



Developmental Education Reform

Innovation Incubator

CCRC COMMUNITY COLLEGE
RESEARCH CENTER
Teachers College, Columbia University

Reducing Disparities in Developmental Education Reform Outcomes at Institutional and System Levels

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Slides



Mentimeter–We Want to Hear From You!



<https://www.menti.com/aldje8zw6hyf>

Session Objectives

1. Share multiple perspectives on developmental education reforms — state, institutional, and research.
2. Demonstrate how evidence-based, practitioner-led innovation can address disparities in student outcomes.
3. Engage participants in applying frameworks and tools to their own contexts.
4. Facilitate dialogue on sustaining reforms and scaling effective practices.

Two Strands of Today's Conversation: From Classroom Innovation to System Impact

STATE / SYSTEM LEVEL

- Creating Conditions for Scaling and Sustainability
- Align policies, funding, and accountability frameworks
 - Build leadership and cross-system collaboration
 - Scale effective practices across institutions



COMMUNITY OF PRACTICE

Shared learning, reflection, and adaptation across colleges



INSTITUTIONAL LEVEL

- Developing Strategies to Reduce Inequities
- Faculty and staff identify drivers of inequities
 - Test innovative classroom and advising practices
 - Use inquiry tool to analyze barriers and outcomes

Today's Roadmap

**Preparing for the
Next Phase of
Reform (CCRC)**

**Innovative
Classroom-Level
Reforms (CCBC)**

**Gaining
Momentum in
Developmental
Education
(Maryland)**

**Conclusion &
Next Steps
(Facilitated
Discussion)**

Preparing for the Next Phase of Reform

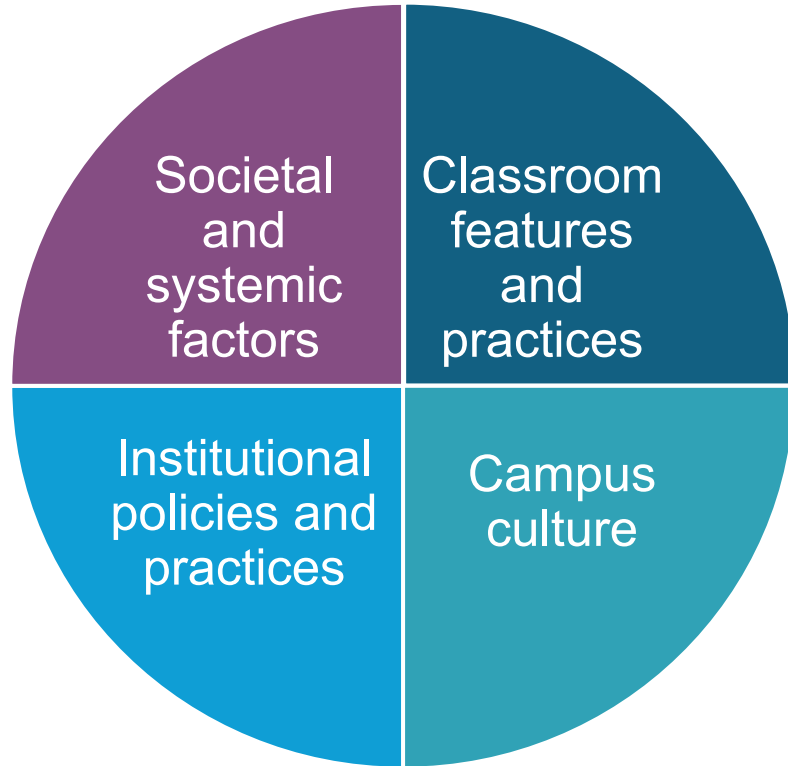
The State of Developmental Education Reform

- Increasing adoption of proven reforms, including corequisite courses and MMA / multiple measures assessment (Litschwartz et al., 2023)
 - At least 33 states or systems allow for the use of multiple measures in placement decisions and at least 29 states or systems allow or require the use of corequisite support (ECS, 2025)
- Strong body of rigorous evidence informing the implementation of developmental education reforms and showing improved short-term outcomes for students

Disparities in Outcomes Persist Despite Progress

- Most analyses of developmental education reforms (including rigorous, quasi-experimental and descriptive research) show disparities in outcomes persist as overall outcomes improve (e.g., Kopko et al., 2023; Cuellar Mejia et al., 2023; Ngo & Melguizo, 2024)
- Limited rigorous research comparing impacts by race, income, or other student characteristics
- A small number of experimental and quasi-experimental studies show differential, positive impacts for student subgroups, though it is generally unclear why (e.g., positive effects of passing Engl Comp I and II for Latinx students in Coca et al., 2024)

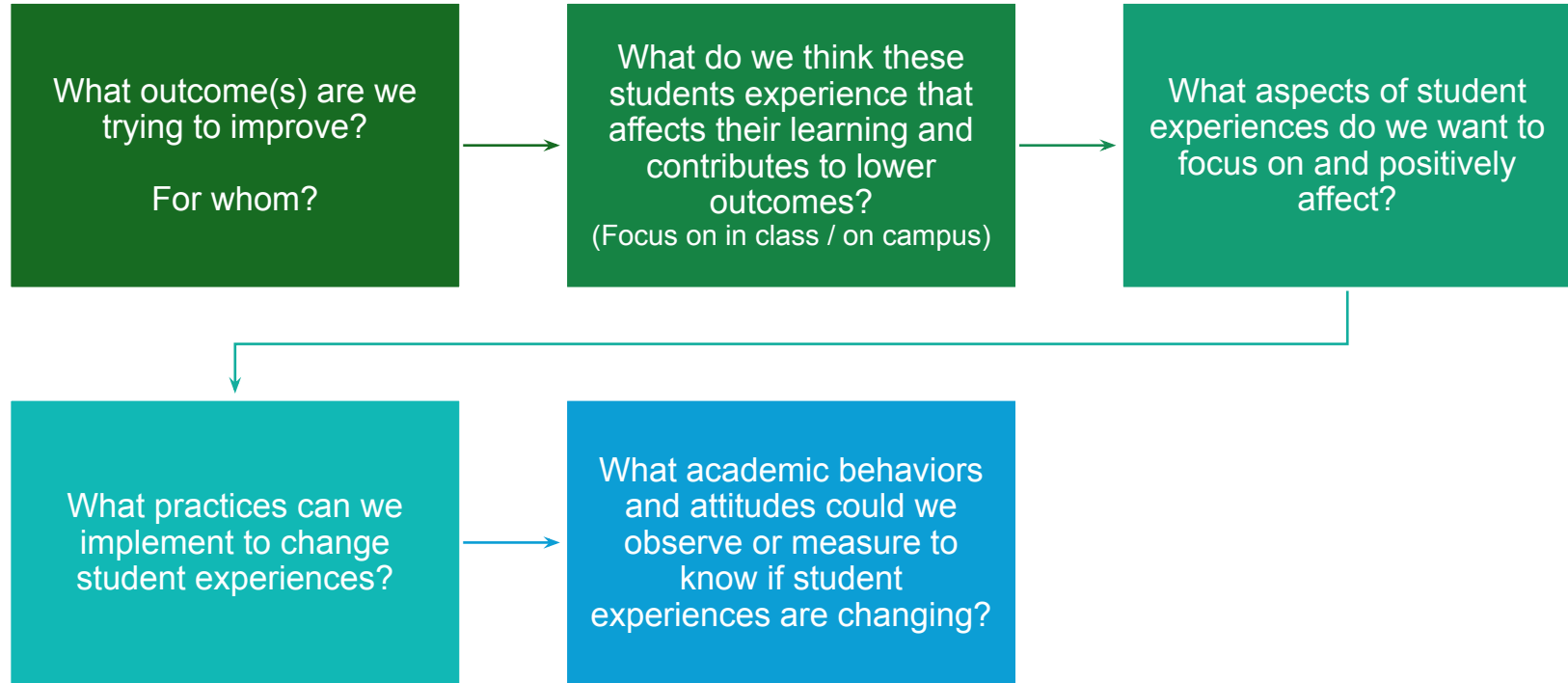
What Contributes to Inequitable Outcomes?



Developmental Education Reform Innovation Incubator project

- Research and practice scan
- 1 year community of practice with 4 colleges
- Forthcoming evaluation of selected practice(s)
- Funded by the Gates Foundation

Inquiry tool: Identifying innovative practices that can improve student outcomes and experiences in developmental education reform contexts



Progress on Innovative Classroom-Level Dev Ed Reforms: Institutional Perspective

Community College of Baltimore County-- Quick Facts

Credit Enrollment AY 2024-2025	24,425 (Credit)
Receive Financial Aid	66%
Work 20+ hours per week	51%
Minoritized Student Population	68%
Attend CCBC Part-Time	90%
Place into Developmental Education Courses	73%
Average Age	36

CCBC's Community of Practice Members

Three English Faculty and Three Math Faculty with Support from our Respective Deans

- Began the CoP with two distinct (and unrelated) projects
- Leveraged the inquiry tool during our early meetings
 - siloed approach would not result in the meaningful types of changes
 - screenshot here one can see that even our stickies are labeled "English" and "Math"

So, our approach to even examining what outcomes we are trying to improve are through the lens of our own disciplines instead of looking at the student holistically.



Silos Exist Even in the "Dev Ed Sandbox"

- We are both in the *developmental education sandbox*, but, to borrow a term from the field of child psychology, we are engaging in **parallel play**.
- The CoP has given us the opportunity to reimagine how we function in the dev ed space and discover the possibilities available, if we engage in what child psychologists refer to as a **cooperative play**.



Microsoft Copilot. (2025). *Developmental Education Sandbox* [AI-generated image]. Microsoft Copilot.

Back to the CCRC Inquiry Tool—This Time, Through a Shared Lens

-Responses show a holistic view of the students' educational experience at CCBC

-Shared goals of completing Math AND English in the first year

★ **Approach is vastly different than how we began the CoP**

CCBC CoP Inquiry Tool Question Responses Summary

Question	Summary of Responses	Consensus
1: What are we trying to improve?	• Increase ENGL 101 and gen ed math course within 24 credits • Improve outcomes for non-traditional students • Reducing time to complete math and English requirements • Refine dev math reform and improve ALP rates • Complete math and English requirements in first year • Self-efficacy and retention	• Reducing time to complete math and English credit requirement (within the first 24 credits.)

Cross-Disciplinary Collaboration



Imagine the Possibilities :)

Microlessons where English faculty teach relevant lessons in Math classes and Math faculty teach relevant lessons in English courses

Inaugural Math/English "Think Tank" in January 2026



Microsoft Copilot. (2025). *Children building sandcastles labeled "English" and "Math" [AI-generated image]*. Retrieved from <https://copilot.microsoft.com>

Interventions So Far:

Statistics 153+ (Our most highly enrolled credit math class)

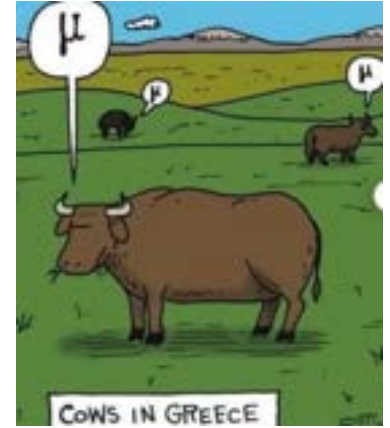
Aha Moment: Students finish the semester and still don't know the statistical terms.

English Faculty Teaches Microlessons: Cognitive Learning Strategies and Social Belonging Interventions

Teach Just-in-Time Cognitive Learning Strategies

-Reframe statistical symbols (μ / σ) as a foreign language and teach flashcard development as a tool to "learn the language"

-Work with students to write their own word problems to engage in mathematical writing



Social Belonging Interventions:

- Work with students on expanding growth mindset and normalizing help-seeking behaviors
- Work with students to develop their identities as "mathematicians" as a means to promote belonging and counter belonging uncertainty and stereotype threat (targeted math stickers and reflection)



"The truth is, we all engage in mathematical activity every single day, whether we realize it or not. We are all mathematicians. And so, the key is, as math teachers, we want to remove that barrier in our classrooms that says that only some students are math capable" (Wallus, 2025)

Working with the Professor to Revise Test Questions:

- Make Them More Concise, Culturally Relevant, and Student-Centered while Maintaining Rigor



2. (3 pts each) Determine whether the situations are an experiment or an observational study.

- Veterinary scientists wanted to evaluate whether pigs with outdoor access on farms were commonly exposed to the bacteria *Brucella suis*. They selected 24 farms in New York State. The participating farms were provided with a questionnaire to complete and up to 30 pigs per farm were tested for serum anti-*Brucella* antibodies

2. Determine whether the situations are an **experiment** or an **observational study**.

- Researchers want to examine whether different study habits (such as hours spent studying per week, preferred study locations, or use of study groups) are associated with students' GPA. (3 pts)

Next Steps

- Plans to Collect Feedback from Students about the Benefits of these Interventions
- Plans to develop microlessons for students based in trauma-informed pedagogy
- Plans to Invite Math Faculty into the English Classroom to Assist with Reading Graphs and Encourage Enrollment in Math for the Spring Semester

Gaining Momentum in Dev Ed: A State Perspective from Maryland

The Policy Foundation for Reform: The CCRCCA

- **The Mandate:** The Career and College Readiness and College Completion Act (CCRCCA) of 2013 set an ambitious goal: that 55% of Marylanders would have at least one degree by 2025. The
- **Directives:** To reach this goal, the CCRCCA directly addressed developmental education:
 1. Required high school students to be assessed for college readiness by 11th grade and enroll in transition courses if found deficient.
 2. Required public institutions to develop degree pathways that include credit-bearing coursework within the first 24 credits.
 3. Mandated that students taking developmental courses enroll in associated credit-bearing courses concurrently (paving the way for the co-requisite model).

Core Reform Strategies: Pathways & Co-requisites

1. Implement Math Pathways (Curricular Reform)

- Moves students from a "one-size-fits-all" Algebra track to math aligned with their major (e.g., Statistics, Quantitative Reasoning, or STEM).

2. Use Co-requisite Models (Structural Reform)

- Replaces traditional, prerequisite remedial courses. Students enroll directly in a college-level, credit-bearing course while receiving required, concurrent academic support.

Key Focus: Accelerate time to credit and address completion gaps,
directly supporting CCRCCA objectives.

Current Outcomes & Tracking Performance



Interactive Dashboard

TRENDS IN REMEDIAL EDUCATION IN MARYLAND PUBLIC INSTITUTIONS

Maryland Higher Education Commission (MHEC)

217 E. Redwood St., Suite 2100

Baltimore, MD 21202

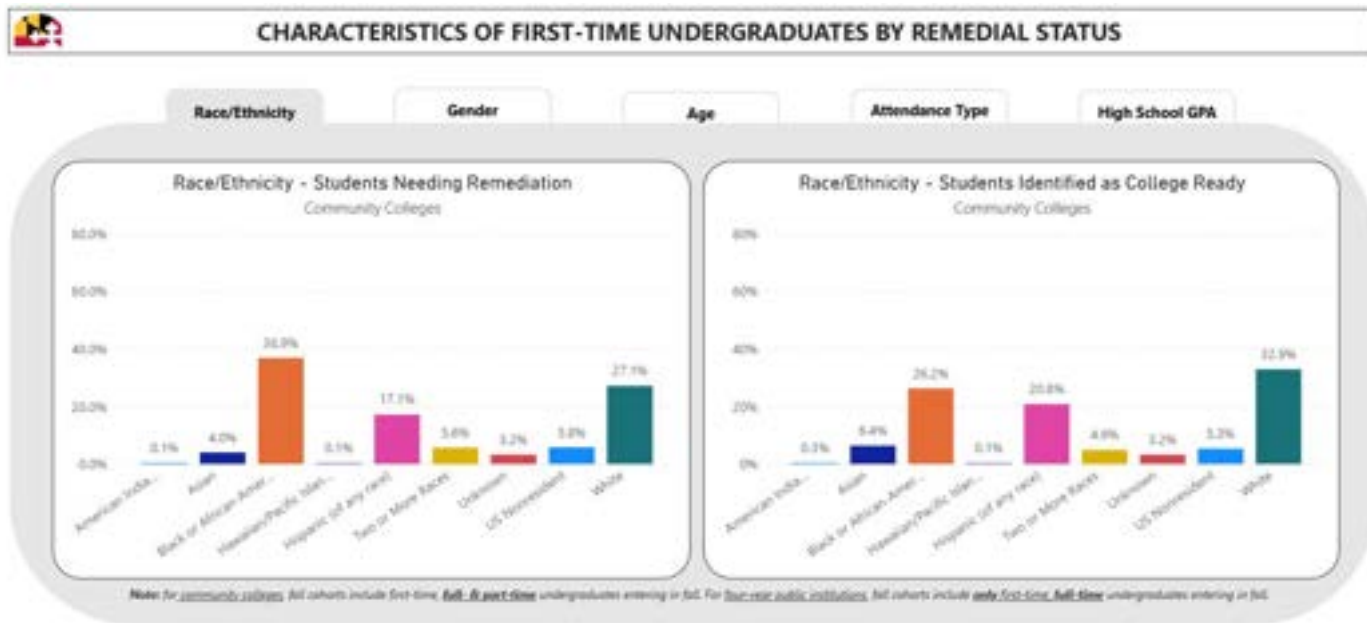
www.mhec.maryland.gov

Wes Moore, Governor

Aruna Miller, Lt. Governor

Sanjay Rai, Ph.D., Secretary

Current Outcomes & Tracking Performance



Additional notes:

-The visuals on this tab only reflect data from four-year public institutions that offer remediation.
-The downloadable data available on the last tab provides data for the last 12 fall cohorts in Excel tables.

Fall Cohort

2024

Segment

- ☒ Select all
☐ 4-Year Publics
☒ Community Colleges

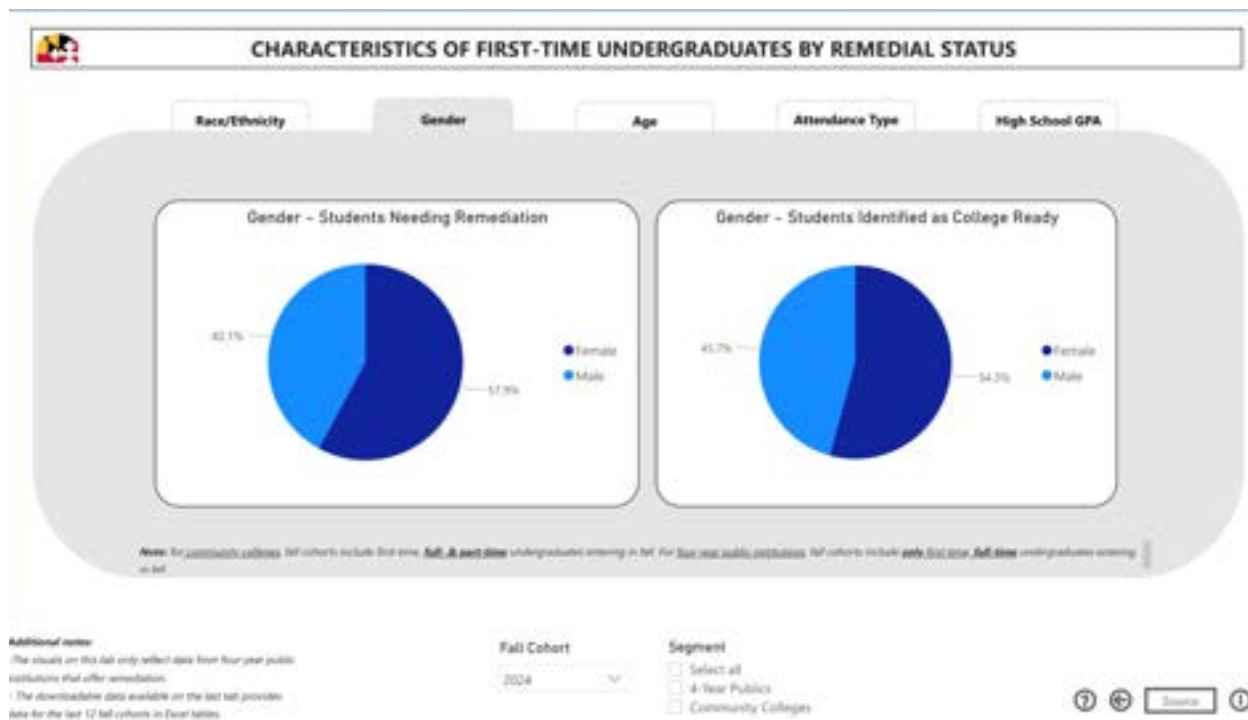


Search

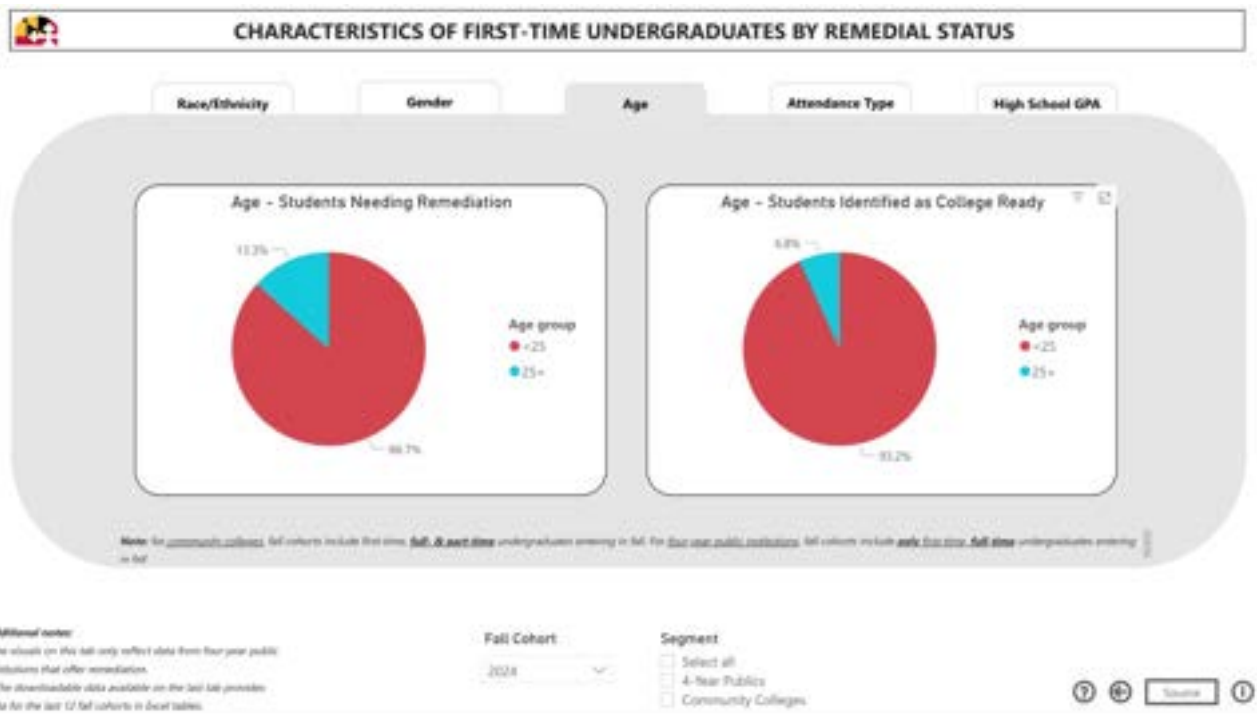


Activate Window

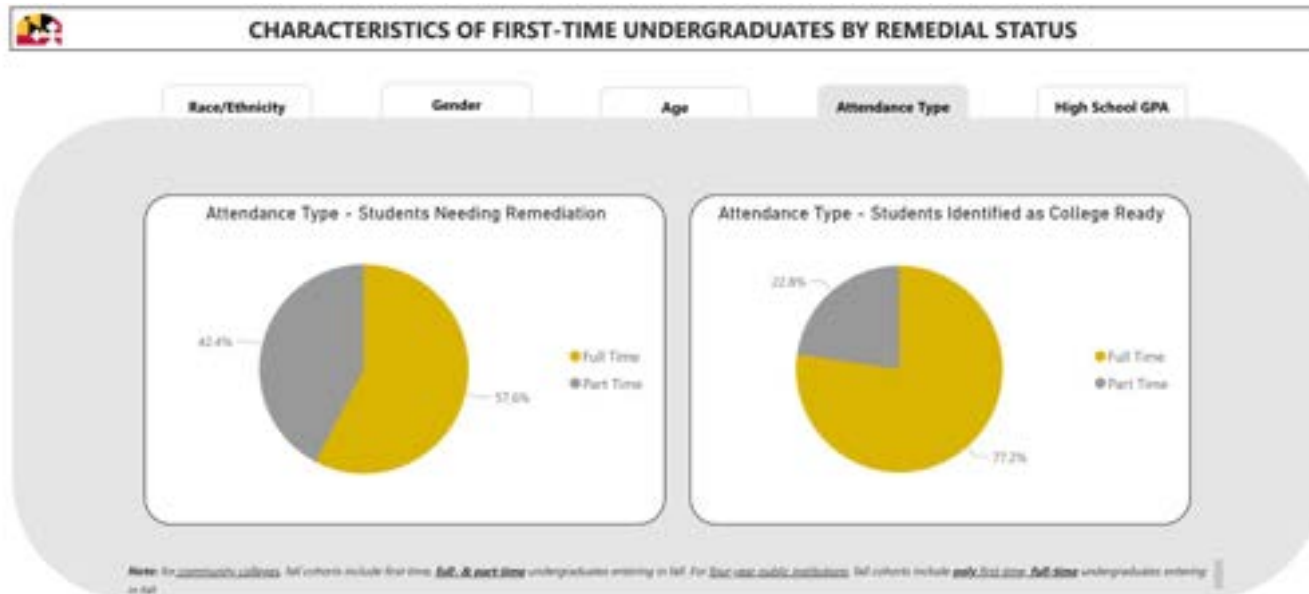
Current Outcomes & Tracking Performance



Current Outcomes & Tracking Performance



Current Outcomes & Tracking Performance



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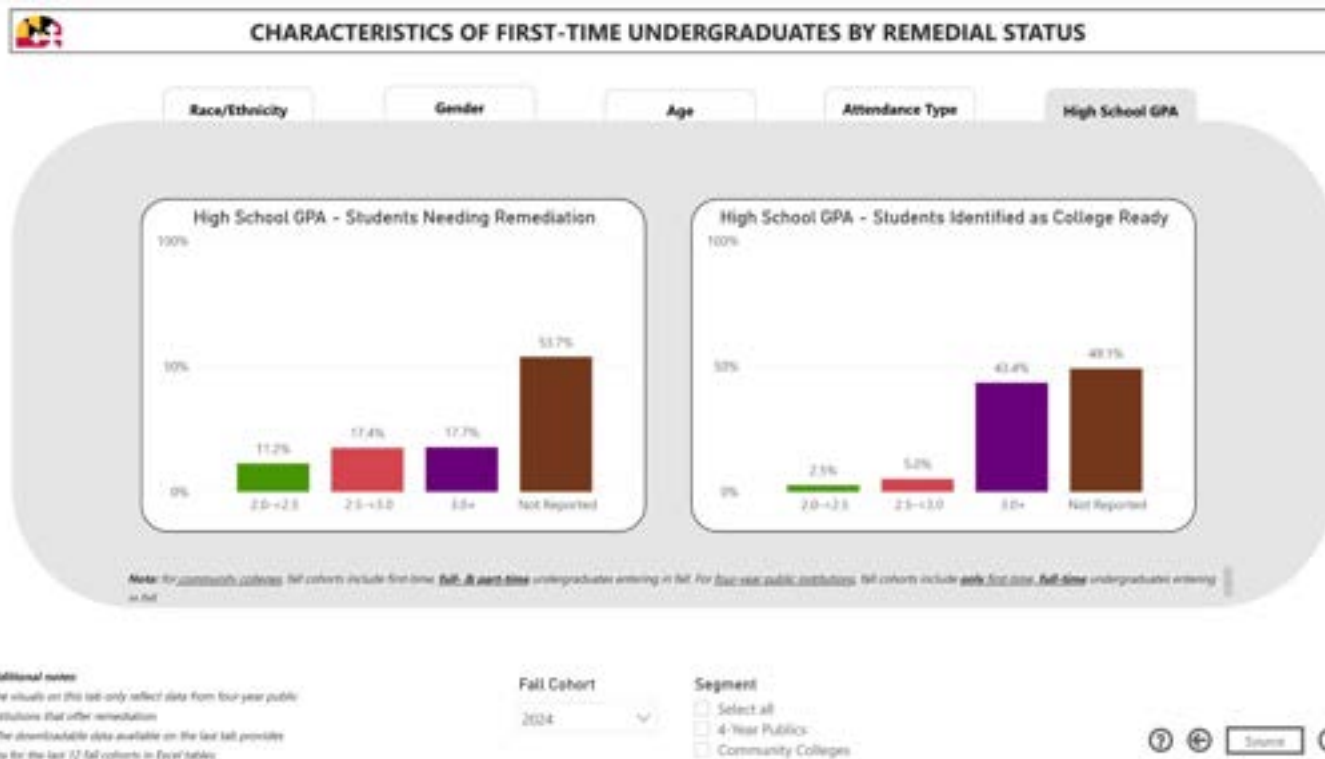
Fall Cohort

2024

Segment

- ☐ Select all
- ☐ 4-Year Publics
- ☐ Community Colleges

Current Outcomes & Tracking Performance



Scaling Success Through Collaboration

- No single institution or agency can solve this challenge alone; scaling requires deep, intentional collaboration.
- **K-12 & Higher Ed:** The CCRCCA mandated, and the Blueprint continues, alignment of PreK-12 standards with college and career readiness expectations.
- **Institutional Partners:** The USM and Maryland's community colleges partner on the MMRI to align pathways and ensure seamless transfer.
- **State Agency Groups:** Sister agencies works across departments to support vulnerable student populations.

**Inquiry tool brainstorm, group
discussion, and share out**

Small group discussions (5 min.)

Form a pair or small group and discuss:

- What promising innovations at your institution could be studied or scaled?
- What supports are needed from state/system levels?
- How can cross-system collaboration help scale effective practices?

What did you hear?

- Share a few reflections from the room.
- Q&A

Thank you!

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For more information, scan the QR code
or visit <https://ccrc.tc.columbia.edu/>

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