Math Placement in California’s Public Schools

Technical Appendices

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with research support from Melo-Jean Yap and Lunna Lopes

Supported with funding from the Applied Materials Foundation and the Silicon Valley Community Foundation
Appendix A. Survey Instruments

Survey Development
Our survey, “Math Placement in California”, collected information on district’s math placement procedures and practices. It consisted of five sections with 31 questions: district background, math curriculum/pathways, placement development, placement guideline components, Senate Bill 359, course support system, resources for parents, evaluation of placement guidelines, challenges and issues, and follow up request. As part of background research, the project team interviewed about 20 districts to identify major sections. Specific questions were drafted and shared with PPIC’s survey team for technical feedback (e.g., wording the survey). The revised draft was shared internally with researchers at PPIC, and externally with practitioners and state policy-makers (e.g., California Department of Education, County Offices of Education). The final survey, which took 10 to 15 minutes to complete, was field tested before the official launch. A copy of our survey is included as an attachment to this Technical Appendix.

Target Population
Our survey targeted all unified and high school districts (N=420).

District Contact
The California Department of Education maintains and publishes Public School and Districts Data Files, which contain district superintendents’ contact information (N=946). Since it is not always easy to distinguish unified districts from elementary districts, we sent out the survey to all districts: the survey was first emailed to a random sample of 100 superintendents on Wednesday, April 6, 2016, and in the absence of any reported technical issues, the survey was emailed to the rest 846 districts.¹

Follow up
We conducted two rounds of follow-ups:

In the first round, which started a month after the initial launch, we invited district Instruction and Curriculum department heads and school principals to complete the survey. In particular, if the non-respondent is one of the largest 25 districts, we went to the district’s website and found corresponding department’s contact information (e.g., director of curriculum and instruction). We then called the department heads and invited them to participate in our survey. For other non-respondent districts, we chose 10 high performing schools (based on 11th grade math SBAC) from each district and emailed the survey to school principals because high performing students are more likely to have accelerated during their middle and high school years.

In the second round, which took place in late May/early June, we expanded our contact pool by including math department heads, curriculum counselors, and math teachers. As discussed later, the follow-up strategies have been effective in increasing response rate and representativeness of our survey.

¹ Our survey allows elementary school districts to exit at the very beginning of the survey.
Appendix B. Survey Respondents Analysis

Response Rate

We received a total of 305 responses to our survey and among these respondents, 60 of them could not be identified as they did not provide information about their district type, or their district name. A few had multiple responses, and in case of inconsistent entries, we kept the response from district staff or math department head. One hundred ninety-nine unified and high school district responded to our survey, representing an overall response rate of 47 percent. High school districts’ response rate is higher at 57 percent. In addition, 45 (9 percent) elementary school districts responded to our survey. Note that our response rates only includes districts that completed at least a substantial part of the survey (i.e., they provided sufficient information that we could identify their location, district type, and math placement policies).

Respondents Analysis

Table B1 presents the respondents analysis. Not surprisingly, large, urban, affluent, and better performing districts were more likely to respond to our survey (Column 1 and 3, Table B1). To bring the responses closer to state averages, we model districts’ likelihood of responding and then weighed each respondent by its inverse probability of responding (Table B2). Our weighted sample is not statistically different from the state average (Columns 2 and 3, Table B1). \(^2\)

\(^2\) The weighting will not work if districts are responding to the survey based on unobserved characteristics.
## TABLE B1
Weighted responses are not different from state average

<table>
<thead>
<tr>
<th></th>
<th>Raw</th>
<th>Weighted</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enrollment (000)</td>
<td>18</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Urbanicity: City</td>
<td>0.29</td>
<td>0.20</td>
<td>0.19</td>
</tr>
<tr>
<td>Urbanicity: rural</td>
<td>0.12</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>% Asian Pacific Islander</td>
<td>0.11</td>
<td>0.08</td>
<td>0.09</td>
</tr>
<tr>
<td>% Latino</td>
<td>0.44</td>
<td>0.47</td>
<td>0.47</td>
</tr>
<tr>
<td>% African American</td>
<td>0.04</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td>% High-need students</td>
<td>0.54</td>
<td>0.58</td>
<td>0.58</td>
</tr>
<tr>
<td>% Free/reduced price lunch</td>
<td>0.51</td>
<td>0.56</td>
<td>0.55</td>
</tr>
<tr>
<td>% English learners</td>
<td>0.18</td>
<td>0.19</td>
<td>0.18</td>
</tr>
<tr>
<td>% graduates completing A–G requirement</td>
<td>0.43</td>
<td>0.39</td>
<td>0.39</td>
</tr>
<tr>
<td>% 11th &amp; 12th graders taking AP exam</td>
<td>0.63</td>
<td>0.56</td>
<td>0.57</td>
</tr>
<tr>
<td>% passing AP exam (conditional on taking)</td>
<td>0.81</td>
<td>0.75</td>
<td>0.74</td>
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<tr>
<td>% 11th &amp; 12th graders taking SAT</td>
<td>0.60</td>
<td>0.56</td>
<td>0.56</td>
</tr>
<tr>
<td>% 11th &amp; 12th graders taking ACT</td>
<td>0.23</td>
<td>0.21</td>
<td>0.20</td>
</tr>
<tr>
<td>% passing ACT benchmarks (conditional on taking)</td>
<td>0.57</td>
<td>0.52</td>
<td>0.50</td>
</tr>
<tr>
<td>SBAC mean scale score (11th grade Math)</td>
<td>2569</td>
<td>2558</td>
<td>2556</td>
</tr>
<tr>
<td>% ready for college (11th grade, SBAC Math)</td>
<td>32</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>Drop out rate</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>High School graduation rate</td>
<td>0.88</td>
<td>0.86</td>
<td>0.87</td>
</tr>
<tr>
<td>% 9-12 students enrolled in Algebra II</td>
<td>0.15</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>% 9-12 students enrolled in geometry</td>
<td>0.19</td>
<td>0.19</td>
<td>0.19</td>
</tr>
<tr>
<td>Median household income</td>
<td>66</td>
<td>60</td>
<td>61</td>
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<tr>
<td>Average property value</td>
<td>532</td>
<td>473</td>
<td>457</td>
</tr>
<tr>
<td>% teachers female</td>
<td>0.69</td>
<td>0.68</td>
<td>0.69</td>
</tr>
<tr>
<td>% teachers w/ master degree or higher</td>
<td>0.44</td>
<td>0.41</td>
<td>0.42</td>
</tr>
<tr>
<td>% teacher Asian, Pacific Islander</td>
<td>0.06</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>% teachers Hispanic</td>
<td>0.14</td>
<td>0.15</td>
<td>0.16</td>
</tr>
<tr>
<td>% teachers Black</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>% teachers White</td>
<td>0.76</td>
<td>0.77</td>
<td>0.76</td>
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<tr>
<td>% novice teachers</td>
<td>0.16</td>
<td>0.18</td>
<td>0.17</td>
</tr>
<tr>
<td>% teachers new to district</td>
<td>0.24</td>
<td>0.25</td>
<td>0.27</td>
</tr>
<tr>
<td>Average years of teaching experience</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Average years of experience in district</td>
<td>11</td>
<td>11</td>
<td>11</td>
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</table>

### TABLE B2
Modeling survey response: Marginal effects of district characteristics

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<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4) (preferred)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enrollment (000)</td>
<td>0.0059***</td>
<td>0.0214***</td>
<td>0.0187***</td>
<td>0.0182***</td>
<td>0.0189***</td>
<td>0.0258***</td>
</tr>
<tr>
<td></td>
<td>[0.0021]</td>
<td>[0.0066]</td>
<td>[0.0061]</td>
<td>[0.0061]</td>
<td>[0.0065]</td>
<td>[0.0082]</td>
</tr>
<tr>
<td>Urbanicity: City</td>
<td>0.0999</td>
<td>0.2022</td>
<td>0.2374</td>
<td>0.2356</td>
<td>0.2455</td>
<td>0.1116</td>
</tr>
<tr>
<td></td>
<td>[0.0636]</td>
<td>[0.1838]</td>
<td>[0.1794]</td>
<td>[0.1797]</td>
<td>[0.1810]</td>
<td>[0.2015]</td>
</tr>
<tr>
<td>Urbanicity: rural</td>
<td>-0.1139*</td>
<td>-0.3787*</td>
<td>-0.2539</td>
<td>-0.1976</td>
<td>-0.2196</td>
<td>-0.2988</td>
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<tr>
<td></td>
<td>[0.0628]</td>
<td>[0.2020]</td>
<td>[0.1776]</td>
<td>[0.1819]</td>
<td>[0.1850]</td>
<td>[0.2164]</td>
</tr>
<tr>
<td>District type: high school district</td>
<td>0.0828</td>
<td>0.3385*</td>
<td>0.1611</td>
<td>0.1521</td>
<td>0.1655</td>
<td>0.1495</td>
</tr>
<tr>
<td></td>
<td>[0.0594]</td>
<td>[0.1875]</td>
<td>[0.1682]</td>
<td>[0.1684]</td>
<td>[0.1683]</td>
<td>[0.1900]</td>
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<tr>
<td>% high-need students</td>
<td>-0.8509***</td>
<td>-0.8310***</td>
<td>-0.8382***</td>
<td>-0.7002*</td>
<td>-0.8382***</td>
<td>-0.7002*</td>
</tr>
<tr>
<td></td>
<td>[0.2818]</td>
<td>[0.3150]</td>
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<td>[0.3598]</td>
<td>[0.3150]</td>
<td>[0.3210]</td>
</tr>
<tr>
<td>% 11th &amp; 12th graders taking AP exam</td>
<td>0.0986</td>
<td>0.1616</td>
<td>0.251</td>
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<tr>
<td></td>
<td>[0.2844]</td>
<td>[0.2992]</td>
<td>[0.3475]</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>% Asian Pacific Islander</td>
<td>-0.2722</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.6534]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Latino</td>
<td>-0.8877</td>
<td></td>
<td></td>
<td></td>
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<td>[0.5819]</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>% African American</td>
<td>-1.1354</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>[1.2903]</td>
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<td></td>
</tr>
<tr>
<td>% Free/reduced price lunch</td>
<td>-0.7289</td>
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</tr>
<tr>
<td></td>
<td>[0.4701]</td>
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<td></td>
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<tr>
<td>% English learners</td>
<td>1.7062*</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>[0.9427]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% teachers w/ master degree or higher</td>
<td>-0.4464</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.4532]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average years of teaching experience</td>
<td>0.0214</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.0299]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.0353</td>
<td>-0.0096</td>
<td>-0.0735</td>
<td>-0.2197</td>
<td>-0.2513</td>
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<tr>
<td></td>
<td>[0.2276]</td>
<td>[0.1935]</td>
<td>[0.3071]</td>
<td>[0.5153]</td>
<td>[0.3733]</td>
<td></td>
</tr>
</tbody>
</table>

**Counts:**

- County FE: X
- Observations: 418 413 418 414 414 387

**Sources:**

**Notes:**
1. All marginal effects are taken from a Logit model with responding to the survey as the dependent variable. 2. Standard errors in brackets and clustered at district level. 3. We use AP participation as a proxy for student performance for the following reasons: first, there is a wide variation across districts in their A–G quality; second, the correlation between AP participation and other performance measures (e.g., SBAC, ACT) are high (0.6–0.8); third, share of students enrolled in Algebra I courses does not capture students who have taken Algebra I in earlier grades (i.e., middle schools). 4. *** p<0.01, ** p<0.05, * p<0.1
Appendix C. Identifying High Performing Districts

Our purpose is to identify districts that, after controlling for student demographics and educational needs, have done a good job in improving student participation in rigorous courses. In order to do so, we first calculate districts’ course outcomes after adjusting for their student demographics and educational needs and then calculate the growth over time. Specifically, letting $i$, $t$ indicate individual district and time, our model takes the following form:

$$Y_{it} = \alpha + \beta X_{it} + \delta S_{it} + \phi T_{it} + C_i + d_t + \epsilon_{it}$$

Where $Y$ is course outcome, e.g., share of graduates completing the A–G requirements; $X$ a vector of student demographic and background factors, e.g., student race/ethnicity, gender, eligibility for free/reduced price lunch, English learner status; $S$ school characteristics, e.g., enrollment size, geographic location; $T$ teacher characteristics, e.g., educational degree, average years of experience, and $\epsilon$ the idiosyncratic error term. Since there is a wide variation across districts in their A–G policy (e.g., making A–G a graduation requirement), we included district fixed effects $C$ in our model, i.e., within district estimators.

In terms of course comes, three candidates come to mind: share of graduates completing the A–G requirement, share of junior and seniors participating in at least one AP exam, and share of high school students (grades 9-12) enrolled in advanced math courses (e.g., Algebra II, geometry). We decided to use A–G as the course outcome for the following reasons: First, students typically take AP exams in their junior and senior years, which do not necessarily reflect their course-taking patterns in earlier grades. A–G courses, on the contrary, consists of sets of courses that are offered at all grade levels. Second, student enrollment in advanced courses are available only for three years, making it somewhat difficulty to look at the trend over time.

Appendix D. Coding Qualitative Responses

Our survey contained one opened question, “what do you see as the biggest challenge(s) when placing students into appropriate mathematics courses”. Through qualitative analysis, we were able to uncover the major themes for the challenges districts are facing in placing students into math courses. This section will detail the process we used to create the themes.

Of the 199 respondents, 186 provided an answer. Since our main focus was middle and high school math placements, we excluded all elementary responses from the dataset, dropping our total responses to 142.

We read through all responses to gain a general understanding and framework of what was written and created 15 broad categories, which are the pre-set codes. The codes ranged from the metrics used in the assessments, parental mindset, equity concerns, and working with limited resources.

With these pre-set codes, three researchers started the coding and triangulation process in Dedoose, an online application for qualitative analysis. During this iterative process, we refined the code list by adding emergent codes and removing less frequent codes. The final list contains 71 codes, 17 parent and 54 sub-codes. We then ranked the codes’ importance for each response to see which codes carries more weight. Finally, we ran principal component analysis to group our primary codes into 14 categories, which are listed below:
## Table D1
List of Parent codes and child codes

<table>
<thead>
<tr>
<th>Parent codes</th>
<th>Child codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerating too early</td>
<td>Resources/Bandwidth</td>
</tr>
<tr>
<td>Alignment (or lack thereof)</td>
<td>Data capacity</td>
</tr>
<tr>
<td>Alignment between schools</td>
<td>District size</td>
</tr>
<tr>
<td>Alignment between teachers</td>
<td>Enough demand for a course</td>
</tr>
<tr>
<td><strong>Assessments and Tests</strong></td>
<td>Limited course options</td>
</tr>
<tr>
<td>Accuracy of feeder school assessments</td>
<td>No appropriate course for struggling students</td>
</tr>
<tr>
<td>Accurate readiness measures</td>
<td>Not enough staff</td>
</tr>
<tr>
<td>Appropriate placement</td>
<td>Student Attributes</td>
</tr>
<tr>
<td>Subjective vs objective measures</td>
<td>Student desire</td>
</tr>
<tr>
<td>Too many tests</td>
<td>Student motivation</td>
</tr>
<tr>
<td>Use of grades</td>
<td>Student non-cognitive skills</td>
</tr>
<tr>
<td>Use of multiple measures</td>
<td>Time</td>
</tr>
<tr>
<td>Validity of measures</td>
<td>Scheduling issues</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
</tr>
<tr>
<td>Communication on math content</td>
<td>Time for assessments</td>
</tr>
<tr>
<td>Communication with feeder schools</td>
<td>Timing of placement decision</td>
</tr>
<tr>
<td><strong>Differing expectations</strong></td>
<td>adeque teacher preparation</td>
</tr>
<tr>
<td><strong>Curriculum/Instruction</strong></td>
<td>Teacher input</td>
</tr>
<tr>
<td>Inconsistent Instruction</td>
<td>Quality of teachers</td>
</tr>
<tr>
<td>New practices (i.e. Common Core and 21st learning)</td>
<td>teacher bias</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
</tr>
<tr>
<td>Appropriately challenge students</td>
<td>Teacher collaboration</td>
</tr>
<tr>
<td>Gaps/Holes in math knowledge</td>
<td>Teacher mindset/personality</td>
</tr>
<tr>
<td>Mastery of math concepts</td>
<td>Policy</td>
</tr>
<tr>
<td>Perceptions: One size fits all</td>
<td>Advancing students who shouldn't</td>
</tr>
<tr>
<td>Standardized evaluation on ability</td>
<td>Assessing placement/policy</td>
</tr>
<tr>
<td>Success in future math courses</td>
<td>Checkpoints of student performance</td>
</tr>
<tr>
<td><strong>Math Supports</strong></td>
<td>Enforcing/following policy</td>
</tr>
<tr>
<td>Resources/Tools for all students</td>
<td>Placing all students in same class, regardless of skill level</td>
</tr>
<tr>
<td>Supporting struggling students</td>
<td>Tracking (i.e. placing students on math tracks)</td>
</tr>
<tr>
<td><strong>Parents</strong></td>
<td>Tracking data</td>
</tr>
<tr>
<td>Parent decision</td>
<td>Waiver process</td>
</tr>
<tr>
<td>Parent involvement</td>
<td></td>
</tr>
<tr>
<td>Parent mindset</td>
<td></td>
</tr>
<tr>
<td>Parent Misunderstanding</td>
<td></td>
</tr>
<tr>
<td>Parent unrealistic expectations of child's math abilities</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** Math Placement Survey, PPIC 2016

**Notes:** 1. Bolded texts indicate parent codes. 2. N=142
Appendix E. Math Placement Survey

Survey of Mathematics Placement in California

Introduction
Thank you for taking this survey conducted by the Public Policy Institute of California (PPIC), an independent, objective, nonpartisan research institute (www.ppic.org). The following questions are about your school district’s math placement procedures and practices. Your participation in this survey will help inform researchers and practitioners about the placement procedures implemented in California’s K-12 schools. PPIC will use this information as part of a broader project to identify innovative and promising math placement practices.

This survey should only take 10 - 15 minutes to complete. Your responses will be treated confidentially and will only be reported in aggregate form. You or your school district will not be identified in reports or ranked. In return for your valuable time, we will provide you a copy of final report that summarizes placement practices and procedures in other districts across the state.

We appreciate your cooperation and thank you in advance for helping us understand your district’s math placement guidelines and practices. If you have any questions about the survey, please contact Niu Gao, Research Fellow at PPIC at 415-291-4491 or gao@ppic.org.

When you are ready, please click the Start button below to start the survey.
Part I. District Background
In this section, we ask about your school district’s basic information.

1. Is your district an independent charter district (e.g., managed by a Charter Management Organization or Education Management Organization)? [Single choice]
   - Yes (Please write in your CMO or EMO name) [Insert a comment line]
   - No
   - Don’t know

2. [Skip if “Yes” in Q1] Please select the county your district is in. [Insert dropdown menu with all counties]

3. [Skip if “Yes” in Q1] Please select your district. [Insert dropdown menu of districts]

4. What is the highest grade your district offers? [Single choice]
   - 5th grade or lower
   - 6th grade
   - 7th grade
   - 8th grade
   - 9th grade
   - 10th grade
   - 11th grade
   - 12th grade
   - Other (please specify) [Insert comment line]
   - Don’t know

   How does your district place students into different mathematic courses? [open ended]

   May we contact you for some follow-up questions?
   - Yes, my contact is…
   - No

5. (High school district only) Please list all the elementary and middle school districts that feed into your district. [Write in]
   - [Add up to 10 comment lines; one district per line]
   - Don’t know

Part II. Math Pathways
The following questions are about your school district’s mathematics curriculum during the 2015-2016 academic year.

6. Which of the following math pathways does your district offer? [Single choice]
   - Traditional math pathway (e.g., Algebra I, Geometry, Algebra II)
   - Integrated math pathway (e.g., Integrated Math I, Integrated Math II, Integrated Math III)
   - Both traditional and integrated pathways
   - Other (please specify) [add comment area]
Part III. Placement Development

We are interested in your school district’s practices on placing students in different mathematics courses during the 2015-16 school year. The practices do not need to be from a formal policy adopted by the district Board of Education.

14. During the 2015-16 school year, does your district have a specific procedure or protocol to determine students’ math placement (e.g., using student performance, teacher recommendations, parental request, etc.)? Again, these practices do not need to be from an official policy adopted by the Board. [Single choice]

□ Yes
15. [Version 1] [If “Yes” to Q14] You have selected that you district had a specific procedure or protocol to determine students’ math placement during the 2015-16 school year. Thinking about the evolution of these placement practices, when was the last time the district made changes to them? [Single choice]
   - Our district is currently changing our existing placement practices
   - Our district changed the placement practices less than a year ago
   - Our district changed the placement practices 1-3 years ago
   - Our district changed the placement practices more than 3 years ago
   - Other (please specify) [add a comment line]

15. [Version 2] [If “No” or “Don’t know” to Q14] You have selected that your district did not have a specific procedure or protocol to determine students’ math placement during the 2015–16 school year. Is your district currently developing its placement procedure? [Single choice]
   - Yes
   - No
   - Don’t know

16. [Skip if “No” to Q15 (Version 2)] When developing or changing the placement procedures, which of the following stakeholders were/are involved during the process? Please select all that apply. [Multiple choice]
   - County office of education (e.g., math specialist at COE)
   - District central office
   - School leadership team (e.g., principals, assistant principals)
   - School math department/division heads
   - School math teachers
   - School math counselors
   - Local teacher unions
   - Parents/guardians
   - Student representatives
   - Other (please specify) [add up to five lines; one input per line]
   - None
   - Don’t know

**Part IV. Placement Guideline Components**

**Version-1:** [if selected “yes” to Q6] Now we want to know more about the measures and indicators your school district used to place students into mathematics courses during the 2015-16 school year.
17. [Version 1] Which of the following **assessment** measures did your district normally use to place students into appropriate mathematics courses in the 2015-2016 year? Please select all that apply.

[Multiple choice]

- State standardized assessments
  - SBAC
  - CST
  - Other (please specify) [Add up to 3 comment lines; one per test]
- District administered assessments
  - Renaissance math
  - MDTP
  - MARS
  - MAP
  - Other (please specify) [Add up to 3 comment lines; one line per test]
- District developed assessments
  - Please specify [Add up to 3 comment lines; one line per test]
- Formative assessments
  - Please specify [add up to five lines; one line per assessment]
- Other assessments
  - Please specify [add up to five lines; one line per measure]
- None
- Don’t know

18. [Version 1] [Skip if “None” or “Don’t know” to Q17] Now please tell us the importance of each assessment measure.

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19. [Version 1] Which of the following **grade** measures did your district normally use to place students into appropriate mathematics courses in the 2015-16 school year? Please select all that apply.

[Multiple choice]

- Overall GPA
- GPA in math course
- Other (please specify) [add up to five lines; one line per grade measure]
- None
- Don’t know
20. [Version 1] [Skip if “None” or “Don’t know” to Q19] Now please tell us the importance of each grade measure.

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21. [Version 1] Which of the following student attributes did your district normally use to place students into appropriate mathematics courses in the 2015-16 school year? Please select all that apply. [Multiple choice]

- Student goals (e.g., college plans)
- Student course planning (e.g., course taking plans)
- Student motivation
- Student academic potential
- Student social-emotional skills
- Student growth mindset
- Other (please specify) [Add up to 5 lines; one line per attribute]
- None
- Don’t know

22. [Version 1] [Skip if “None” or “Don’t Know” to Q21] Now tell us the importance of each student attribute measure.

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23. [Version 1] Was enrollment capacity (e.g., number of courses available) a factor in your district’s placement decisions? [Single choice]

- Yes
- No
- Don’t know
24. [Version 1] [Skip if “No” or “Don’t know” to Q23] How important was enrollment capacity in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

25. [Version 1] Was teacher staffing (e.g., number of math teachers available) a factor in your district’s placement decisions? [Single choice]
   a. Yes
   b. No
   c. Don’t know

26. [Version 1] [Skip if “No” or “Don’t know” to Q25] How important was teacher staffing in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

27. [Version 1] Was parental/guardian request a factor in your district’s placement decision? [Single choice]
   - Yes
   - No
   - Don’t know

28. [Version 1] [Skip if “No” or “Don’t know” to Q27] How important was parental/guardian request in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

29. [Version 1] Were teacher recommendations a factor when placing students into appropriate mathematics courses? [Single choice]
   - Yes
   - No
   - Don’t know
30. [Version 1] [Skip if “No” or “Don’t know” in Q29] What were teachers’ recommendations based on? Please select all that apply. [Multiple choice]
- Student academic performance in the class
- Formative assessment (e.g., observations, student presentations)
- Student maturity
- Student motivation in math
- Inquiry or problem solving skills
- Organizational skills
- Peer support
- Student persistence
- Content mastery
- Parent support
- Student social-emotional skills
- Other (please specify) [add comment area]
- Don’t know

31. [Version 1] [Skip if “No” or “Don’t know” in Q26] How important was teacher recommendation in your district’s placement decisions? [Single choice]
- Very important
- Somewhat important
- Not very important
- Not important at all
- Don’t know

32. [Version 1] Did your district use any other measure(s) to place students into appropriate mathematics courses? [Single choice]
- Yes (please specify) [add up to 5 comment lines; one line per each measure]
- No
- Don’t know

33. [Version 1] [Only if Yes to Q32] You stated your district used other measures to place students into mathematics courses. Please tell us the importance of each measure.

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Version-2: [if selected “no” to Q14] Now we want to know more about the measures and indicators your school district plans to use to place students into mathematics courses during the 2016-17 school year.
17. [Version 2] Overall, which of the following assessment measures does your district plan to use to place students into appropriate mathematics courses? Please select all that apply. [Multiple choice]

- State standardized assessments
  - SBAC
  - CST
  - Other (please specify) [Add up to 3 comment lines; one per test]

- District administered assessments
  - Renaissance math
  - MDTP
  - MARS
  - MAP
  - Other (please specify) [Add up to 3 comment lines; one line per test]

- District developed assessments
  - Please specify [Add up to 3 comment lines; one line per test]

- Formative assessments
  - Please specify [add up to five lines; one line per assessment]

- Other assessments
  - Please specify [add up to five lines; one line per measure]

- None

- Don’t know

18. [Version 2] [Skip if “None” or “Don’t know” to Q17] Now please tell us the importance of each assessment measure.

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19. [Version 2] Overall, which of the following grade measures does your district plan to use to place students into appropriate mathematics courses? Please select all that apply. [Multiple choice]

- Overall GPA
- GPA in math course
- Other (please specify) [add up to five lines; one line per grade measure]
- None
- Don’t know
20. **[Version 2]** [Skip if “None” or “Don’t know” to Q19] Now please tell us the importance of each grade measure.

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21. **[Version 2]** Overall, which of the following **student attributes** does your district plan to use to place students into appropriate mathematics courses? Please select all that apply [Multiple choice]

- Student goals (e.g., college plans)
- Student course planning (e.g., course taking plans)
- Student motivation
- Student academic potential
- Student social-emotional skills
- Student growth mindset
- Other (please specify) [Add up to 5 lines; one line per attribute]
- None
- Don’t know

22. **[Version 2]** [Skip if “None” or “Don’t Know” to Q21] Now tell us the importance of each student attribute measure.

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</table>

23. **[Version 2]** Is **enrollment capacity** (e.g., number of courses available) going to be a factor in your district’s placement decisions? [Single choice]

- Yes
- No
- Don’t know
24. Version 2 [Skip if “No” or “Don’t know” to Q23] How important is enrollment capacity in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

25. Version 2 Is teacher staffing (e.g., number of math teachers available) going to be a factor in your district’s placement decisions? [Single choice]
   - Yes
   - No
   - Don’t know

26. Version 2 [Skip if “No” or “Don’t know” to Q25] How important is teacher staffing in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

27. Version 2 Is parental/guardian request going to be a factor in your district’s placement decision? [Single choice]
   - Yes
   - No
   - Don’t know

28. Version 2 [Skip if “No” or “Don’t know” to Q27] How important is parental/guardian request in your district’s placement decisions? [Single choice]
   - Very important
   - Somewhat important
   - Not very important
   - Not important at all
   - Don’t know

29. Version 2 Does your district plan to use teacher recommendations when placing students into appropriate mathematics courses? [Single choice]
   - Yes
   - No
   - Don’t know
30. [Version 2] [Skip if “No” or “Don’t know” in Q29] What are teachers’ recommendations based on? Please select all that apply. [Multiple choice]

- Student academic performance in the class
- Formative assessment (e.g., observations, student presentations)
- Student maturity
- Student motivation in math
- Inquiry or problem solving skills
- Organizational skills
- Peer support
- Student persistence
- Content mastery
- Parent support
- Student social-emotional skills
- Other (please specify) [add comment area]
- Don’t know

31. [Version 2] [Skip if “No” or “Don’t know” in Q29] How important is teacher recommendation in your district’s placement decisions? [Single choice]

- Very important
- Somewhat important
- Not very important
- Not important at all
- Don’t know

32. [Version 2] Does your district plan to use any other measure(s) to place students into appropriate mathematics courses? [Single choice]

   a. Yes (please specify) [add up to 5 comment lines; one line per each measure]
   b. No
   c. Don’t know

33. [Only if “Yes” to Q32] You stated your district plan to use other measures to place students to mathematics courses. Please tell us the importance of each measure.

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<tr>
<th>First written in measure</th>
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Part V. SB 359
In this section we ask about Senate Bill 359 (California Mathematics Placement Act), as we are trying to measure the impact SB 359 has had on school districts’ operations.

34. How familiar are you with Senate Bill 359 (California Mathematics Placement Act)? [Single choice]
35. [skip if “not familiar” is selected in Q34] What do you believe is the likelihood SB 359 will result in more students being placed in the appropriate math courses?

- Very likely
- Somewhat likely
- Not very likely
- No likely at all
- Don’t know

36. Is your district’s math placement practice already in compliance with the upcoming law or do you need to make changes to reach compliance by the 2016-2017 school year? [Single choice]

- My district’s current practice already complies with the law
- My district needs to make changes in our placement practices and we are working on it
- My district did not have any placement practices but is working to develop one
- Other (please specify) [add comment area]
- Don’t know

Part VI. Course Supports

In this section, we ask about the course support system your school district currently provides to help students succeed in mathematics courses.

37. Which of the following instructional supports does your district provide to help students succeed in mathematics courses? Please select all that apply. [Multiple choice]

- After school tutoring
- Summer bridge programs
- Peer mentoring
- Compacted courses
- Technology assisted learning
- Other (please specify) [add up to five lines; one per line]
- None
- Don’t know

38. Which of the following non-academic supports does your district provide to help students succeed in mathematics courses? Please select all that apply. [Multiple choice]

- Student advocates
- Encourage parental involvement
- Raise student awareness through assemblies, newsletters, and class talks
- Provide one-on-one counselor, guidance, or encouragement to students who could take advanced courses, but are not.
Part VII. Resources for Parents

In this section we ask about the resources your school district has provided parents on your district’s mathematics placement.

[Version 1 if yes to Q14]

39. [Version 1] Through which of the following channels did your district disseminate math placement information to parents and guardians? Please select all that apply. [Multiple choice]
   - Public information on district website
   - PTA
   - Parent lounge
   - Special workshops
   - School newsletters
   - Letter from teachers
   - Other (please specify) [add comment area]
   - Don’t know

40. [Version 1] How often do you think parents or guardians challenge the district’s placement decisions each year? [Single choice]
   - Never
   - Rarely
   - Occasionally
   - Often
   - Don’t know

[Version 2 if no to Q14]

39. [Version 2] Through which of the following channels will you disseminate math placement information to parents and guardians? Please select all that apply. [Multiple choice]
   - Public information on district website
   - PTA
   - Parent lounge
   - Special workshops
   - School newsletters
   - Letter from teachers
   - Other (please specify) [add comment area]
   - Don’t know

40. [Version 2] How often do you think parents or guardians will challenge the district’s placement decisions each year? [Single choice]
   - Never
   - Rarely
   - Occasionally
Part VIII. Evaluation of placement guidelines

In this section we are interested in knowing the indicator(s) that your school district uses to measure the success of your placement practices.

41. [Version 1] [if yes to Q14] Did your district use any of the following measures to determine the success (or lack thereof) of the placement guideline? Please select all that apply. [Multiple choice]
   - Overall enrollment in specific mathematics courses
   - Course enrollment in specific mathematics courses, broken down by subgroups (e.g., racial/ethnic subgroups, socio-economic status subgroups)
   - Percent of students advancing to the next level math course, broken down by subgroups (e.g., racial/ethnic subgroups, socio-economic status subgroups)
   - Teacher feedback on student outcomes
   - Teacher feedback on placement process
   - Parent feedback
   - Student feedback
   - State assessment (e.g., SBAC)
   - District assessment
   - End of year math grade
   - Other (please specify) [Add comment area]
   - None
   - Don’t know

41. [Version 2][if no to Q14] Will your district use any of the following measures to determine the success (or lack thereof) of the math placement practice? Please select all that apply. [Multiple choice]
   - Overall enrollment in specific mathematics courses
   - Course enrollment in specific mathematics courses, broken down by subgroups (e.g., racial/ethnic subgroups, socio-economic status subgroups)
   - Percent of students advancing to the next level math course, broken down by subgroups (e.g., racial/ethnic subgroups, socio-economic status subgroups)
   - Teacher feedback on student outcomes
   - Teacher feedback on placement process
   - Parent feedback
   - Student feedback
   - State assessment (e.g., SBAC)
   - District assessment
   - End of year math grade
   - Other (please specify) [Add comment area]
   - None
   - Don’t know
Part IX. Challenges and Issues

42. What do you see as the biggest challenge(s) when placing students into appropriate mathematics courses?
   [Insert comment area]

Part X. Follow up Request

43. Please select your current position at your school district. [Multiple choice]
   □ District central office (e.g., superintendents)
   □ School leadership team (e.g., principals, assistant principals)
   □ School math department/division head
   □ School math teacher
   □ School math counselor
   □ Other (please specify) [Add comment area]
   □ Don’t know

44. In return for your valuable time, we would like to give you a copy of our survey report that summarizes placement practices in other districts. Would you like to receive a copy? [Single choice]
   □ Yes, please send me a copy and my email address is [email address]
   □ No, thank you.

45. May we contact you for some follow-up questions regarding your district’s placement practices? You will not be cited or quoted. [Single choice]
   □ Yes, my contact is:
     i. Name:[insert comment area]
     ii. Email:[insert comment area]
     iii. Phone:[insert comment area]
   □ No, thank you.
Mas Masumoto, Chair
Author and Farmer

Mark Baldassare
President and CEO
Public Policy Institute of California

Ruben Barrales
President and CEO
GROW Elect

Maria Blanco
Executive Director
Undocumented Student Legal Services Center
University of California Office of the President

Louise Henry Bryson
Chair Emerita, Board of Trustees
J. Paul Getty Trust

A. Marisa Chun
Partner
McDermott Will & Emery LLP

Chet Hewitt
President and CEO
Sierra Health Foundation

Phil Isenberg
Former Chair
Delta Stewardship Council

Donna Lucas
Chief Executive Officer
Lucas Public Affairs

Steven A. Merksamer
Senior Partner
Nielsen, Merksamer, Parrinello, Gross & Leoni, LLP

Gerald L. Parsky
Chairman
Aurora Capital Group

Kim Polese
Chairman
ClearStreet, Inc.

Gaddi H. Vasquez
Senior Vice President, Government Affairs
Edison International
Southern California Edison
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