Administrative Analyst (1822) Performance Task

SFUSD — Research, Planning and Assessment (RPA)

Project

Principals around the SFUSD are curious about the following: How are students' performance on California's standards-based assessment related to 1) their own growth mindset and 2) their school's culture/climate? How do these patterns vary across different subgroups?

The subgroups you will consider for this task are the following:

- 4 racial/ethnic groups: African American, Hispanic/Latino, Asian, and White
- 3 program groups: English Learners (EL/ELL), Special Education, and Low Socio-Economic Status

Please generate a report for school principals that answers these questions for all K8 schools (schools covering kindergarten through 8th grade) in the district. The report should contain answers to the questions posed above, visualizations with appropriate annotations to support those answers, a description of the data transformations suitable for a general audience (250-word maximum), and a discussion of any assumptions or issues in the data analysis that the audience should be aware of (250-word maximum).

Submit a *single* file that contains the report, the visualizations, and your code to corrigand@sfusd.edu by Tuesday, October 31 at 9am.

Data Files

To help you complete the project, you have two data files to work with:

1. Student Test Scores

    This file contains student-level demographic information and performance on the 2016-17 Smarter Balanced Assessment for English Language Arts (ELA) and Math. Unique ID numbers have been removed to protect student privacy. The following are the variables:

    - Schno: SFUSD unique school number for each school
    - School: School name
    - Gender: Male or Female
    - Calgrade: grade level for students
    - Englang: EO = English Only; IFEP = Initial Fluent English Proficient; RFEP = Reclassified Fluent English Proficient; EL = English Learner; TBD = To Be Determined
    - Econ_Dis: Indicator of students who are economically disadvantaged
    - Sped: Indicator of students who received special education services
    - HL: Indicator of students who are Hispanic/Latino

- NA: Indicator of students who are Native American/Alaskan Native
- Asian: Indicator of students who are Asian
- Hawaiian: Indicator of students who are Asian
- Filipino: Indicator of students who are Filipino
- AA: Indicator of students who are African American
- White: Indicator of students who are White
- Multi_Race: Indicator of students who are of multiple races
- ELASS: ELA scaled scores on the assessment
- ELA_AL: ELA achievement levels (1 = Standard Not Met; 2 = Standard Nearly Met; 3 = Standard Met; 4 = Standard Exceeded)
- MathSS: Math scaled scores on the assessment
- Math_AL: Math achievement levels (1 = Standard Not Met; 2 = Standard Nearly Met; 3 = Standard Met; 4 = Standard Exceeded)

2. Aggregated Survey Responses

This file contains aggregated responses on 2016-17 student social-emotional learning (SEL) and school culture/climate survey. The responses are aggregated to various levels and groups. Only students in Grades 4 through 12 take the survey. Students in Grades 4 and 5 get one version of the survey, whereas students in Grades 6 through 12 get another version of the survey. Accordingly, the results are reported separately, if schools have students across those two clusters.

- schno: SFUSD unique school number for each school
- school: School name
- span: Elementary (grades 4, 5), Middle (grades 6, 7, 8), or High (grades 9, 10, 11, 12)
- group: All = All students at the school-span; others, as indicated
- domain: Social-Emotional Learning or Culture/Climate
- construct: specific constructs within each domain, as indicated
- favorability: average percentage of respondents in the school-span-group-domain-construct who responded favorably to questions under the construct
- count: number of respondents in the school-span-group