Multiple Measures Assessment Project (MMAP)

Why Multiple Measures?

- A multiple measures approach to placement provides students a variety of ways in which to demonstrate their proficiency in a subject area. Thereby, helping to minimize test bias, reduce equity gaps for underrepresented groups, improve placement accuracy, and move students through a sequence of courses more efficiently.

- Multiple measures can include any or all of the following:
  - Essays/writing samples
  - Portfolio assessments, or self-reported data (e.g., surveys)
  - Non-cognitive variables/psychometric data (CSSAS)
  - **High school transcript data (e.g., GPA & CST scores)**

What is the MMAP?

- A component of SB1456 Student Success Act, Common Assessment Initiative, and an extension of the STEPS pilot.

- A way in which to quantify students' likelihood of passing an English or math course using high school transcript data (e.g., GPA, & CST scores) for placement.

- A set of rules or criteria for predicting student success in English or math that can be used as a disjunctive (placement test or HS data) or progressive (highest result) approach for placement.

- A method for maintaining equivalent success as with placement testing only, and increasing the placement of more students into higher levels (greater "throughput").

- A multiple measure approach intended to be used conjunctively (along with Accuplacer/Common Assessment).

Sample MMAP Decision Tree

Transfer Level English, 12th Grade GPA
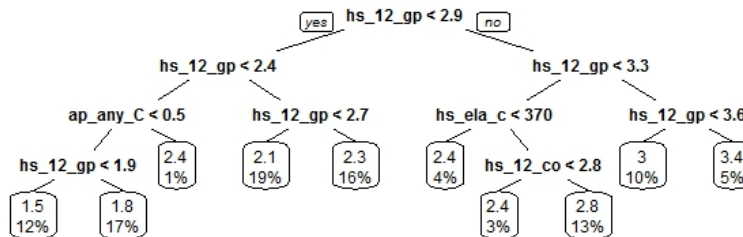
Transfer English Rule Set

11th Grade Data Available

- Transfer Level:
  HS GPA >= 2.7 or APA English C+ or better

- One Level Below Transfer:
  HS GPA >= 2.5

12th Grade Data Available

- Transfer Level:
  HS GPA >= 2.9, or >2.4 plus 12th grade English course C+ or better

- One Level Below Transfer:
  HS GPA >= 2.7, or AP English grade C or better, or GPA >2.3 plus 12th grade English grade B- or better

Transfer Math Rule Set

Models were created for transfer-level math that included Statistics, GE math/College Algebra, Pre-Calculus and Calculus I.

Transfer – Statistics (Adj. R^2=0.16)

- HS GPA >= 3.2
  OR
- HS GPA >=2.7 AND CST >= 310
  OR
- Enrolled in HS Calculus
  OR
- C+ or better in Statistics in HS AND CST >= 242
  OR
- B- or better in HS Trig AND CST >= 369
  OR
- B- or better in HS Trig AND CST >= 271 AND C or better in HS Algebra 1

Math Transfer Level Placements
Fall 2015 MMAP Pilot Cohort

	Accuplacer Placement at Transfer	MMAP Placement at Transfer	Combined Accuplacer and MMAP Placement at Transfer	Percent Difference
City College/ECC	67	138	205	206%
Mesa College	94	159	253	169%
Miramar College	100	80	180	80%
All Colleges	261	378	639	145%

The MMAP pilot cohort consists of students who applied, but may not have registered, Jan. 2015 and June 2015, and took the Accuplacer test. Approximately 941 students are in this cohort.

English Transfer Level Placements
Fall 2015 MMAP Pilot Cohort

English Writing	Accuplacer Placement at Transfer	MMAP Placement at Transfer	Combined Accuplacer and MMAP Placement at Transfer	Percent Difference
City College/ECC	48	116	164	242%
Mesa College	113	120	233	106%
Miramar College	66	83	149	126%
All Colleges	227	321	548	141%

The MMAP pilot cohort consists of students who applied, may not have registered, between Jan. 2015 and June 2015 and took the Accuplacer test . Approximately 941 students are in this cohort.

MMAP Pilot Process

- Established a districtwide MMAP work group that met several times in Spring 2015. The Work group provided input into the rule sets, assisted with the logistics for piloting, and drafted an assessment plan with guidelines for implementation.

- The District Research Office conducted numerous comprehensive retrospective analyses to test for predictive validity of the MMAP model for SDCCD students.

- CalPASS developed a secure, and robust longitudinal data warehouse that will collect, store, and process multiple measures data for placement.

- Students that were identified as eligible to be 'bumped' to transfer level English and math were contacted for Fall 2015 registration.

Next Steps

- (Aug. 2015-May 2016) Broadly communicate assessment plan.

- (Jan. 2016) Track fall cohort progress and completion, and review, and refine placement rule sets as needed.

- (Nov.- Dec. 2016)Place students for Spring 2016 using MMAP measures and Accuplacer or Common Assessment conjunctively.

- (June 2016) Track spring cohort progress and completion, and review and refine placement rule sets as needed.