California Department of Education

Report to the Governor and the Legislature:
Recommendation on the Development of a Growth Model as
Required by California Education Code Section 52052.5(d)

Prepared by:

Analysis, Measurement, and Accountability Reporting Division
District, School, and Innovation Support Branch

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Description: California Education Code Section 52052.5(d) states that the State Superintendent of Public Instruction and the State Board of Education, in consultation with the Public Schools Accountability Act Advisory Committee, shall make recommendations to the Legislature and the Governor on the establishment of an individual academic performance growth model by utilizing individual pupil results from a longitudinally valid achievement assessment system. These recommendations are contained in this report.

Authority: California Education Code Section 52052.5 (d)

Recipient: The Governor and the Legislature

Due Date: July 1, 2013
California Department of Education

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Executive Summary

This report is required by California Education Code (EC) Section 52052.5(d) that states the State Superintendent of Public Instruction (SSPI) and the State Board of Education, in consultation with the Public Schools Accountability Act (PSAA) Advisory Committee, shall make recommendations to the Legislature and the Governor on the establishment of an individual academic performance growth model by utilizing individual pupil results from a longitudinally valid achievement assessment system. These recommendations are due to the Legislature and the Governor by July 1, 2013.

When the Academic Performance Index (API) was designed in 1999, it did not include a student growth component. At the time, the California Department of Education (CDE) did not have the capacity to link the test results of individual students across years. In addition, the testing system was not designed to provide growth scores to students. Although the CDE now has the ability to link student scores from one year to the next through the California Longitudinal Pupil Achievement Data System, neither the 1999 state standards nor the current assessment system (Standardized Testing and Reporting) provide a clear vertical articulation from grade to grade.

In 2003, EC Section 52052.5(d) required the PSAA Advisory Committee to make recommendations to the SSPI on the “appropriateness and feasibility of a methodology for generating a measurement of academic performance” based on individual student results.

This report recommends that implementation of a growth model be delayed until the statewide assessment system is reauthorized and new assessments based on the Common Core State Standards are fully implemented.

If you have any questions regarding this report, please contact Jenny Singh, Administrator, Academic Accountability Unit, by phone at 916-319-0437 or by e-mail at jsingh@cde.ca.gov.

You can find this report at the CDE API Web page at http://www.cde.ca.gov/ta/ac/ap/index.asp. If you need a copy of this report, please contact Betty Miura, Research Analyst, Academic Accountability Unit, by phone at 916-319-0863 or by e-mail at bmiura@cde.ca.gov.
Background Summary and Recommendations for Measuring Academic Growth for California

Introduction

The purpose of this report is to provide background on the recommendation by the California Department of Education (CDE) to the Governor and the Legislature on the development of a growth model as required by California Education Code (EC) Section 52052.5(d).

The assessment and accountability system in California has provided reliable data for accountability purposes for over 13 years. The system includes two assessment programs: the Standardized Testing and Reporting (STAR) assessment program and the California High School Exit Examination (CAHSEE). The California Standards Tests (CSTs) is the major component of the STAR program. These assessments cover numerous subjects, including English-language arts (ELA), mathematics, science, and history/social science. The data from the CSTs and the CAHSEE contribute to the state’s school and district accountability index, known as the Academic Performance Index (API), which has been used to determine school improvement from one year to the next since the 1999–2000 API reporting cycle.

The API system features annual comparisons whereby aggregate student performance is compared from one year to the next in what is known as a “base to growth” comparison. This system of assessments and accountability are a type of cohort improvement model with “improvement” measured by how well last year’s students did compared to this year’s. These comparisons are reported for each school and for a variety of student groups where there are 10 or more student test scores for valid comparisons.

Summary of Results Regarding the use of the California Standard Tests Assessments for Measuring Growth

Research on potential models for measuring growth using the CSTs began in 2004. The CDE and the STAR contractor, Educational Testing Service (ETS), conducted a study that examined the potential for developing a vertically articulated scale for the CSTs. Preliminary investigation of vertical scaling led to the conclusion that a valid and reliable vertical scale for reporting the results of the CSTs would require modification of the curriculum standards and the blueprints for the assessments. This was because the standards themselves were not designed to articulate curricula across grade spans. The magnitude of change required to achieve a vertical scale, at least in the short term, was recognized as unfeasible for a variety of reasons, including the expense of revising the standards and assessments.

The work on growth measurement that followed was focused on statistical procedures that could be used to link student scores from one grade to the next, recognizing the limitations and challenges of an assessment based on a non-vertical scale. Empirical
regression was shown to be a reliable means of assessing student progress for program evaluation purposes. It was, however, a measure of a student’s growth relative to the performance of other students, not a measure of absolute growth along a continuous scale. This means that students can only improve their position on the growth scale if other student’s performance declines. This is a limitation of all normative measures of performance. Quantile regression procedures were found to have the same limitations.

**Recommendation of the Public Schools Accountability Act Advisory Committee**

On April 18, 2013, the CDE consulted with the Technical Design Group (TDG) and recommended that the implementation of an individual growth model be delayed until the statewide assessment system is reauthorized and new assessments based on the Common Core State Standards (CCSS) are fully implemented.

In reviewing the current status of the assessment system with regard to growth models, the TDG noted the following in support of this recommendation:

1. The STAR Program is scheduled to end with the spring 2014 assessments.

2. California has adopted the CCSS as the basis for assessment going forward.

3. The CCSS are designed to support the development of assessments that can report progress across grades.

4. The State of California is a governing member of the Smarter Balanced Assessment Consortium that is developing a set of assessments based on the common core designed to report individual student growth from one grade to another.

5. The State Superintendent of Public Instruction’s (SSPI) recommendations for transitioning to a new assessment system include the recommendation that California use the Smarter Balanced assessments as the basis for testing ELA and mathematics beginning in the 2014–15 school year.

6. Implementing any of the growth models based on the STAR assessments would be inefficient given the limited period of time remaining for the program.

At its April 23, 2013, meeting, the Public Schools Accountability Act (PSAA) Advisory Committee considered the recommendations of the TDG and passed the following motion:

“The PSAA Advisory Committee recommends that (1) implementation of an individual growth model be delayed until the statewide assessment system is reauthorized and new assessments based on the Common Core Standards are in place; and (2) the CDE closely follow the development of the SBAC reporting
metrics and, once these metrics have been developed, investigate how they might best be incorporated into the API or any successor measure of school and local educational agency (LEA) accountability.”

The SSPI supports the PSAA Advisory Committee’s recommendation. On July 10, 2013, the State Board of Education voted to accept the recommendation of the PSAA Advisory Committee to delay implementation of an individual growth model until the statewide assessment system is reauthorized and new assessments based on the CCSS are fully implemented.