) and are expected to show improvement in students' academic achievement by meeting or exceeding annual API growth targets. The law calls for the use of multiple measures of school performance—assessments that address the state's curriculum content standards, high school exit exam, the California Assessment of Applied Academic Skills (a performance-based assessment yet to be created), student attendance and graduation rates, staff attendance, and other measures of performance. Thus far only results from the SAT 9 portion of the STAR program constitute the API.

Calculating the API is a multistep process. Each content area for Grades 2–8 has been assigned various weights: Mathematics, 40%; Reading, 30%; Language, 15%; Spelling, 15%. For Grades 9–11, the content areas—Mathematics, Science, Reading, Language, History/Social Science—have been assigned equal weights of 20%. The formula for calculating the API can be accessed through the CDE web site [API](#).

Each year, schools are given a growth target that is determined by calculating 5% of the difference between the previous years' API score and 800. For example, a school with an API of 400 needs to improve by 20 points (5% of  $800 - 400$ ), which means their performance target for the following year would be 420. Schools that already have an API of 800 or more must maintain such a score.

Additionally, APIs and growth targets must be calculated for each numerically significant subgroup in the school. Numerically significant subgroups are defined as ethnic and socioeconomically disadvantaged subgroups that comprise

- at least thirty students with valid SAT 9 scores and 15% of the school's testing enrollment, or
- 100 students with valid SAT 9 scores (even if less than 15% of the school's tested enrollment).

Each subgroup's calculated growth target must be 80% of the growth

target for the school to demonstrate sufficient growth to be recognized for awards. In the previous example of the school with an API of 400 and a school growth target of 20, the calculated growth target for each significant subgroup would be 16.

To be eligible for awards, a school must meet or exceed its school-wide growth target and meet or exceed each subgroup's growth target. Schools with an API of 800 or more must make at least 1 point gain in their API.

### **Observations**

SAT 9 is not aligned to the California State Standards. In order to assess students on these standards, it has been necessary to develop the augmented items. Thus far the only scores reported on the standards-based items have been raw scores, since the items have not passed reliability and validity criteria.

Schools are confused about whether to emphasize the objectives of the SAT 9 or the California Standards, given the current reliance on SAT 9 to determine the API.

In some districts, SAT 9 scores are being used to make decisions regarding promotion and retention of students. There continues to be a great deal of confusion on the part of policy makers, educators, parents, and community members about what the scores truly represent. For example, many people think that a student scoring at the 50th percentile must have answered only 50% of the items correctly. Others believe that scoring at the 50th percentile means that the student must be at grade level. Neither premise is correct.

API rankings, based only on SAT 9 scores, are being used to judge schools and the quality of learning at schools, even though SAT 9 does not measure learning of the California Standards. Awards and punishments are meted out as a result of what students demonstrate in one moment of time.

### **Items for Discussion**

The California Mathematics Council is concerned about the lack of complete implementation of the Public Schools Accountability Act, which has resulted in a fragmented assessment system that only shows accountability to the SAT 9. CMC encourages serious discussion on the following issues:

The Public Schools Accountability Act legislates the use of multiple measures to hold schools accountable for improving students' academic performance. What are the best measures of school progress? What are the best measures of individual student learning? What are the advantages and disadvantages of each? How can the measures work together to give a full picture of student progress?

What are the components of an assessment system that would indicate growth of learning as well as mastery of significant mathematics? Is an assessment of basic skills, such as the SAT 9, sufficient to do this?

One measure—a multiple choice, norm-referenced test—is being used to make multiple decisions about individual children, programs, and school quality. What are the false assumptions these actions are based on? What is wrong with this process?

A single test is being used to determine which schools will receive monetary rewards and which will be penalized as a result of how students do on this one measure. How does this process influence what happens in schools and in individual classrooms prior to the administration of the test? What are all the factors that could affect how well or how poorly a student does on this one measure?

The SAT 9 does not assess the California Standards as evidenced by the need for the augmented California Standards portion of the STAR test. Under the current legislation the SAT 9 will be used for the last time in the spring of 2002 and may be replaced by a newer norm-referenced test. If the new norm-referenced test also requires a significant number of augmented California Standards items, what inferences can be made about the appropriateness of the California Standards?

## **References**

Cox, Patty. *How Accountable is Accountability?* California Teacher (December 2000): 4

California Department of Education. *Calculating the Academic Performance Index*. (January 2001) [API](#)

\_\_\_\_\_. *Fact Book 2000: Handbook of Education Information*. CDE: Sacramento, 2000.

EdSource. *California's Standardized Testing and Reporting Program (STAR)*." EdSource Parent Guide (Sept 2000).