

# California Department of Education

## Report to the Legislature: Recommendation of a Method to Emphasize Student Mastery of Standards in Science and Social Science



Prepared by:

**Analysis, Measurement, and Accountability Reporting Division**

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OCTOBER 2013

*Description:* California *Education Code* Section 52052.9 states that the State Superintendent of Public Instruction shall report to the Legislature and recommend to the State Board of Education for adoption a method or methods for increasing the emphasis on pupil mastery of standards in science and social science through the public schools accountability system or by other means. The recommended method is contained in this report.

*Authority:* California *Education Code* Section 52052.9

*Recipient:* Legislature

*Due Date:* October 1, 2013

**California Department of Education**

**Report to the Legislature:**

**Recommendation of a Method to Emphasize Student Mastery of  
Standards in Science and Social Science**

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## California Department of Education

### Recommendation of a Method to Emphasize Student Mastery of Standards in Science and Social Science

#### Executive Summary

This report is required by California *Education Code* Section 52052.9, which states that the State Superintendent of Public Instruction (SSPI) shall report to the Legislature and recommend to the State Board of Education (SBE) for adoption a method or methods for increasing the emphasis on pupil mastery of standards in science and social science through the public schools accountability system or by other means. This report is due to the Legislature by October 1, 2013.

Currently, the importance of student mastery in science and social science is made visible through the inclusion of science and history-social science assessment results in the state accountability system or the Academic Performance Index (API). In addition, the California Department of Education (CDE) also produces a School Quality Snapshot (SQS), which graphically displays a broad series of data that includes state assessment data, API data, and other important types of information demonstrating school performance. The current SQS reports are located on the CDE School Quality Snapshot Web page at <http://www.cde.ca.gov/ta/ac/sq/>.

Assembly Bill 484 established the Measurement of Academic Performance and Progress (MAPP) to replace the current Standardized Testing and Reporting (STAR) Program. It also allows the SSPI, with approval of the SBE, to not calculate schools' and districts' APIs in 2013–14 and 2014–15 due to the lack of comparability between the MAPP and STAR Program results.

End-of-course science and history-social science California Standards Tests (CSTs) and California Modified Assessments (CMAs) have been suspended and APIs may not be calculated for the next two years. Therefore, the CDE recommends to highlight student mastery of science and social science using available data by adding additional information to the current SQS. The CDE presented its recommendation to the SBE at its September 4, 2013, meeting, and the SBE unanimously adopted the CDE recommendation (see Attachment 1).

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](mailto:jsingh@cde.ca.gov). This report is on 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](mailto:bmiura@cde.ca.gov).

## **Recommendation of a Method to Emphasize Student Mastery of Standards in Science and Social Science**

### **Introduction**

The purpose of this report is to provide background information and to recommend a method to emphasize student mastery of standards in science and social science as required by California *Education Code (EC)* Section 52052.9.

### **Background**

Currently, the importance of student mastery in science and social science is made visible through the inclusion of science and history-social science assessment results in the state accountability system or the Academic Performance Index (API). The following table shows the relative emphases (for these two content areas) in the API for the most common school grade spans.

<b>Grade Span</b>	<b>Science Weight</b>	<b>History-Social Science Weight</b>
K–5	5.9%	(Not Applicable)
K–8	6.5%	3.2%
6–8	7.1%	7.1%
9–12	22.9%	13.9%

Assembly Bill (AB) 484 established the Measurement of Academic Performance and Progress (MAPP) to replace the current Standardized Testing and Reporting (STAR) Program. Following are the main components of the legislation that affect accountability:

- Prohibits the comparison of results from the MAPP assessments and the STAR Program assessments.
- Prohibits the use of 2013–14 MAPP field test results for accountability purposes.
- Provides the State Superintendent of Public Instruction (SSPI) with the authority to not calculate schools' and districts' APIs in 2013–14 and 2014–15, due to the lack of comparability, with the approval of the State Board of Education (SBE).
- Provides alternatives for schools and districts that do not receive an API due to comparability issues to meet legislative requirements. Schools and districts may use one of the following:
  - The most recent API
  - An average of the three most recent annual API calculations

- Alternative measures that show increases in pupil academic achievement schoolwide and for all student groups.

AB 484 also requires the SSPI to make recommendations to the SBE regarding the new science assessments after the adoption of the Next Generation Science Standards. It is anticipated the science assessments will be implemented in the 2016–17 school year. The SSPI is also required to make recommendations to the SBE on expanding the MAPP assessments to include other subject areas, such as history-social science, technology, visual and performing arts, etc.

Since California is transitioning from the STAR Program to the new MAPP assessments and full implementation of the new assessments is several years out, the CDE recommended the development of new School Quality Snapshot (SQS) information as a method to continue to drive the importance of mastering science and history-social science using available data.

The current SQS was first introduced with the release of the 2012 accountability reports. It was developed to capture school success and provide, in an easy to understand graphical format, measures of student learning, including accountability, demographics, and assessment results. SQS reports are generated for every school that receives an API and has more than 10 students enrolled. The current SQS reports are on the CDE School Quality Snapshot Web page at <http://www.cde.ca.gov/ta/ac/sq/>.

### **Recommended Method to Emphasize Student Mastery of Standards in Science and Social Science**

The CDE presented its recommendation to the SBE at its September 4, 2013, meeting to use the SQS as a method of emphasizing student mastery of science and history-social science using available data. The SBE unanimously adopted the CDE recommendation (see Attachment 1).

The following data elements are examples of how the high school SQS can be modified to emphasize science and social sciences:

- Percent of students schoolwide enrolled in an Advanced Placement science or history-social science course(s) for the school year.
- Percent of students schoolwide enrolled in honors courses in science or history-social science for the school year.
- Percent of students schoolwide who participate in an International Baccalaureate Program for the school year.
- Percent of students in the graduating class who complete science or history-social science courses beyond the state standard graduation requirements.
- Inclusion of specific awards; for example, the “Civic Learning Award.”

- Inclusion of the civics and the science, technology, engineering, and mathematics (STEM) Exemplary Awards. (Note: The Distinguished School Awards Program currently includes signature practices for civics and STEM. Beginning in 2014–15, Exemplary Awards will be granted based on these signature practices.)

Although the new SQS information focuses on high schools only, the CDE will continue to work with the SBE to identify ways of highlighting the mastery of science and history-social science for elementary and middle schools. When the new MAPP science assessments are fully implemented, the CDE will work with the Public Schools Accountability Act Advisory Committee and the SBE to determine how the science results should be incorporated in the API.

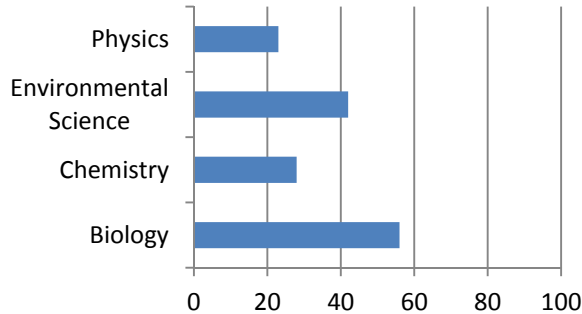


**Civic Learning Award**

**2011-12 Sample School Quality Snapshot**  
**Sample High**  
 Sample Unified  
 555 Sample Street, Sample City, CA Zip

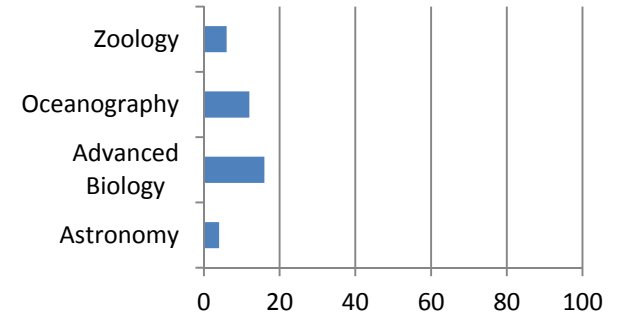
Grades Offered: 9-12  
 Enrollment: 1,900  
 Charter: No  
 Title I Funded: No  
 CDS Code: XX-XXXXX-XXXXXX

**Percentage of Students Enrolled in an AP Science Course**



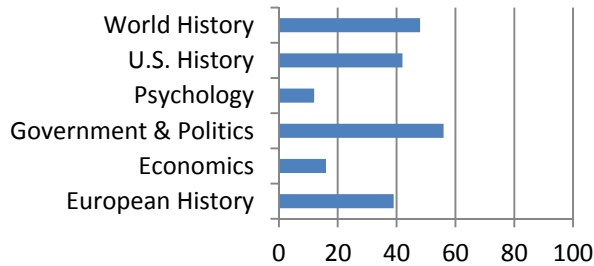
The chart on the left depicts the percentage of students enrolled in an Advanced Placement (AP) Science course. For further information on AP test results, visit the California Department of Education (CDE) Postsecondary Preparation Test Results Web page at <http://www.cde.ca.gov/ds/sp/ai/>.

**Percentage of Students Enrolled in an Honors Science Course**



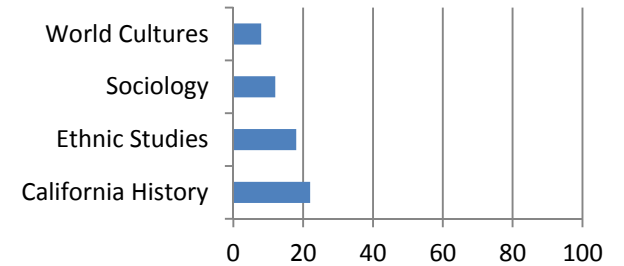
The chart on the right depicts the Honors courses offered at this school and the percentage of students enrolled in these courses.

**Percentage of Students Enrolled in an AP History-Social Science Course**



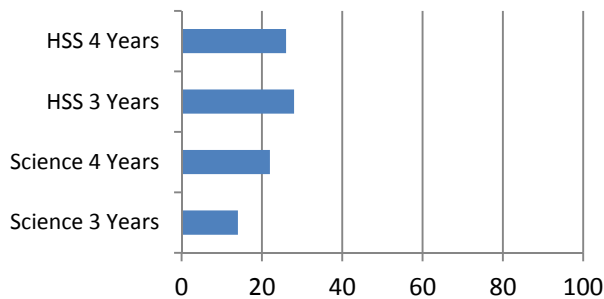
The chart on the left depicts the percentage of students enrolled in an AP History-Social Science course. For Further information on AP test results, please visit the CDE Postsecondary Preparation Test Results Web page at <http://www.cde.ca.gov/ds/sp/ai/>.

**Percentage of Students Enrolled in an Honors History-Social Science Course**



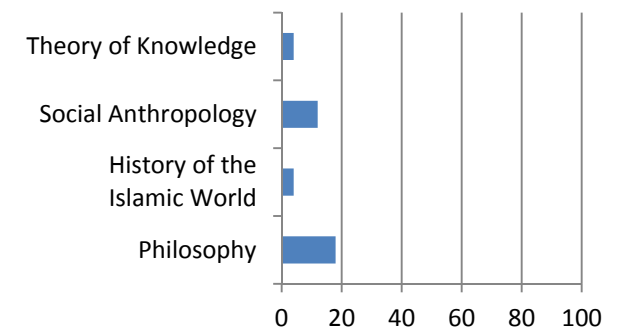
The chart on the right depicts the Honors courses offered at this school and the percentage of students enrolled in these courses.

**Percentage of Students Who Complete Science or History-Social Science (HSS) Courses Beyond Two year Graduation Requirements**



The chart on the right depicts the percentage of students who complete Science or History-Social Science courses beyond the two year graduation requirement.

**Percentage of Students Participating in an International Baccalaureate Program**



The chart on the left depicts the percentage of students enrolled in an International Baccalaureate (IB) Program. For Further information on IB Programs, visit the CDE International Baccalaureate Program Web page at <http://www.cde.ca.gov/ci/qs/ps/ibgen.asp>.

Please visit the following Web page for more information:  
<http://www.cde.ca.gov/snapshot/>