Eliminating Racial and Income Inequities in Postsecondary Math Outcomes: Interventions Across Time

SHEEO Higher Education Policy Conference

November 10, 2021

Washington, DC

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The Launch Years Initiative: Improving postsecondary math success



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The case for change

- 1. Educational experiences have not kept pace with the diverse ways mathematics is now used
- 2. K12 and postsecondary stakeholders rarely collaborate to align their expectations and requirements
- 3. Black and Latinx students are most likely to be deemed unprepared for college-level math

All students should leave high school prepared to engage in college-level mathematics aligned to their future goals—and ready to pursue, and succeed in, their chosen postsecondary pathway



The Launch Years initiative

- Build consensus and establish legitimacy in the math education community
- Pilot the Transition to College Math (TCM) across participating districts
- Modernize algebra II standards and curricula across participating states
- Equip systems and institutions for work at scale

The impact of Launch Years

- A national group of math experts developed a consensus statement on how to modernize secondary math and advance equity goals
- State and regional task forces were created to advance policies that reflect Launch Years' principles
 - GA created new math standards that integrate statistics and data science to algebra II courses
- LY encouraged states and systems to collaborate and to consider ways to modernize math without tracking students



Directed Self-Placement: Emerging Practices and Equity Considerations



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Why Reform College Math Placement?

- Traditional placement approaches underplace many students in developmental math education
 - Black, Latinx, and low-income students are disproportionately affected
- Developmental education may stigmatize or discourage students
 - Delays entry to college-level courses
 - Prolongs time to degree
 - Adds to college costs (for students and taxpayers)

What is Directed Self-Placement?



Defining DSP

- Directed Self-Placement (DSP) is defined as the placement practices that combine student choice with guidance from the college and its representatives (e.g., advisors and/or faculty)
 - DSP is not a single procedure, method, or measure, but rather a set of principles that can be implemented in a variety of ways (Toth, 2019)
 - Not mutually exclusive from other placement procedures and reforms such as multiple measures assessment (MMA)

Other terms: Guided Self-Placement; Informed Self-Placement

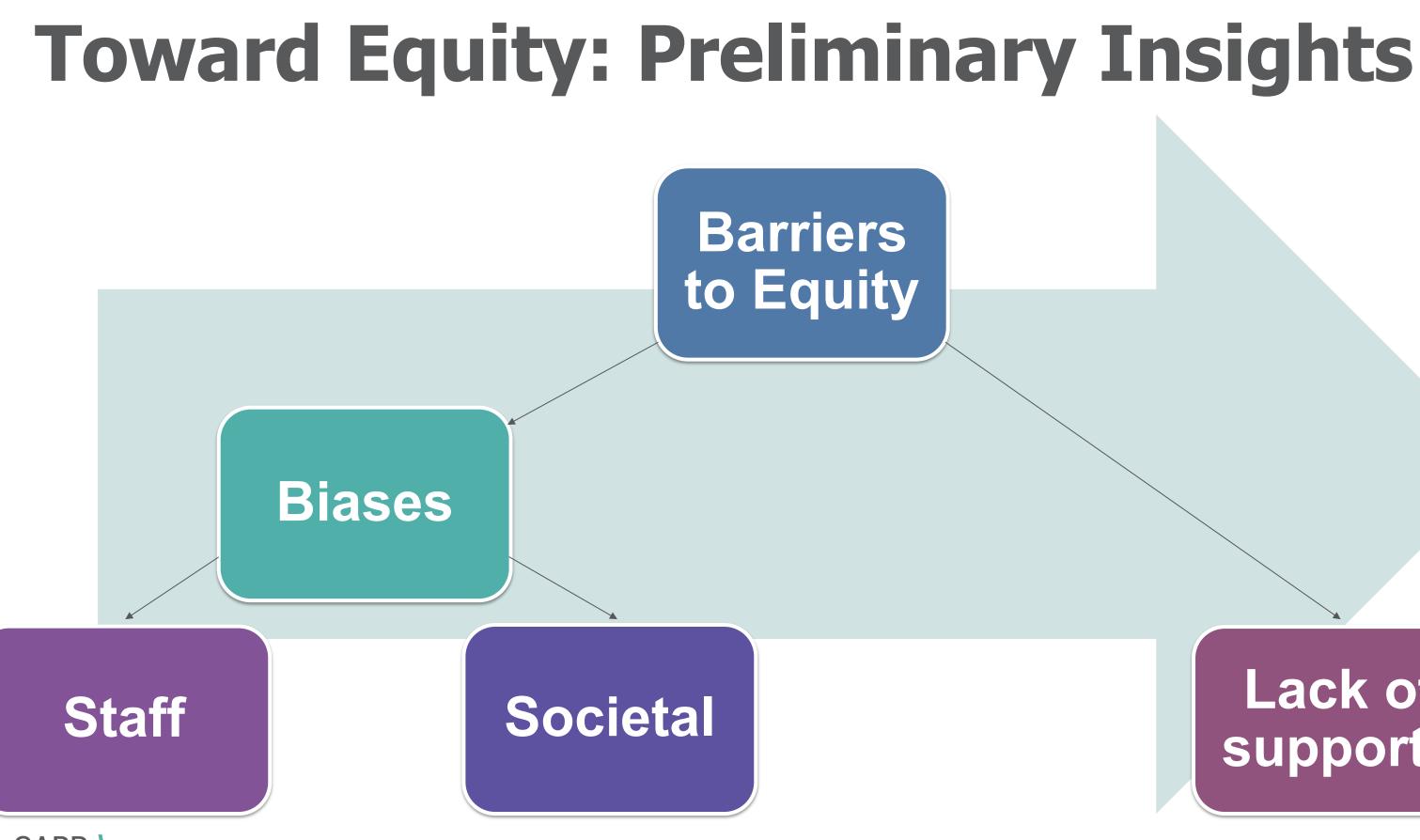
Directed Self-Placement – Practitioner Rationale

- **Four** main justifications for DSP:
 - 1. Aligning placement with educational philosophy and curriculum
 - 2. Fostering student agency
 - Improving the learning environment 3.
 - 4. The holistic nature of DSP as a placement method

A Discussion of Outcomes from the Literature

- Students are less likely to place themselves into developmental math courses
 - May vary by subgroup
- Enrollment in gateway courses seems to increase
- Grades and pass rates remained the same or improved after implementing DSP

Limited research available; Descriptive analyses; Wide variation across models



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Lack of supports

Aligning Resources & Programs to Put Students First



POLICY CONNECTIONS

Examples include Equitable Placement (AB705), Associate Degrees for Transfer, California Promise, and regulatory reforms.

FISCAL REFORM

Examples include Student Centered Funding Formula, Guided Pathways allocations, and Student Equity and Achievement Program.

PROGRAM ALIGNMENT & SUPPORT

Examples include Strong Workforce Program, Student Success Metrics, Vision Resource Center, investment in faculty and staff, regional support, and local board goals.



Equitable Placement and Completion

- *Goal:* Maximize student success
- *Policy Reform:* Stipulates the time to enrollment & completion; what information can be used for placement; and the standard of proof for any below transfer-level (BTL) placements
- Implementation: Research to establish standards & best practices; Required adoption plans with a two-year innovation window; Required validation of practices; Enforcement of the law; Continued evaluation and improvement

AB 705 is a historic reform to dismantle structural racism and classism barriers.



Student outcomes have improved across all student groups

 More students are taking and completing gateway math and English.

 \gg No matter their high school performance

>Across all subgroups

• When students are placed equitably their path to completion is expedited and persistent opportunity gaps are diminished.



Strategies Employed

- Utilize high school data for placement
- Create guided/self placement practices
- Develop corequisite and enhanced courses
- Adjust course offerings & schedules
- Develop contextualized courses across disciplines
- Incentivize use of concurrent supports
- Utilize early alert systems
- Improve classroom culture, curriculum and pedagogy





From Compliance to Continuous Improvement

S Comprehensively *v* informing students Data-driven advising Defaulting to transfer-level placement

Ensuring students enroll in gateway courses (not simply giving them the option to)



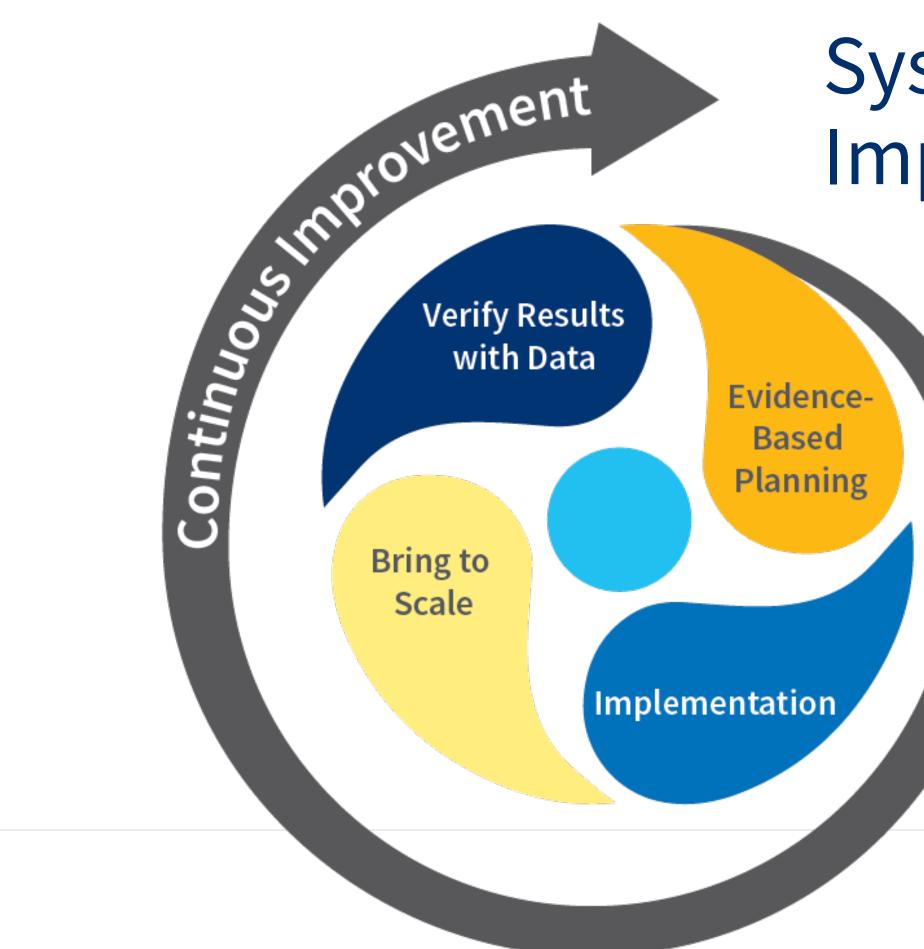
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Practical Considerations

- Lead with data and make data-based decisions
- Publicly self-evaluate and be transparent
- Couple policy change with mindset renewal
- Build a coalition of support
- Be clear and strategic with messaging









System of Improvement

Facilitated Discussion

- How do we define success and monitor progress? How do we know it's time to make adjustments?
- What practices are or should be in place to support engagement among multiple stakeholders in support of the initiatives/reforms discussed today?
- What do you still have questions about when it comes to eliminating racial and income inequities in postsecondary math? Areas for future research/refinement of practice and policy?

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