

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 represent various aspects 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
- d. No single criteria are presumably better than another in distinguishing high performing schools; the pattern of results will determine which are the most distinguishing criteria

Before the model is run, schools are split into various grade categories (elementary, middle, high, k8, and k12) based on their reported grade spans (low and high grades). The grade span of a school is measured against each of the grade categories, and the category with the most overlap is chosen as the grade category for the school. Schools in these grade categories were further split into two socioeconomic levels:

- STAR Schools: schools with greater than, or equal to, 33 percent of students designated as socioeconomically disadvantaged
- Scholar Schools: schools with fewer than 33 percent of students designated as socioeconomically disadvantaged

To identify Honor Roll schools, several different models were run for each grade category and socioeconomic level. 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 was 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 (latent class) with the highest scores on most of the criteria are the Honor Roll group.

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 2019-2020 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 2019-2020 than 2018-2019

- Equity Among Ethnic Groups in English and Math
 - Equity among ethnic groups - the difference between achievement rates of ethnic minority students compared to their White American peers in the same school
 - The six ethnic minority subgroups are the following: 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 to (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 four additional measures:

- Percentage of the most recent graduating cohort who attended college within 12 months
- 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

Additional Notes:

- The source of the data is from the California Department of Education – Data & Statistics website and Educational Data Partnership (EdData)
- 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 socioeconomic 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
- We designate California districts with >60% honor roll schools as California Honor Roll districts.