

California Honor Roll Methodology

Educational Results Partnership (ERP) uses a data-driven approach called multi-level latent class modeling to identify California Honor Roll schools. This statistical technique assumes that:

- (a) Hidden groups (latent classes) of schools exist among a larger set of schools;
- (b) A set of observable criteria that represents various dimensions of school performance can distinguish these hidden groups from one another;
- (c) Schools within the same district may be more similar to one another than typically assumed because they are affected by similar district-wide factors; and
- (d) No single criteria are presumably better than another in distinguishing high performing schools among a larger set of schools; the pattern of results will determine which are the most distinguishing criteria.

To identify Honor Roll Schools, these models first estimate the characteristics (i.e., the average spread of scores on each criterion) for each hidden group. Then the model assesses the degree to which each school were similar to the characteristics of each hidden group (latent class). Finally, the model classifies schools into a specific group according to their highest probability of membership. The group with the highest scores on most of the criteria are the Honor Roll group. Schools that are members of that group are Honor Roll candidates.

Seven different models identified candidates among schools that served students at various grade segments and levels of poverty. Data from the California Department of Education – Data & Statistics website and Educational Data Partnership (EdData) were used to identify elementary, middle, high, and

“other” schools. Schools in these grade segments were further split into two categories:

- STAR Schools: schools with greater than, or equal to, 33 percent of students designated as socio-economically disadvantaged (high poverty)
- Scholar Schools: schools with fewer than 33 percent of students designated as socio-economically disadvantaged (low poverty)

Results did not include science achievement as testing on new science standards are piloted.

The number of Honor Roll schools in each category was not predetermined; the results of the model determined the number. Eight measures were derived for all schools using standardized test data:

- Achievement in English and Math
 - The percentage of tested students that met or exceeded standards for their respective grade levels in the 2017-2018 California Smarter Balanced Tests
- Improvement in English and Math
 - The difference between the percentage of students tested that met or exceeded standards in their respective grade levels and subject areas in each school for the past two years. Positive scores indicate higher achievement rates in 2017-2018 than 2016-2017
- Equity Among Ethnic Groups in English and Math
 - Equity among ethnic groups was the difference between achievement rates of ethnic minority students compared to their White American peers in the same school.
 - For each school, the achievement rates from six ethnic minority subgroups (African American, American Indian/Alaskan Natives, Asians, Filipino/as, Hispanics, and Pacific Islanders). Schools did

not report achievement rates for ethnic minority groups with 10 or fewer tested students in a subject area.

- Each school's equity score on each subject was calculated in three steps:
 - For each ethnic minority group, derive the number of students who met or exceeded standards from the number of students tested and the achievement rate.
 - Sum up the number of students in each ethnic minority groups that had more than 10 tested students in the subject.
 - Divide the sum of ethnic minority students who met or exceeded standards by the sum of tested ethnic minority students.
- The equity score provides a general indicator regarding the degree to which ethnic minority students were outperforming (more positive score), underperforming (more negative score), or similarly (score closer to zero) compared to their White American peers.
- Schools that did not report achievement rate for any of the significant ethnic minority or White American groups did not receive an equity score for the subject.
- Equity in Socioeconomic Status in English and Math
 - Equity in socioeconomic status was the difference in achievement rates between students who were socioeconomically disadvantaged and those who were not within the same school.
 - Schools did not report achievement rates for socioeconomic groups with 10 or less tested students in a subject area.
 - This equity score provides a general indicator regarding the degree to which socioeconomically disadvantaged students were outperforming (more positive score), underperforming (more

negative score), or similarly (score closer to zero) peers in the same school who were not socioeconomically disadvantaged.

- Schools that did not report achievement rate for either group did not receive an equity score for the subject.

Models for high schools included six additional measures:

- Percentage of the most recent graduating cohort who met the UC/CSU course requirements
- Percentage of students who met the state English benchmark on the SAT
- Percentage of students who met the state math benchmark on the SAT
- Percentage of Advanced Placement (AP) exams taken that were given a score of 3 or higher
- Graduation rate
- Dropout rate

Notes

- The development of these models accounted for the relationships in performance among schools in the same district and considered the relationship between achievement and improvement within each school
- Missing data did not automatically disqualify a school from Honor Roll consideration. Based on the pattern of relationships among available data from all schools in the same grade segment and poverty level, the models estimated each school's likely group membership using their available data. However, schools must be at or above average in each of their tested subjects within their respective school categories as well as on balance among all of their available measures in order to receive recognition.