Multiple Measures Assessment Project (MMAP)
Spring 2018 Implementation Survey Results – Full Results

Introduction

The survey was sent to 97 California Community Colleges (CCC), a mix of official and unofficial (colleges that are using the models but have not signed the data sharing agreement) pilot colleges, in March 2018. The administration resulted in 79 responses for a response rate of 81%. The purpose of the survey was to collect information regarding where colleges are at in their process of implementing MMAP, the scale of the implementation, how MMAP is being applied (using the statewide models or modifications), and how colleges are preparing for AB 705 implementation. The results of the survey will be used to inform the next phase of the project including tailored support for colleges as they transition from MMAP to implementation of the state Chancellor's Office AB 705 guidelines.

Highlights

- 91% (72 of 79) of colleges who responded to the survey implemented a multiple measures approach using high school transcript data.
- 71% (67 of 94) of colleges who are using high school transcript data are using the statewide rule sets without modifications in English, math, ESL and Reading.
- Over 80% (87 of 105) of colleges are using a disjunctive model for English, Math, ESL and Reading.
- Approximately 87% (54 of 62) of colleges have begun to adapt their assessment and placement systems to meet AB 705 requirements.
- Four colleges indicated they are using self-guided placement.
- About half of respondents are using self-reported high school transcript data collected locally, about 40% are using self-reported transcript data collected via CCCApply, and over a quarter are using CalPass Plus data, while around 20% require students to bring in their official transcripts.

Implementation of Multiple Measures

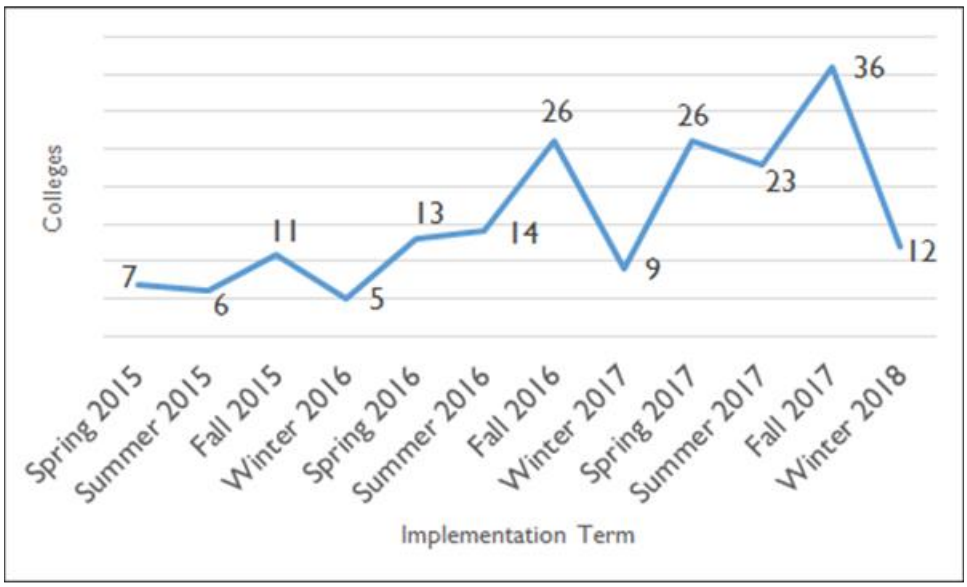
Colleges were asked to report on where they are at in the process (select all that apply)

	Colleges	Percent
We have not yet started the process	0	0%
We are in the early stages of planning	4	5%
We are reviewing retrospective data with our team	6	8%
We have developed an implementation plan and are starting to act upon it	12	15%
We have the processes in place to start placing students using high school transcript-based multiple measures	24	30%
We have implemented a multiple measures approach using high school transcript data and are in the process of analyzing the results	40	51%
We have implemented a multiple measures approach using high school transcript data and have collected and analyzed the results to determine success rates in the course which placed	32	41%
We have implemented a multiple measures approach using high school transcript data and have collected and analyzed the results to determine throughput rates for students starting in basic skills and successfully completing the transfer-level course	15	19%
We have developed a research plan to validate our multiple measures approach which uses high school transcript data	20	25%
We have completed an evaluation of our assessment and placement process, including data on our high school transcript-based multiple measures approach	14	18%
We have evaluated our high school transcript-based multiple measures approach and made changes based on the findings	14	18%

Of the 79 colleges that responded:

- 15 have implemented a multiple measures approach and have collected and analyzed the results to determine throughput rates for students starting in basic skills and successfully completing the transfer-level course.
- 32 have implemented a multiple measures approach and have collected and analyzed the results to determine success rates in the course which placed.
- 40 have implemented a multiple measures approach and are in the process of analyzing the results.
- 20 have developed a research plan to validate their multiple measures approach.
- 14 have evaluated their multiple measures approach and made changes based on the findings.
- 24 have the processes in place to start placing students.

Academic terms that multiple measures assessment was implemented (select all that apply):



- Implementation of multiple measures was greatest starting in the fall 2016 followed by spring 2017 and fall 2017.

Estimated number of students ELIGIBLE for high school transcript-based multiple measures between spring 2015 and winter 2018:

	Colleges	Percent	Colleges	Percent	Colleges	Percent	Colleges	Percent	Colleges	Percent	Colleges	Percent
Spring 2015	3	4%		0%	2	3%	1	1%	1	1%	7	9%
Summer 2015	2	3%	2	3%	1	1%		0%	1	1%	6	8%
Fall 2015	4	5%	3	4%	1	1%	2	3%	1	1%	11	14%
Winter 2016	3	4%		0%	1	1%		0%	1	1%	5	6%
Spring 2016	8	10%		0%	2	3%	1	1%	2	3%	13	16%
Summer 2016	7	9%	4	5%	1	1%		0%	2	3%	14	18%
Fall 2016	8	10%	6	8%	2	3%	3	4%	7	9%	26	33%
Winter 2017	3	4%	2	3%	1	1%		0%	3	4%	9	11%
Spring 2017	9	11%	1	1%	5	6%	5	6%	6	8%	26	33%
Summer 2017	7	9%	6	8%	3	4%		0%	7	9%	23	29%
Fall 2017	9	11%	3	4%	5	6%	6	8%	13	16%	36	46%
Winter 2018	2	3%	2	3%	4	5%	1	1%	3	4%	12	15%
Total	65	82%	29	37%	28	35%	19	24%	47	59%	188	

- Respondents were asked to report which terms students were placed and how many students were eligible to receive a high school transcript-based placement.
    - The majority of respondents implemented MMAP with a small cohort of 200 students or less.
    - A quarter of respondents implemented MMAP with over 2,000 students in their cohort.
- When combined, between spring 2015 and winter 2018, up to 185,000 students may have been eligible for a multiple measures placement.

Did your college implement any of the following?

	Self-reported high school transcript data (locally or via CCCApply)	Noncognitive variables data (i.e., Grit, Hope, Productive Persistence, etc.)	Self-guided placement	Other (please specify)
Colleges	30	7	4	7
Percent	38%	9%	5%	9%

Of the 79 colleges that responded to the survey, 30 or 38% are using self-reported transcript data either collected locally or through CCCApply while 7 colleges are using noncognitive variables and 4 are using self-guided placement.

Method of Assessment

What type of model was implemented?

Approximately 71% of colleges (67 of 94) who are using high school transcript data are using the statewide rule sets without modifications in English, math, ESL and Reading.

- English
  - 32% (25 of 41) of colleges are using the unmodified MMAP rule sets
  - 14% (11) are using modified MMAP rule sets
  - 6% (5) are using a locally created rule.
- Math
  - 28% (22 of 39) of colleges are using the unmodified MMAP rule set
  - 16% (13) are using modified MMAP rule sets
  - 5% (4) are using a locally created rule.
- ESL
  - 8% (6 of 23) of colleges are using the unmodified MMAP rule set
  - 1% (1) are using modified MMAP rule sets
  - 3% (2) are using a locally created rule
  - 18% (14) are using a multiple measures approach that does not use high school transcript data
  - 23% (18) are not using multiple measures for ESL.
- Reading
  - 18% (14 of 19) of colleges are using the unmodified MMAP rule set
  - 1% (1) are using modified MMAP rule sets
  - 1% (1) are using a locally created rule
  - 2% (3) are using a multiple measures approach that does not use high school transcript data
  - 8% (6) are not using multiple measures for Reading but have a Reading program.

If a college is using a modified MMAP or locally derived multiple measure for English, what is it?

The English department has developed multiple measures to be used for Dual enrollment students (students taking college courses while in high school). The English department has implemented a self-guided placement for re-entry students.
As of 3/1/18 English modified their system to include a disjunctive floor embedded into accuplacer. This allows direct placements in the event that students who meet criteria (e.g. certain combinations of grades, courses completed, SAT, ACT) do not have an accuplacer-based result of the same or higher level. Historically, questions such as last course, grade from course, overall GPA, AP/Honors courses taken, were simply weighting the test score results, and/or used for test branching alone. The new system is far more advanced.
Direct (using HS GPA from grades 9-11): Transfer-level: GPA 2.6 or higher OR B- or higher in last English writing class One level below transfer: GPA lower than 2.6 AND lower than B- in last English writing class (this placement prompts a recommendation to take the Accuplacer test) Non-direct: Transfer-level: HS (9-12) GPA 2.6 or higher One level below: GPA is below 2.6 (this placement prompts a recommendation to take the Accuplacer test)
High School GPA at least 2.6 or B or better in 11th grade English Composition or higher => English 100
Our English department made the following modifications to the Direct Matriculants: 1. Four levels below: HS GPA <1.4 2. Two levels below HS 11 GPA>=2.0 AND English with a C- or better 3. One level below HS 11 GPA>=2.3 AND English with a C- or better 4. Transfer-level HS 11 GPA>=2.6 AND English with a C- or better Modifications to the Non-direct Matriculants (12th-grade students) 1. Four levels below: HS GPA <1.7 2. Transfer-level HS 11 GPA>=2.6 AND English with a C- or better
Students who attended a US high school for 3 or more years within the last 10 years are eligible for MM placement (self-reported or transcript). Students with a cumulative, unweighted HS GPA of 2.8 or higher are eligible for transfer-level English (English 100). Students with a HS GPA between 2.5 and 2.79 with a B or better in last English class are eligible for English 100. Students with HS GPA >=2.4 and >=C in last English class eligible for pre-transfer English 50. All other students (HSGPA <2.4 OR last English class
To get into transfer-level English, you need either a HS GPA of 2.7, or a B or better in Jr/Sr HS English To get into transfer-level English with a corequisite, you need a HS GPA of 2.3, or a C or better in HS Jr/Sr English Anyone else places into one-level below English.
Until we hear about guidance about how to implement AB705, we are still using Accuplacer cut scores, with HS GPA used as one of the multiple measures, along with grade in English, to bump up students at the margins of the cut scores. We have added only that if they have HS GPA of 3.5 or more, and scored at least basic skills level in Accuplacer, than they can go into College English. We are discussing lowering the HS GPA threshold, but the English faculty are reluctant to change anything unless they have to.
We are also using a Writing Sample assessment, CTEP Reading Test, EAP, SAT, ACT, AND high school transcript information, when available. We do use a disjunctive approach - whichever measure results in the highest placement, is the one we use.
We created our own CART trees using CalPASS data and built our placements on them. We compared predicted outcomes to historical averages and, with input from faculty, chose the placements based on them.

If a college is using a modified MMAP or locally derived multiple measure for math, what is it?

The Math department has added for Math P122 (Algebra 1 and GPA) requirement as research is evolving modifications will be made to accommodate for AB705. The Math Division added completion of Algebra 2 with no GPA requirement as an alternate pathway to STEM.
Algebra 1 with C OR higher and Cumulative GPA of 2.0 => Math 110 – Elementary Algebra= AlgebraAlgebra 2 with a C OR higher and Cumulative GPA of 2.4=> Math 120 – Intermediate Algebra 1 with C OR higher and Cumulative GPA of 2.0 => Math 190 – Path to Statistics Algebra 2 with a C OR higher and Cumulative GPA of 2.8 => Transfer Level--Math 125, 130, 145, 150, 200, 225, 241 Completed high school Trigonometry with C or higher OR GPA of 2.8=> Math 222 (130 Prerequisite) Pre-Calculus College Algebra/Trigonometry ☐Completed high school Pre-Calculus with a C or higher OR GPA of 2.8 =>Math 251 Analytical Geometry and Calculus
Based on grades in algebra and pre-calculus along with GPA.
Basically we used the MMAP rules to place students into courses for which MMAP data was available. If it wasn't available, we used faculty input to decide on GPA rules that we felt comfortable with. We determined a placement for every student with every possible GPA and every possible answer from CCCApply.
Just slight changes based on our local HS course patterns. Too hard to describe, would need to attach the model...
Locally developed algorithm uses HS GPA and last completed course for placement.
Our math placement system is unique. Background MM questions produce 'floors' and students can place no-lower than one of these floor levels- this is essentially a disjunctive model embedded into a conjunctive model. We then have a algorithm that determines if the disjunctive floors, OR, a combination of test scores weighted by MM measures, produces a higher result. The system will only show the student the higher of the two concurrent placement models. In addition, 'statistics' course placements can be added to any result from either model formulation as a type of bonus placement (primarily intended for Liberal arts majors). Overall, even though we continue to use Accuplacer (at least until Jan of 2019 when classic is set to expire), the test are not used to harm students, but instead, only to advance students who have skills beyond what their academic history alone implies. This system is also helpful for returning students, who may not know their high school information after a long gap, and thus may be mis-placed by a Multiple Measure system alone.
Similar rules, but slightly different gpa cut-offs and eligibility ends at 5 years after high school.
Used statewide measures but adapted for course offerings at our college.
We apply the state model. However, for some courses that are not included in the state model, we use the state model as a
We are not using MMAP for math. I use EAP, AP, Transcripts(Multiple Measures) and Accuplacer.
We created our own CART trees using CalPASS data and built our placements on them. We compared predicted outcomes to historical averages and, with input from faculty, chose the placements based on them.
We modified the MMAP rules for statistics to match the requirements for pre-calculus.

If a college is using a modified MMAP or locally derived multiple measure for Reading, what is it?

In addition to HS transcripts (when we can get them), we use the CTEP reading assessment.
Locally developed algorithm uses HS GPA and last completed course for placement.
There was no specific placement model for Reading exclusive to the discipline in MMAP, so we created one but ultimately decided to align reading course placement by English course level associated with the reading level (which we modified and re-aligned in 2017). Previous to 2017, we had aligned Reading 22 with English 20A, but changed the Reading course associated with that level to Reading 25. Having separate placement levels in Reading and Writing courses proved to be preventative when creating co-requisites for enrollment, and the Reading levels matched the writing levels very closely when we initially attempted to create placement scores that separated reading and writing.

If a college is using a modified MMAP or locally derived multiple measure for ESL, what is it?

Counselor Guided Placement model
ESL uses a traditional accupalcer that has been modified by locally developed MM weights. The small ratio of students taking this assessment has lead to less available data, slowing our progress to make changes at the same rates as English and math. ESL meetings are planned at this time to discuss what a MM-disjunctive options might look like. Examples of these systems would be welcomed, if this has proven to be a successful strategy at other colleges.
ESOL placement currently uses the CELSA assessment. However, students can earn extra points for their responses to two questions: How many years of schooling have you completed in your country? And, When you were a student in your country, what kind of grades did you receive in school?
Local grammar and writing test.
Our ESL faculty incorporates interviews into their Accuplacer assessment.
Students taking the assessment for placement into ESL take the CELSA and Writeplacer ESL from Accuplacer. They also fill out a background questionnaire that is reviewed by the ESL coordinator, who then has a discussion with the student regarding their placement into the ESL program.
Two background questions add additional points to the students final score.
WE are using Accuplacer that branches up to English and down to ESL. Multiple measures are years in the US, rather than HS GPA. We are waiting for state guidance on ESL and AB705.
We are currently not using MMAP for ESL placement. This is our next effort. Our current ESL test does have a multiple measure. For adult ESL, CASAS is used.
We have not modified our ESL placement scheme recently in light of MMAP; we are using the same system that we have had in place for years, which includes self-reported high school GPA.
We modified the ESL state decision rules to match the English state decision rules for the ESL courses that match the English courses (English 100 and ESL 100, for example, have the same decision rule).
We use a conjunctive model with Accuplacer ESL and a writing sample

How multiple measures was applied (select all that apply):

	English		Math		ESL		Reading	
Disjunctively (higher of the two)	34	83%	33	85%	8	89%	12	75%
Compensatory I (e.g., adjusting upwards from the assessment test-based placement)	3	7%	2	5%	3	33%	1	6%
Compensatory II (e.g., some combination of the two allowing lower performance on some measures to be offset by higher performance on other measures)	1	2%	2	5%	0	0%	0	0%
Conjunctively (e.g., students have to meet a certain minimum threshold in more than one measure)	3	7%	2	5%	1	11%	2	13%

English = 41 colleges, Math = 39, ESL = 9 Reading = 16

- Over 80% (87 of 105) of colleges are using a disjunctive model for English, Math, ESL and Reading.

What course level where high school transcript-based multiple measures assessment was used in each subject area to place students? (select all that apply)

	English		Math		ESL		Reading	
Transfer-level	37	47%	37	47%	7	9%	13	16%
One level below transfer	28	35%	30	38%	10	13%	11	14%
Two levels below transfer	21	27%	29	37%	10	13%	10	13%
Three levels below transfer	9	11%	23	29%	7	9%	8	10%
Four or more levels below transfer	3	4%	8	10%	3	4%	2	3%

- Around 50% of respondents were using high school transcript models to place into transfer-level English and Math.
- Followed by one-level below transfer for English and Math (35% and 38%)

Data Acquisition

Data source used (select all that apply):

	English		Math		ESL		Reading	
CalPass Plus	11	27%	11	28%	2	22%	7	44%
Self-reported high school transcript data collected through the CCCApply application	15	37%	15	38%	3	33%	6	38%
Self-reported high school transcript data collected through a locally created process	20	49%	18	46%	7	78%	5	31%
Students are required to bring in their transcripts	11	27%	12	31%	3	33%	3	19%
Local data sharing agreement/relationship with a high school	8	20%	8	21%	1	11%	2	13%

English = 41 colleges, Math = 39, ESL = 9 Reading = 16

- About half of respondents are using self-reported high school transcript data collected locally, about 40% are using self-reported transcript data collected via CCCApply, and over a quarter are using CalPass Plus data, while around 20% require students to bring in their official transcripts.

Other data sources:

Attempted to use CalPass Plus data as the primary means of collecting this data but few students assessed were in the CalPass Plus. We are currently working districtwide with our local unified school districts to gather HS transcripts to confirm student information.
For English, placements can come from the EAP through data sharing, all others are self-reported.
Local ESL tests.
Though ESL is not using high school transcript data, self-reported information on school performance in a student's country is added to assessment results (see details in response to previous question).
WE have the high school transcripts from 4 out of our 5 HS districts, and we use them just for the math assessments. They are only available for the 40% of our new students who attended those HS districts. The English assessments use self reported HS GPA in Accuplacer.
We are currently establishing local data sharing MOU with our two feeder high school districts, as well as working with Parchment, and of course Cal Pass Plus. We believe having three sources available, we can find our student's high school data.
we also have a manual process where students can bring in their transcripts if Cal-Pass and/or Self-reported are not available

AB 705 Compliance

Types of actions or plans colleges have already put into place to meet AB 705 requirements:

- Developed or implemented placement models based on high school data (19 colleges)
- Planning or implementing changes to basic skills curriculum or sequences (16)
- Developing corequisite models for transfer-level courses (13)
- Communication on implementing multiple measures between departments/faculty/counselors and outreach (11)
- Formed a workgroup (8)
- Analyzing multiple measures data or assessing pilot data (8)
- Working on automation of high school data collection (8)
- Began collecting high school data (6)
- Provided professional development to faculty (5)
- Began piloting multiple measures (3)
- Offering non-credit assessment preparation courses during the summer (2)

Reported assistance or resources that would help colleges adapt to AB 705:

- Clearly stated language that better defines data requirements, term/quarter time frames, courses below transfer-level, ESL exceptions/clarification, students who have been out of high school for over 10 years, and placement of international students (19 colleges)
- Professional development (webinars, workshops, or additional training) and networking opportunities with other colleges (16)
- Assistance with automation and data acquisition (7)
- Access to K-12 data (CalPass Plus) (6)
- A template or checklist to help meet requirements (4)
- An approved assessment test (2)

Other initiatives, programs, or other efforts in place in addition to multiple measures assessment:

- Guided Pathways (44 colleges)
- Corequisite courses (42)
- Accelerated courses (44)
- Special support services (27)
- Supplemental instruction (34)
- Summer Bridge (28)
- Non-credit courses or corequisites (30)
- Late start or compressed courses (21)

Sharing any additional information or feedback about experiences with multiple measures assessment:

- Communication, system updates, and technology support are all of critical concern
- Need for data-sharing agreement with the Department of Education
- Need to address placement of high school students in non-traditional classes
- Worries that moving to a fully disjunctive system will be difficult
- The difficulties associated with potentially eliminating developmental course sequences and sections
- The perception that assessment offices and staff are of lesser value with the push to reduce standardized testing. Consider ways of including assessment work in these transitional periods.

- Worries that truly remedial students, or disenfranchised students, are being overlooked in the movement towards acceleration.
- Initial data on student success is promising.
- Concerns that using MMAP rules to meet the math competency requirements for A.A. degree will be in conflict with Title V mandates.
- Concerns that MMAP rules will reduce students taking Intermediate Algebra courses that are transferrable to UC schools.
- Frustrations with the difficulty in obtaining high school transcript information and the need for automation of high school data.
- Further guidance on AB 705 is needed from the Chancellor's Office.
- Need to clarify a lot of the language in AB 705.
- MMAP has been a positive development in regards to success rates.
- Concerns that MMAP will place ill-prepared students into college-level English.
- Communication with CCCAply to include a pop-up window explaining to students that they will need their high school transcript available.
- The pressure of top-down implementation with some guidelines still not provided is creating additional difficulties.
- Concerns that STEM students will place lower than Trig. or Pre-Calculus for not meeting MM high school GPA requirement.
- Need for a CalPass statewide database to access transcript data.
- Benefits of sharing research data that support MMAP.
- The need for automation and additional state resources to assist with data collection.
- Problems with high rates of false self-reported high school GPA and missing or inaccurate data.
- Need for guidance on placement of students who do not matriculate from high school.
- Found many benefits from disjunctive placement of students.
- It would benefit the colleges to become familiar with equivalent math courses from feeder high school districts to identify their relationship to the courses of the placement model.
- Pilot data showed lower success rates for MMAP students.

Survey Respondents:

Allan Hancock College
Bakersfield College
Cabrillo College
Cañada College
Cerritos College
Chabot College
Chaffey College
Citrus College
City College of San Francisco
College of Alameda
College of the Canyons
College of the Redwoods
College of the Sequoias
Contra Costa College
Cuesta College
Cuyamaca College
Cypress College
De Anza College
Diablo Valley College
East L.A. College
El Camino College
Evergreen Valley College
Feather River College
Folsom Lake College
Foothill College
Fresno City College
Gavilan College
Golden West College
Grossmont College
Hartnell College
Imperial Valley
Irvine Valley College
L.A. City College
L.A. Harbor College
L.A. Mission College
L.A Pierce College
L.A. Trade-Tech College
L.A. Southwest College
L.A. Valley College
Long Beach City College
Mendocino College
Merritt College
Mesa College
MiraCosta College
Mission College
Modesto Junior College
Monterey Peninsula College
Moreno Valley College
Mt. San Antonio College
Norco College
Ohlone College
Orange Coast College
Oxnard College
Pasadena City College
Porterville College
Reedley College
Rio Hondo College
Riverside College
Saddleback College
San Diego City College
San Diego Miramar
San Joaquin Delta College
San Jose City College
Santa Ana College
Santa Barbara City College
Santa Monica College
Santiago Canyon College
Shasta College
Sierra College
Solano College
Ventura College
West Hills College Lemoore
West Hills College Coalinga
West L.A. College
West Valley College

Note: Not all colleges chose to identify themselves as a respondent.

The MMAP Research Team, a partnership of The RP Group and Educational Results Partnership prepared this report. The primary contact is Mallory Newell, who can be reached at newellmallory@deanza.edu.