# A New Paradigm for Placement and Remediation in English and Math


## Dr. Katie Hern

English Instructor, Skyline College
Co-Founder & Executive Director, California Acceleration Project
www.AccelerationProject.org
CaliforniaAccelerationProject@gmail.com


This powerpoint available online:
https://app.box.com/s/08kbiaeh2cgromn2bwfs6fav7vx0wtq9

PLEASE SILENCE ALL PHONES AND DEVICES

# LAND ACKNOWLEDGEMENT

We acknowledge the land we occupy today as the traditional and ancestral home of the following indigenous tribes: Cahuilla, Cupeño, Luiseño, and Kumeyaay (aka lipay-Tipay-Diegueño). We take this opportunity to thank and honor the original caretakers of this land.

# Statewide

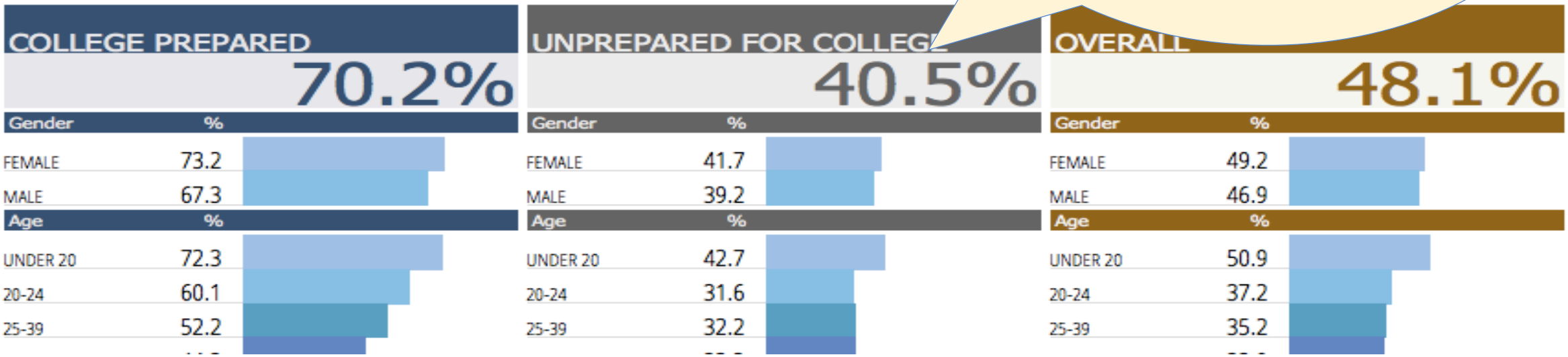
MOMENTUM POINTS | COMPLETION OU

PROFILE | REMEDIAL | PERSISTENCE | 30 UNITS | DEGREE/TRANSFER | CAREER TE

## Completion

Percentage of degree, certificate and/or transfer-seeking students starting first time in 2007-08 track… certificate or transfer-related outcomes.

Across CA community colleges, more than three-quarters of incoming students have been classified "unprepared"



# Initial Course Placement Is Destiny

| Students' Initial Course in English-Writing | % Completing College English in 3 Years |
|---|---|
| One Remedial Course Below College English | 48% |
| Two Remedial Courses Below | 34% |
| Three or more Remedial Courses Below | 19% |

Across CA, students of color 2-3 times more likely to begin in lowest levels than white students

Statewide data, Basic Skills Cohort Tracker, Fall 2009-Spring 2012

# Initial Course Placement Is Destiny

| Students' Initial Course in Math | % Completing College-Level* Math in 3 Years |
|---|---|
| One Remedial Course Below College Math* | 35% |
| Two Remedial Courses Below | 15% |
| Three or more Remedial Courses Below | 6% |

Across CA, more than half of Black and Hispanic students in remedial math begin here

Statewide data, Basic Skills Cohort Tracker, Fall '09-Spring '12

* Meets transferable university requirements in quantitative reasoning

# Inequitable Placement Drives Inequitable Completion

Mt. San Jacinto College (Fall 2015)

- White students were 2x more likely to be placed into college English than Hispanics and nearly 4x more likely than African Americans

  Chance of passing college English in 2 years: **73%**

- African American & Hispanic students more than 2x more likely than white students to have to take multiple remedial English classes

  Chance of passing college English in 2 years: **23%-38%**

# Remediation Reform:
# Essential to Campus Equity Efforts

Nationally and across California, students of color are disproportionately excluded from transfer-level courses and disproportionately required to take multiple remedial classes in math and English.

A study of the three community colleges in Contra Costa County estimates that 50-60% of racial inequities in degree completion and transfer-readiness is explained by initial placement in English and math.

# How Do We Ensure ALL Students Have the Best Opportunity to Complete Key English/Math Requirements?

**Changing Placement Policies:**

Broadening access to transferable, college-level courses by using high school grades for placement and requiring algebra-based remediation only for access to courses that require substantial algebra.

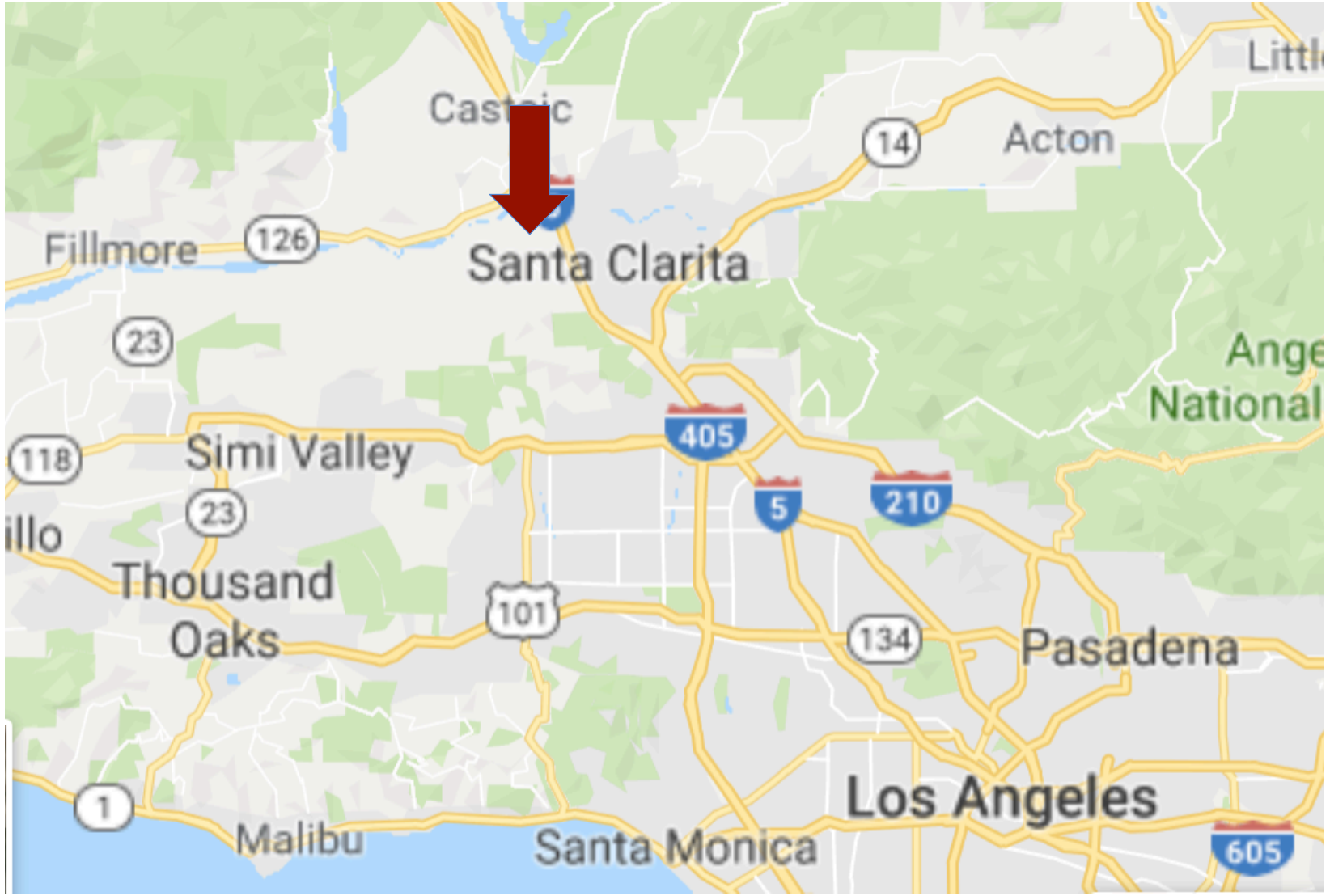
**Replacing Remedial Courses with Corequisite Support:**

Allowing students to bypass stand-alone remedial classes and enroll directly in transferable, college-level classes with additional concurrent support (for students with lower GPAs, lower-level math coursework).

**Changing Placement Policies:**

Broadening access to transferable, college-level courses by using high school grades for placement and requiring algebra-based remediation only for access to courses that require substantial algebra.

# College of the Canyons



# Andrés Salazar

**Math placement via standardized test:** Arithmetic, 4 remedial courses required

**Likelihood of completing transferable math in 3 years:** 12%

Fall 2013

353 students started in arithmetic

↓

Spring 2016

43 of them had completed transferable math

# Andrés Salazar

**Goal:** Bachelor's Degree, Music Conducting

**High School Math**: A in Algebra II

**High School GPA**: 4.0

**Enrolled directly in College Statistics through Multiple Measures Placement**

**Grade:** A

**Completed math requirement in one semester instead of five**

**Follow Up:** Transferred to California Institute of the Arts in Fall 2017

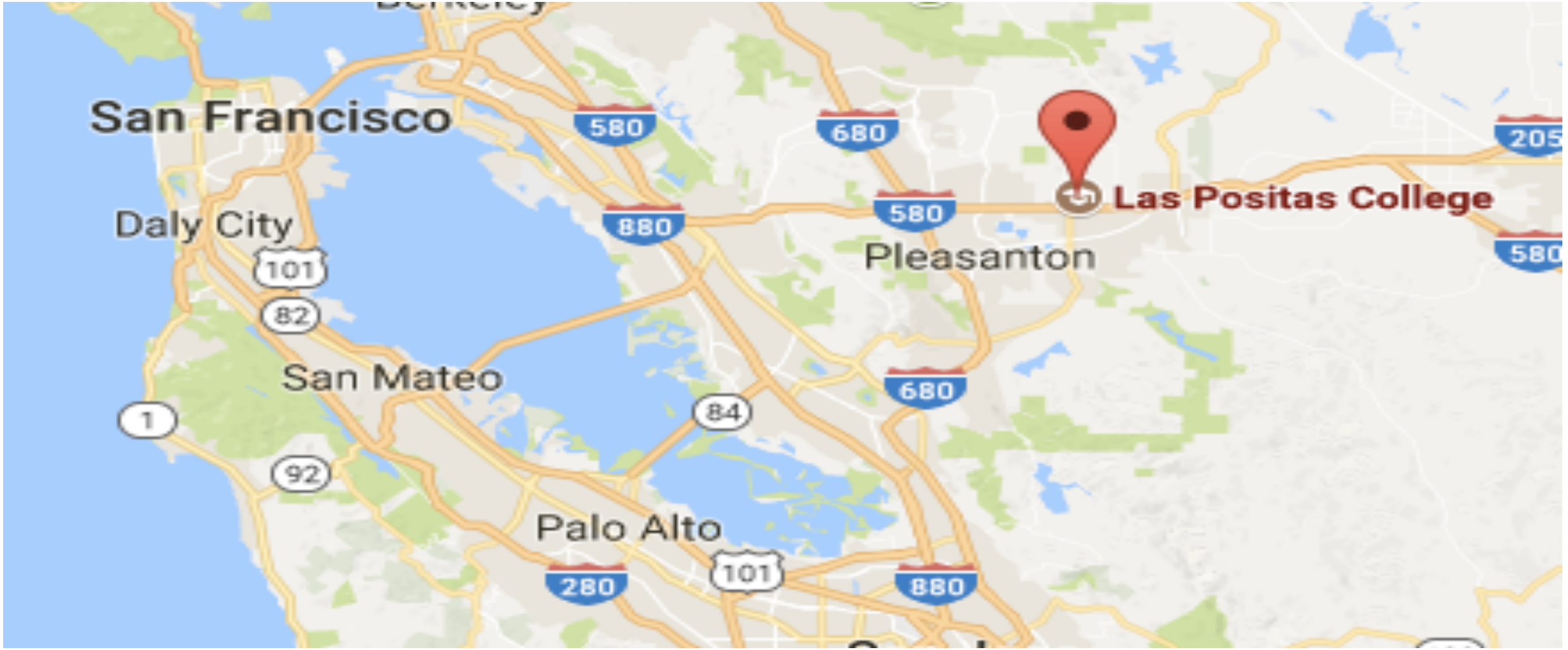
# College of the Canyons

## Using High School Grades for Placement in Math – Fall 2016

- Students qualify for statistics through test OR high school measures (GPA, grades in Algebra I or II – self-report, no transcript required)
- Eligibility for college statistics more than quadrupled, increasing from 15% to 71% of incoming students
- No changes to curriculum, no corequisite support provided − students simply enrolled in the existing course
- Success rate in course remained steady
- Among students who previously would have started in remediation, 66% succeeded in statistics on their first attempt
- This completion rate was five times higher than among students who started below transferable math a year earlier

  (66% in one semester vs. 13% in one year)

# Las Positas College



# Luis Sanchez

Classified “remedial” by Accuplacer but qualified for College English through his high school GPA

First-generation college student

Generation 1.5: U.S.-born and educated, parents don’t speak English

Bilingual, feels most comfortable and most himself in English

Earned Bs on all four essays, turned in all other assignments, perfect attendance

Course Grade: A-

# Las Positas College

## Using High School Grades for Placement in English – Fall 2016

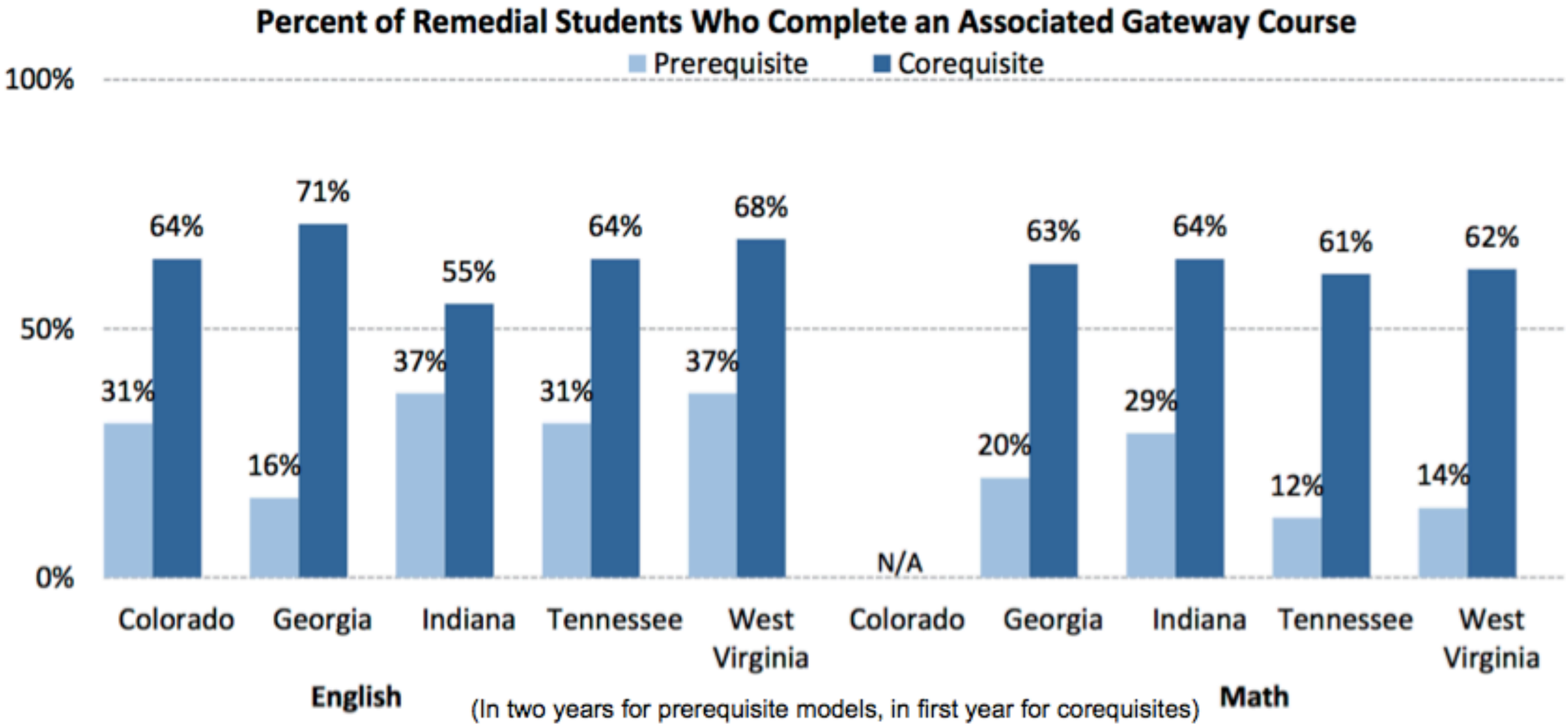
- Students qualify for college English by test OR high school GPA of 2.5 or higher (self report – no transcript required)
- Eligibility for college English doubled - from 36% to 75% of incoming students
- No changes to curriculum, no corequisite support provided -- students were simply allowed to enroll in the existing course
- Success rates in college English held steady
- Among students who previously would have started in remediation (N=348), 77% passed college English and 58% earned As or Bs. If they went on to second-semester composition in spring, 80% passed.
- Completion of college English was 1.75 times higher than among students who started in remediation one year earlier

  (77% in one semester vs. 44% in one year)

**Replacing Remedial Courses with Corequisite Support:**

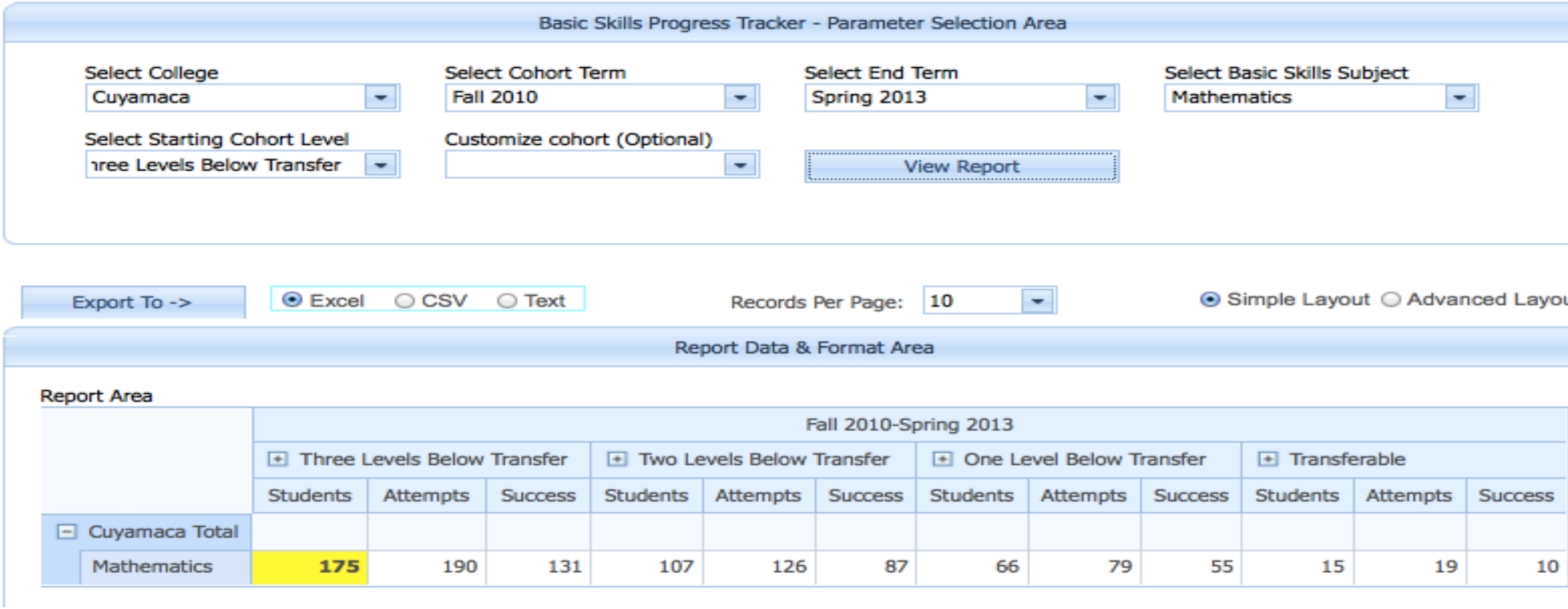
Allowing students to bypass stand-alone remedial classes and enroll directly in transferable, college-level classes with additional concurrent support (for students with lower GPAs, lower-level math coursework).

# National Data



# Cuyamaca College

# Before:
# Completion of College Math from Pre-Algebra

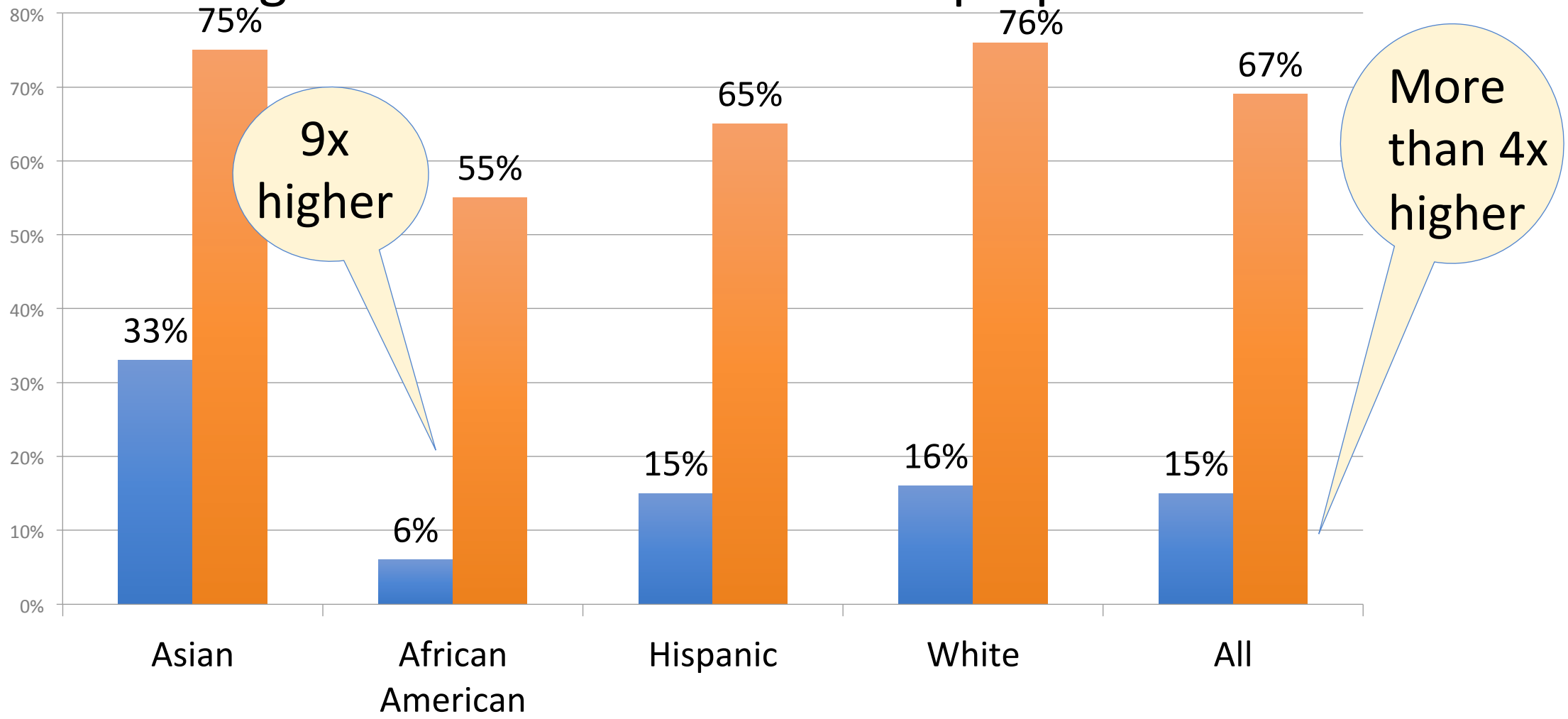



| | Fall 2010-Spring 2013 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Three Levels Below Transfer | | | Two Levels Below Transfer | | | One Level Below Transfer | | | Transferable | | |
| | Students | Attempts | Success | Students | Attempts | Success | Students | Attempts | Success | Students | Attempts | Success |
| Cuyamaca Total | | | | | | | | | | | | |
| Mathematics | **175** | 190 | 131 | 107 | 126 | 87 | 66 | 79 | 55 | 15 | 19 | 10 |

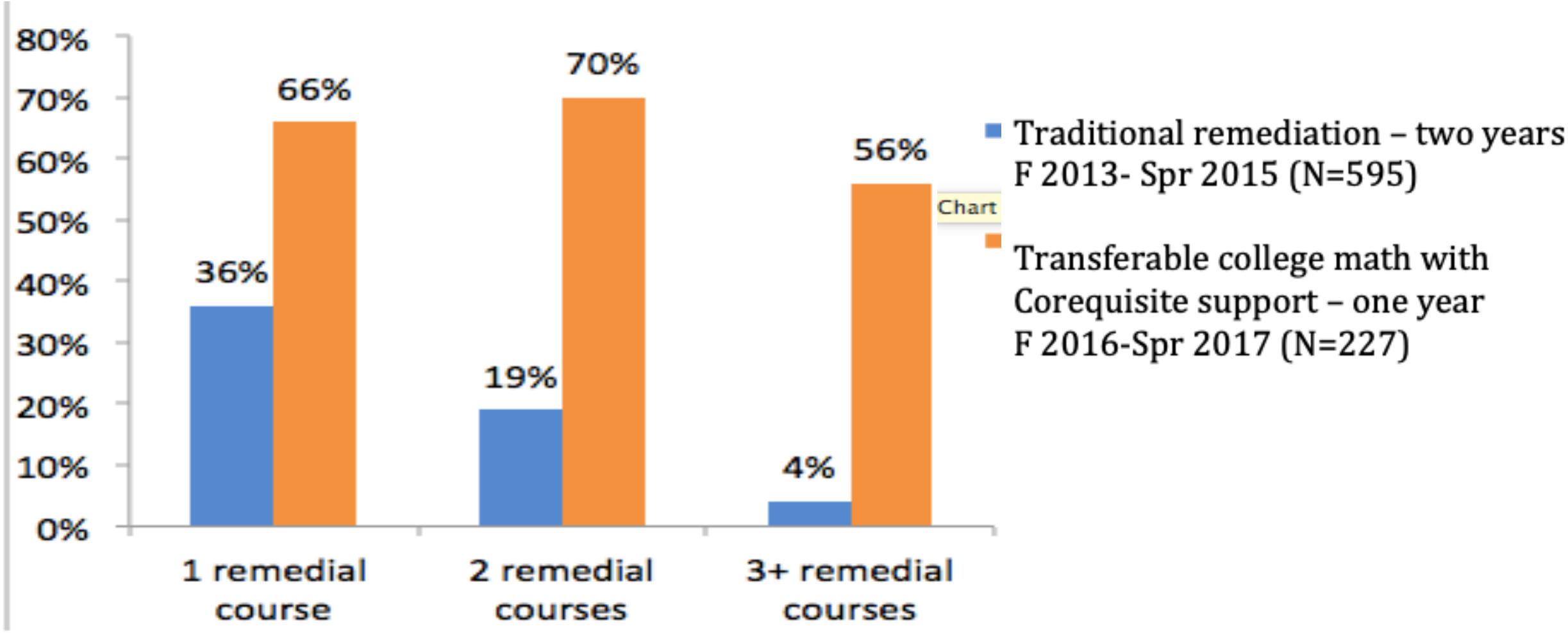
# After: Math Transformation – 2016-17

- All remedial courses 2, 3, and 4 levels below college-level eliminated
- Corequisite support offered for first-tier transferable college-level courses (just-in-time remediation through 2-unit linked courses)
- Self-reported high school grades used to place students into 5 pathways (General Ed, STEM, Business, Education, CTE)
- 100% eligible for College Statistics (regular or w/ support), 59% eligible for transferable business/STEM math (regular or w/ support)
- Lowest possible placement: one remedial course below transferable math, only for students in Business & STEM pathways

# Completion of Transferable, College-Level Math
## Among students Classified “Underprepared”



# Transferable College Math Completion By Placement Test Results



# Karly Franz

**Background:** Returning adult, away from math for 5 years, studied fashion design, worked as a historical costumer

**Goal**: Teach high school biology

**Placement via Standardized Test:**
Intermediate algebra, one remedial course below transferable college math

**Corequisite Remediation:**
Enrolled directly in transferable pre-calculus with 2 units of concurrent support

**Grade in Pre-Calculus**: 89

# Caleb Rendon-Guerrero

**Background:** Dropped out of high school, had been in and out of criminal justice system

**Goal**: To “be the solution not the problem” in his family, create a non-profit to help kids like him

**Placement via Standardized Test:**
Elementary Algebra, 2 remedial courses below transferable college-level math

**Corequisite Remediation:**
Enrolled directly in college statistics with 2 units of concurrent support

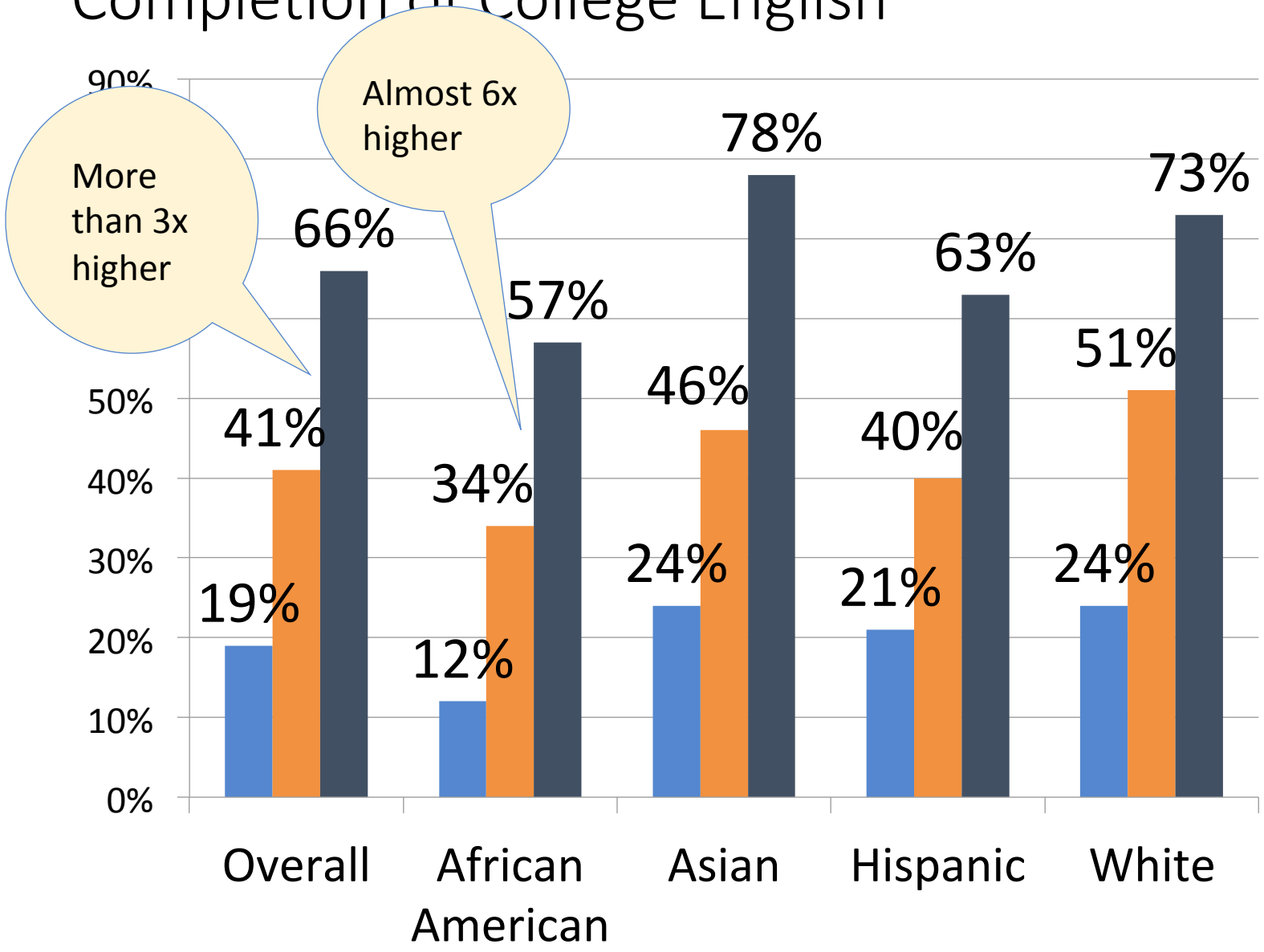
**Grade in Statistics**: B

**Follow-Up:** Second-year student, GPA of 3.6

# Other CA Colleges Replacing Remedial Courses with Corequisite Support

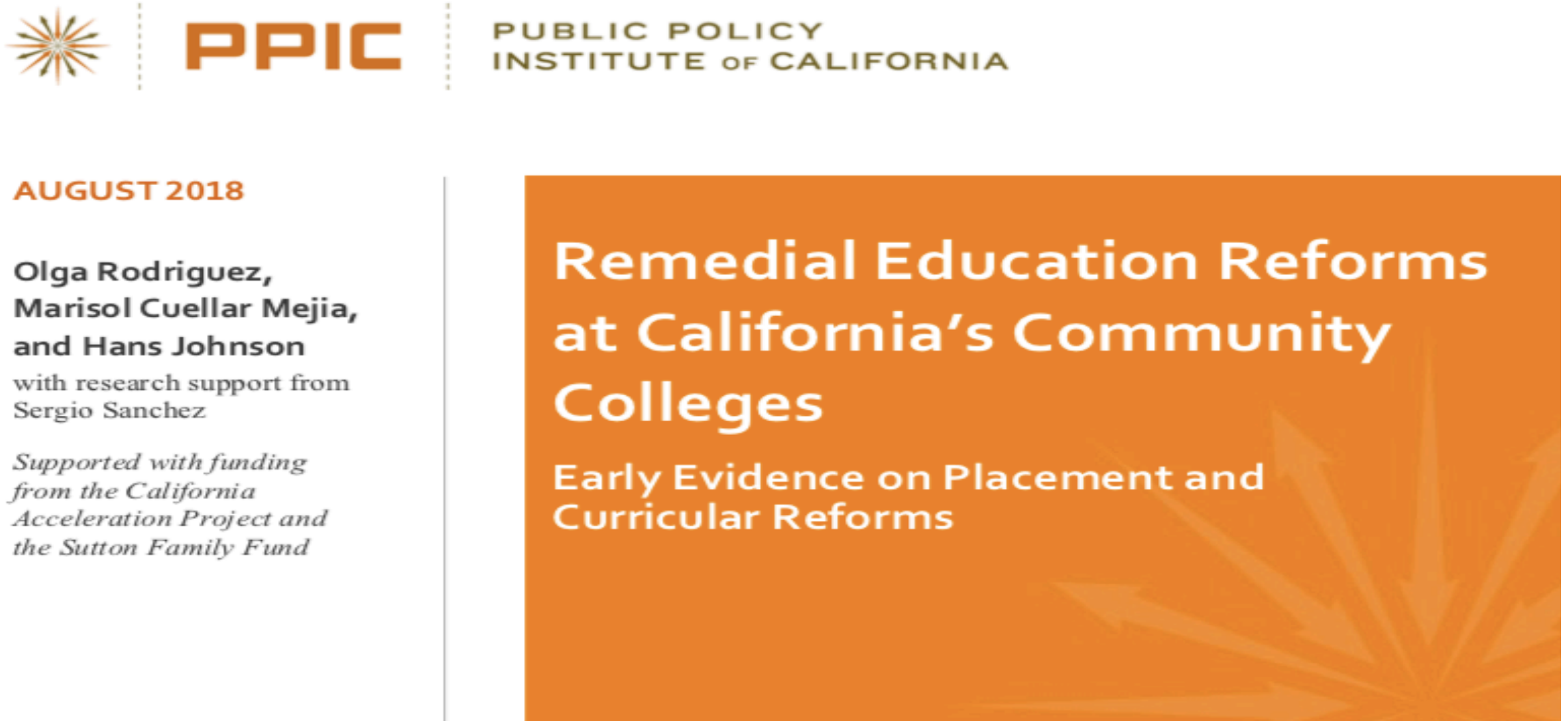
# Los Medanos College

## Completion of College English

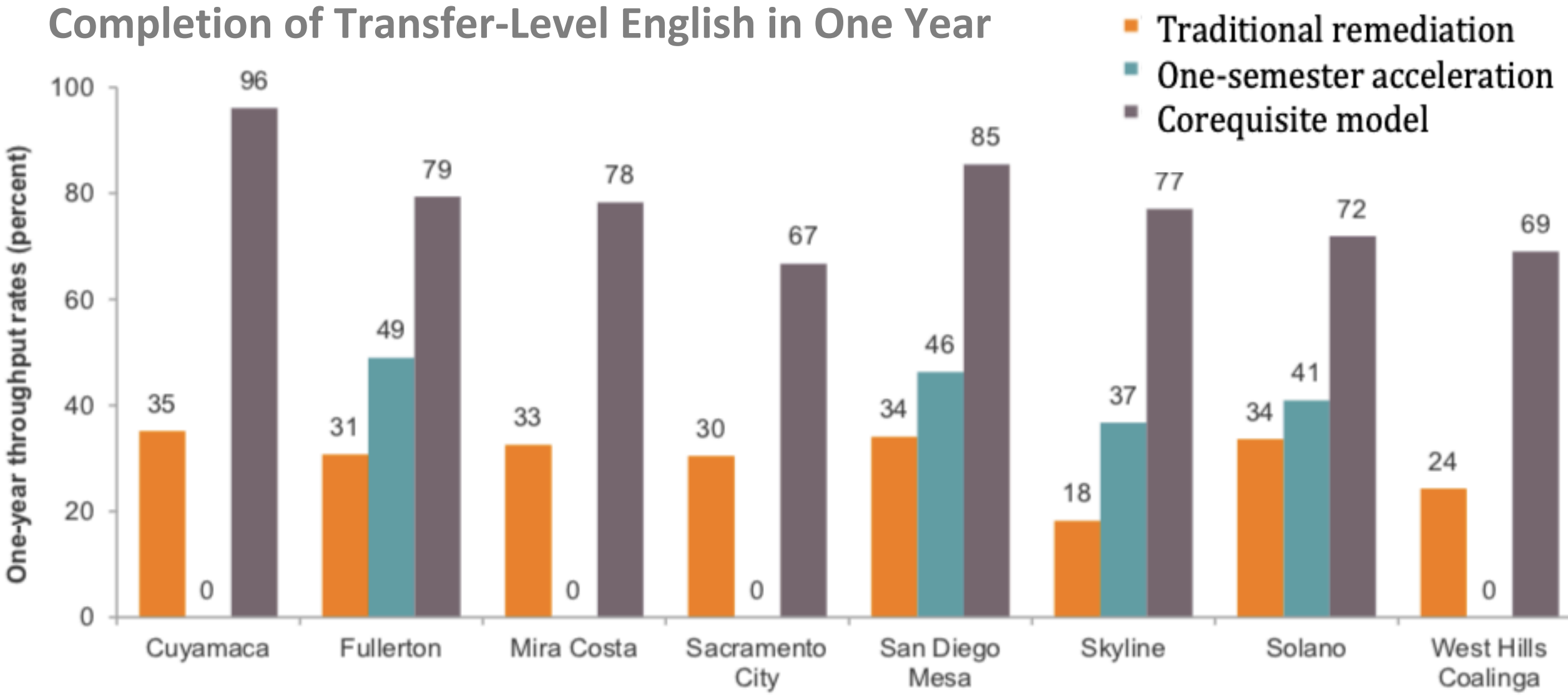



- Two Levels Below College English (Fall 2015-Fall 2016: 3 semesters) N=351
- Accelerated One-Level Below Course (Fall 2016=Spring 2017: 2 semesters) N=303
- College English with Corequisite Support (Fall 2017: 1 semester) N=305

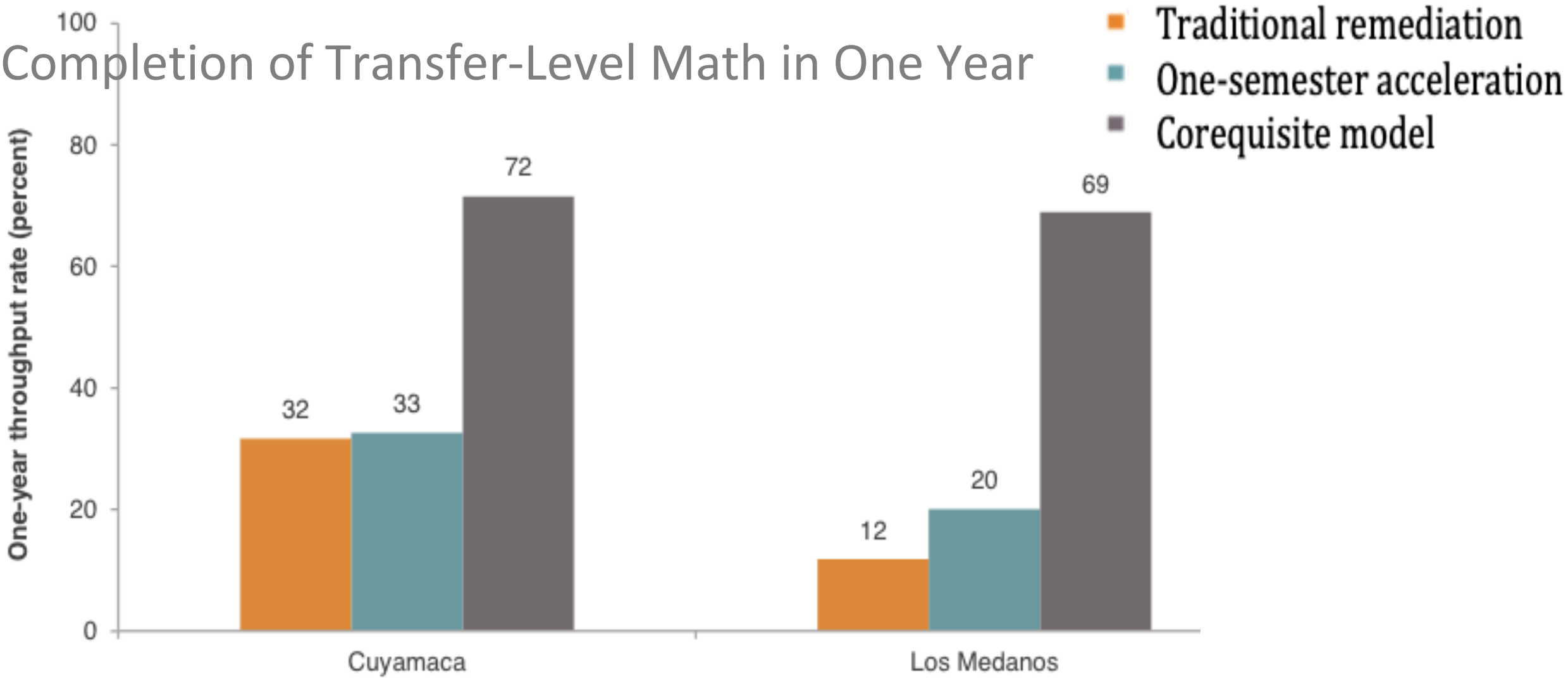
# Early Results: Placement Reform & Corequisite Remediation



# Early CA Implementers of Corequisites in English



# Early CA Implementers of Corequisites in Math



# Why do these strategies work?

# Reason #1:
# The limitations of standardized placement tests

Sample Item: Accuplacer “Sentence Skills” Test

Writing a best seller had earned the author a sum of money and had freed him from the necessity of selling his pen for the political purposes of others.

Rewrite, beginning with The author was not obliged

The new sentence will include

A) consequently he earned

B) because he had earned

C) by earning

D) as a means of earning

# Are you college ready?

**VIII. Exponents & polynomials**

Simplify and write answers with positive exponents.

. $(3x^2 - 5x - 6) + (5x^2 + 4x + 4)$

. $\dfrac{(2a^{-5}b^4c^3)^{-2}}{(3a^3b^{-7}c^3)^2}$

. $(3x^0y^5z^6)(-2xy^3z^{-2})$

. $(-a^5b^7c^9)^4$

. $(4x^2y^6z)^2(-x^{-2}y^3z^4)^6$

6. $\dfrac{24x^4 - 32x^3 + 16x^2}{8x^2}$

7. $(x^2 - 5x)(2x^3 - 7)$

8. $\dfrac{26a^2b^{-5}c^9}{-4a^{-6}bc^9}$

9. $(5a + 6)^2$

# Reason #2:
# Attrition Is Guaranteed in Traditional Remediation

Students placed 2 levels below college English/Math face 6 “exit points” where they fall away:

- Do they enroll in the first course?
- If they enroll, do they pass the first course?
- If they pass, do they enroll in the next course?
- If they enroll, do they pass the second course?
- If they pass, do they enroll in the college-level course?
- If they enroll, do they pass the college-level course?

Students placed 3 levels down face 8 exit points.

# Illustration: Chabot College

Students beginning two levels below college English:

| | |
|---|---|
| • Do they enroll in the first course? | ??% |
| • If they enroll, do they pass the first course? | 66% |
| • If they pass, do they enroll in the next course? | 93% |
| • If they enroll, do they pass the second course? | 75% |
| • If they pass, do they enroll in the college-level course? | 91% |
| • If they enroll, do they pass the college-level course? | 78% |

$$(0.66)(0.93)(0.75)(0.91)(0.78) = 33\%$$

# Thought experiment:

What would it take for a remedial course to equal corequisite completion?

**Corequisite English Completion @ 9 CA Colleges: 78%**

One remedial course = 3 exit points: 1) Pass remedial course, 2) enroll in college English, and 3) pass college English.

If 70% passed & persisted at each exit point? (0.70)(0.70)(0.70) = 34%

If 80% passed and persisted at each exit point? (0.80)(0.80)(0.80) = 51%

If 90% passed and persisted at each exit point? **(0.90)(0.90)(0.90) = 73%**

# Inequitable Access to Reforms across CA

"Institutional variation should not compromise students' likelihood of success… Location often plays an important role in determining which community college a student attends, and it would be beneficial for students if their zip codes did not limit their access to reforms that can significantly improve their likelihood of success."

**-Public Policy Institute of California, 2018, p. 27**

| Top 5 CA Colleges for One-Year Completion of College English, 2016-17 | | |
|---|---|---|
| **% Students Completing in 1 Year** | **% Students Beginning in College Engl.** | **College & Strategy for Broadening Access to College English** |
| 78% | 80% | Moorpark – self-placement into college-level |
| 74% | 73% | Las Positas – college-level for high school GPA 2.5+ |
| 70% | 75% | MiraCosta – informed self-placement & corequisite |
| 68% | 82% | Skyline – corequisite for students with high school GPA 2.0+ or via informed self-placement |
| 68% | 77% | San Mateo – corequisite for students with high school GPA 2.0+ or via informed self-placement |

# Bottom 10 CA Colleges for Completion of College English, 2016-17

| % Students Completing in 1 Year | % Students Beginning in College Engl. | |
|---|---|---|
| 21% | 19% | Southwest LA College |
| 26% | 21% | San Bernadino Valley College |
| 27% | 24% | Compton College |
| 27% | 32% | Palo Verde College |
| 30% | 25% | Reedley College |
| 30% | 27% | LA Mission College |
| 33% | 31% | Woodland College |
| 33% | 34% | Fresno City College |
| 34% | 16% | Mt. San Antonio College |
| 35% | 24% | East LA College |

91% Black & Hispanic Students

77% Black & Hispanic Students

86% Black & Hispanic Students

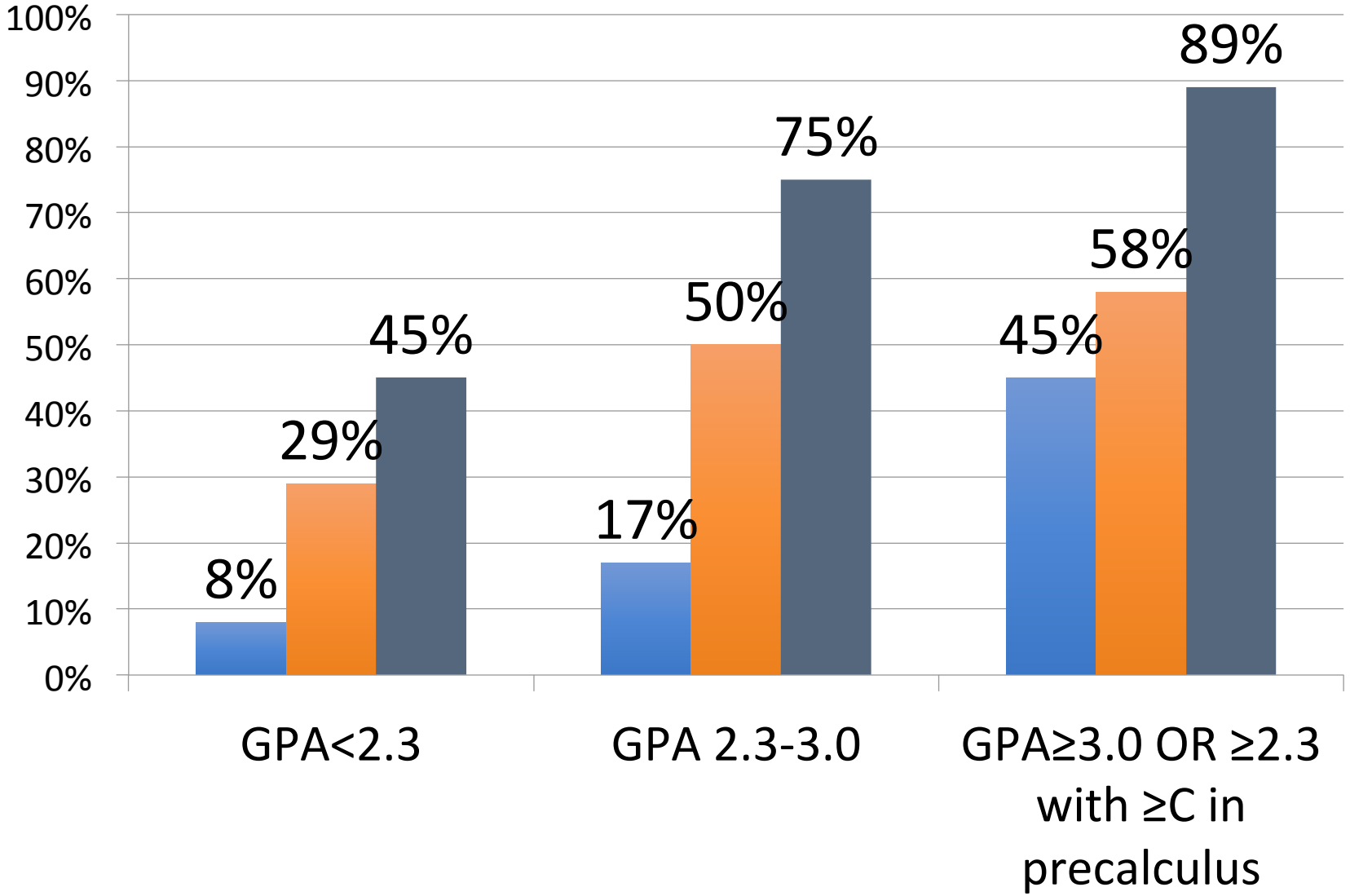
# AB 705

# AB 705 (Irwin) – Assessment and Placement

- Requires colleges to stop relying on standardized tests; requires use of high school grades for English, math placement (GPA, coursework)
- Prohibits colleges from requiring remedial courses that delay students' educational progress (except in very narrow circumstances)
- Steers colleges to replace remedial courses with corequisite support
- Requires colleges to "maximize probability that a student enter and complete transfer-level coursework in English and math within a one-year timeframe" – in other words, <u>students have a legal right to start in the course that gives them the best chance of completion</u>

# Completion of College Statistics

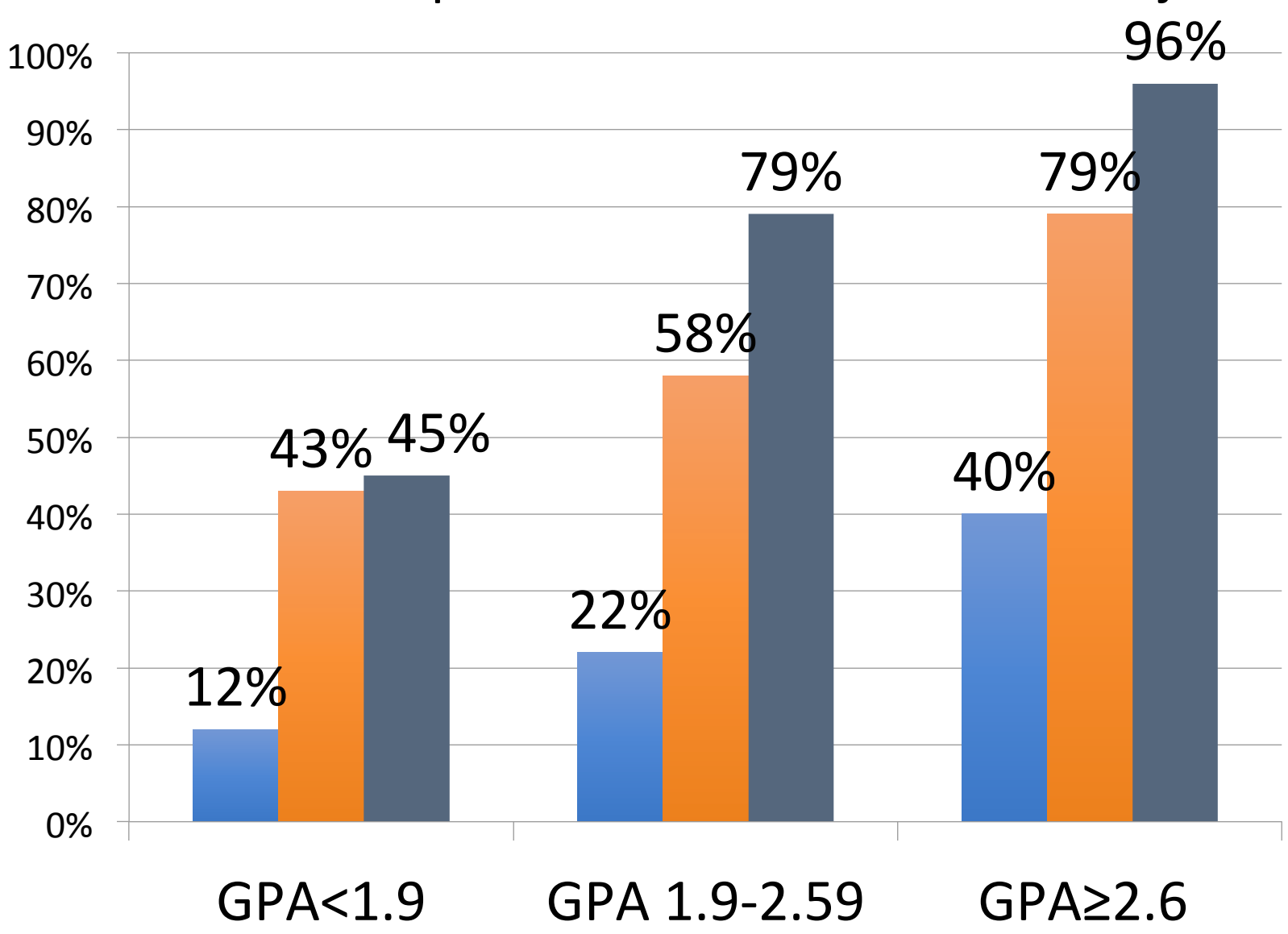
## Multiple Measures Assessment Project




- Starting one remedial course below college statistics (Statewide)
- Enrolling directly in college statistics (Statewide)
- Enrolling directly in college statistics with coreq support (5 colleges)

# Completion of College English Composition

## Multiple Measures Assessment Project




- Starting one remedial course below college English (Statewide)
- Enrolling directly in college English (Statewide)
- Enrolling directly in college English with coreq support (13 colleges)

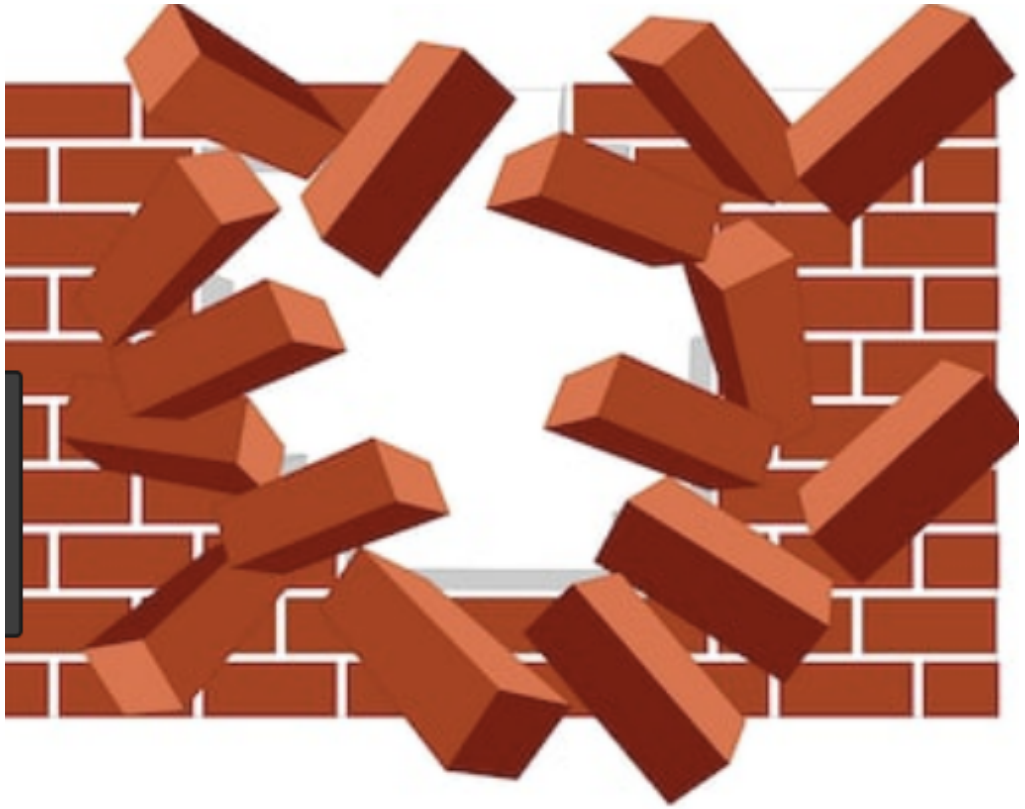
# The evidence is unequivocal


Colleges have been massively under-estimating students, especially students of color.

When students have access to transferable, college-level courses with well-designed support, they rise to the challenge.

Research has not identified <u>any</u> students that have higher completion beginning in a stand-alone remedial course. This is why California's statewide placement rules give all students access to the transferable, college-level courses, with concurrent support recommended for some.

# When the Structural Barriers are Dismantled…



We’re Not Done Yet

# Negative Student Experience in the Classroom

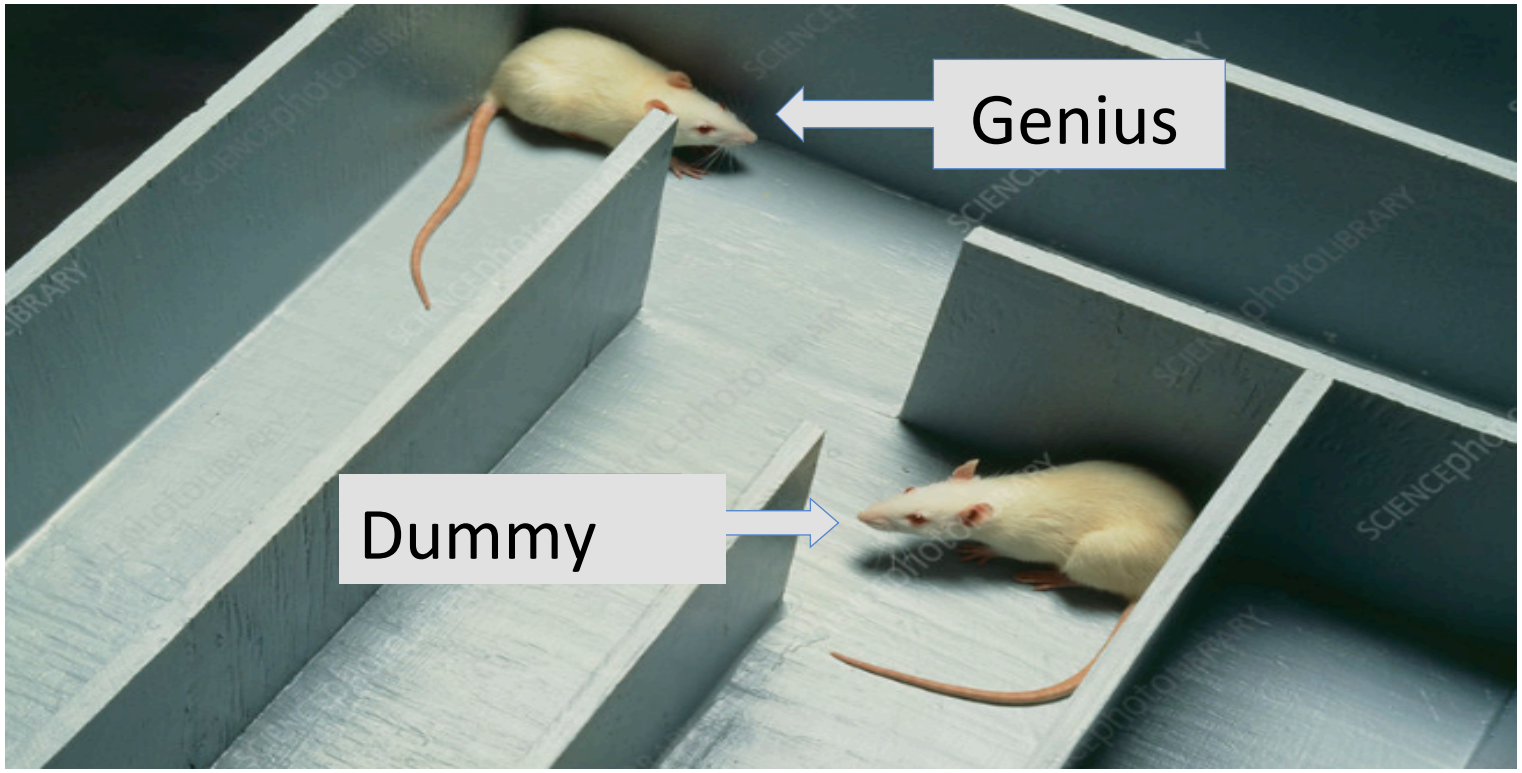

College-level classes will include more new college students, more diverse students, and students who need more guidance and support than faculty are used to providing.

*These students can't even…*

*They don't even know…*

When we communicate to students that they don't belong, we can make them less likely to succeed and fuel equity gaps.

# Expectations are Powerful




**Rats randomly assigned an "intelligent" label were almost 2x more likely to successfully complete the maze in experiment**

Rosenthal & Fode (1963)

# Teacher Expectations are Powerful

1st and 2nd grade teachers were told by researchers that certain students were going to “spurt ahead” academically. Students were randomly assigned to this group.

End of year: these students made larger IQ gains. First grade “spurters”: IQ scores increased over 2x more than control group (27.4 points vs. 12 points)

Rosenthal & Jacobson (1963)

# Teacher Expectations are Powerful

Study of 150 STEM faculty with growth vs. fixed mindsets re: intelligence.

> "To be honest, students have a certain amount of intelligence and they really can't do much to change it."

When faculty espoused a fixed-mindset view, all students had lower STEM GPAs, and racial equity gaps were twice as large as in classes where faculty believe intelligence can be grown. Students also reported lower motivation.

Faculty mindset was a more powerful predictor of student performance than any other faculty characteristic (gender, race/ethnicity, age, teaching experience, tenure status).

Canning, Muenks, Green, Murphy (2019)

# Looking Ahead

**Observing Ourselves as Teachers**

As faculty, when we see students struggle or make errors, we must catch ourselves before concluding they can't handle the class…(*They can't even…*)

> When Foothill College opened Statistics to all students this fall, one instructor noted more students making notation mistakes, like turning 0.95 into 0.95%.
>
> "Things are different, but not as much as you might think. Students are more than capable of understanding the concepts and making sound statistical decisions."
>
> - Patrick Morriss, Math Instructor, Foothill

# Looking Ahead

**Supporting Faculty Colleagues**

“The structural part is the easy part. Ninety percent of the work is figuring out how to teach these classes.”

-- Michael Wangler,

Dean of Mathematics and Business, Citrus College

Shared curricular materials, regular faculty meetings to discuss what’s happening in class, training in how to support students’ affective needs, use culturally responsive teaching, and provide just-in-time remediation.

# Looking Ahead

**Continuing to Examine Our Data & Take Responsibility for It**

- How do we tackle the remaining equity gaps?
- Are any students falling through the cracks?
- Is the corequisite support effective?
- What additional student-level interventions might be needed? (e.g., counseling, financial aid, making corequisite support mandatory rather than optional)?
- What are we doing to foster effective and equitable teaching? (e.g., examining faculty mindsets and grading practices, offering training in culturally responsive teaching, interrogating differences in pass rates across different faculty teaching a course)

# Resources for Transforming Remediation

Conference on Acceleration in Developmental Education

June 5-7, 2019

www.AccelerationProject.org

CaliforniaAccelerationProject@gmail.com


**Katie Hern**

**CAP Executive Director**

**English Instructor**

**Skyline College**

**hernk@smccd.edu**

**Summer Serpas**

**CAP Assistant Director**

**English Instructor**

**Irvine Valley College**

**sserpas@ivc.edu**

# Role Play!
# Skeptics & Advocates

- Get in pairs, decide who will be the skeptic, who will be the advocate
- Prepare: Spend 5 minutes brainstorming & making notes re: what you'll say, feel free to refer to the powerpoint handout
- Engage: Spend 10 minutes talking to each other & genuinely listening to what the other person is saying
- Debrief in pairs: Spend 2 minutes reflecting with each other about the experience & important things that came up
- Debrief as whole group: Share out, raise any issues where advocates got stuck & would like to hear a response from the facilitators

# Where are you in your transformation?

**Building Awareness:** Starting to think about reforming placement and remediation for your campus/district/system

**Reforming Placement**: Increasing access to transferable, college-level gateway courses

**Building Your Model**: Designing corequisite support courses that allow students who would have previously placed in basic skills classes to enroll in college-level classes with support

**Preparing to Teach**: Preparing faculty to teach in these new models

**Scaling Your Program**: Expanding to allow access to transferable, college-level classes for most or all students

# Building Awareness

Starting to think about reforming placement and remediation for your campus/district/system

# Building Awareness

Remediation Reform: An Essential Part of Campus Equity Efforts

An article examining the ways in which our traditional placement policies and remediation structures drive inequitable completion and the reforms that can increase completion and narrow achievement gaps

CAPacity Gazette: Dispatches from Community Colleges Transforming Remediation

Newsletter spotlighting data, program descriptions, and student stories from California community colleges making ambitious changes in English, math, ESL

# Building Awareness

## A Seat at the Table: Supporting Student and Teacher Capacity in Corequisite English Remediation and Accelerated ESL

Through interviews with faculty teaching in three programs, this CAP report sheds light on the specific classroom practices, teacher mindsets, and professional development efforts that are helping many more students to succeed

## Up to the Challenge: Community Colleges Expand Access to College-Level Courses

This report highlights stories of students who prove they are up to the challenge of college-level work despite having been classified as “remedial” by a placement test

## Leading the Way: Cuyamaca College Transforms Math Remediation

A CAP report on how multiple measures placement and corequisite remediation increased completion of transferable college math from 10% to 67% in one year

# Reforming Placement

Increasing access to transferable,
college-level gateway courses

# Reforming Placement

## CAP's Placement and Throughput Data Template

A tool for analyzing student placement data and how it impacts completion, disaggregated by ethnicity to assess for disproportionate impact

## California Community Colleges Chancellor's Office AB 705 website

Resources on AB 705, a new law in California that requires colleges to give students the best chance of completing transferable, college-level courses in English and math in a year

## Multiple Measures Assessment Project

Research into California-wide high school & community college dataset showing that all students have higher completion starting in college English and math than stand-alone remedial courses, plus more recent research on ESL curricula

# Building Your Model

Designing corequisite support courses that allow students who would have previously placed in stand-alone developmental classes to enroll in transferable, college-level classes with support

# Building Your Corequisite Model

- **“ALP Corequisite Model” (aka Comingled)**
  Students enroll in a standard college-level course that includes a mix of “prepared” and “unprepared” students; the “unprepared” students also enroll in a linked support course, typically with same teacher

- **“Wall-to-Wall Corequisite Model” (aka Cohort)**
  Students deemed “unprepared” enroll in sections of college-level course that have a linked corequisite, typically with same teacher. All students in the college-level section take the corequisite together.

- **“Enhanced Courses”**
  Students deemed underprepared enroll in a higher-unit version of college English/Statistics/Precalculus/etc (no linked corequisite) – e.g., Skyline College has 3-unit and 5-unit versions of college composition

See CAP Corequisite Information Sheet for details and contact info for CA community colleges that were early implementers of the above models

# Design Principles for Effective Corequisite Remediation

- Enable students to bypass stand-alone remedial courses and enroll directly in transferable, college-level courses, with additional support/ time in class
- Tailor support to the specific reading and writing assignments of the class, not decontextualized “skill and drill”; we recommend that enhanced/coreq units are taught by the same instructor
- Designed for scale
  - Consider faculty load issues (e.g., with 5-unit co-requisite model part-timers can make full load teaching two)
  - Plan for room scheduling needs, work with IT on linking corequisite
  - Ensure cost does not impede scaling up to cover all eligible students (wall-to-wall is more scalable in CA than ALP model)

# Preparing to Teach

Preparing faculty to teach in these new models

# CAP Instructional Design Principles

Toward a Vision of Accelerated Curriculum and Pedagogy: High-Challenge, High-Support Instruction for Underprepared Students

- Backward Design from College-Level Courses
- Just-in-Time Remediation
- Relevant, Thinking-Oriented Curriculum
- Low Stakes, Collaborative Practice
- Support for Students' Affective Needs

# Preparing to Teach

Inspirations for Thematic Reading and Writing Courses: Themes and Texts from Past Members of CAP's Community of Practice

Nearly 60 examples of thematic courses, including sample units and texts, from faculty in CAP's leadership training program

CAP's Instructional Cycle

This diagram illustrates the instructional cycle we recommend for integrated reading & writing instruction in accelerated/corequisite contexts

Leading the Way: Cuyamaca College Transforms Math Remediation

A CAP report on how multiple measures placement and corequisite remediation increased completion of transferable college math from 10% to 67% in one year; includes discussion of pedagogical approaches

# Scaling Your Program

Expanding to allow access to transferable, college-level classes for most or all students

# Scaling Your Program

Repeat it all!

The process of creating and scaling is not linear. All of these resources can continue to be helpful as you grow your program – feel free to use and adapt to your local context.

Website: www.AccelerationProject.org
Twitter: @AccelerationCA
Email: CaliforniaAccelerationProject@gmail.com

This powerpoint available online:
https://app.box.com/s/08kbiaeh2cgromn2bwfs6fav7vx0wtq9


**Katie Hern**
**CAP Executive Director**
**English Instructor**
**Skyline College**
**hernk@smccd.edu**
**Twitter @KatieHernCA**

**Summer Serpas**
**CAP Assistant Director**
**English Instructor**
**Irvine Valley College**
**sserpas@ivc.edu**