Multiple Measures Assessment Project
Pilot College - Developing a Research Plan

A strong research plan and agenda is a key element of the multiple measures project. It enables the college and departments to see what is working and what changes may need to be made. It is important to assess outcomes each term and track students from term to term, ultimately until the complete the sequence through the transfer level course. This guide provides an overview of some steps to consider when developing a research plan.

Potential steps:
1. Determine the proportion of students that could be matched by Cal-Pass Plus, this is based on your feeder high schools submitting data.
   - It is important to determine how many students do not have transcript data available to inform your multiple measures team of the match rate. If this is a large number of students, your college may want to develop a plan to gather this data, possibly through outreach to high schools or using self-reported data.
   - It is also important to be transparent in your reporting—that this data represents only a sample of your total population that may have been placed using multiple measures. As it is limited by the availability of transcript data.

2. Develop a baseline report
   - Placement into English and math, by level
   - Proportion of students who enroll, by level
   - Completion of initial course, by level
   - Completion of sequence, by initial placement

3. Develop method/plan for identifying students and their placements:
   - Possibility of application of multiple measures
     - Track whether sufficient high school data existed to place students using data field provided by CalPASS
   - Eligibility for implementation of multiple measures
     - Yes/no or categorical variable indicating eligibility of students for multiple measures (i.e., if a cohort of students, students selected from specific high schools, or a randomly selected subset of students had access to the alternative assessment via multiple measures)
   - Placements in English and Math
     - Placement via assessment test (including a category for test not taken because of multiple measures)
Placement via multiple measures (including a category for no placement provided by multiple measures) – note – it is important to develop a theoretical placement for students for whom high school data was available but who were not eligible for multiple measures to be used for whatever reason in your initial cohort of implementation

- We have developed a data element dictionary for the overall variables used to conduct the statewide analysis, these data elements may provide some structure on how to think about which variables to collect locally for your analysis: [http://bit.ly/2np2ifi](http://bit.ly/2np2ifi)

4. Consider the following potential outcome metrics in particular by combination of placements among eligible and compared to students across eligibility for multiple measures:

- Proportion of incoming students placed at transfer level
- Enrollment in discipline course (yes/no) and which level
- Success rate of students in first course
- Successful completion of transfer-level course in first year, second year, third year...
- Disaggregations by demographics, equity categories
- Satisfaction surveys of students, faculty, and staff
- Consequential validity survey of teachers and students

5. Sample data charts are provided as an example of how you may choose to display different information:

**Table 1. Comparison of Placement Test and Multiple Measures – English**

<table>
<thead>
<tr>
<th>Placement Level</th>
<th>Final (Disjunctive or Compensatory) Placement</th>
<th>Unmodified Placement (Test placement)*</th>
<th>Placement by MMs for eligible students**</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Column %</td>
<td>N</td>
<td>Column %</td>
</tr>
<tr>
<td>3 Levels Below</td>
<td>148</td>
<td>15.8%</td>
<td>148</td>
</tr>
<tr>
<td>2 Levels Below</td>
<td>245</td>
<td>13.7%</td>
<td>311</td>
</tr>
<tr>
<td>1 Level Below</td>
<td>433</td>
<td>24.3%</td>
<td>353</td>
</tr>
<tr>
<td>Transfer Level</td>
<td>1,106</td>
<td>62.0%</td>
<td>126</td>
</tr>
<tr>
<td>Total</td>
<td>1,784</td>
<td>100%</td>
<td>790</td>
</tr>
</tbody>
</table>

*unmodified placement level ** mm placement level

**Table 2. Multiple Measures Placement Relative to Unmodified Test Placement - English**

<table>
<thead>
<tr>
<th>Multiple Measures Lower than Test</th>
<th>Multiple Measures and Test Equivalent</th>
<th>Multiple Measures Higher than Test</th>
<th>No Multiple Measures Placement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Row %</td>
<td>N</td>
<td>Row %</td>
<td>N</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>1%</td>
<td>284</td>
<td>35%</td>
</tr>
</tbody>
</table>