



Developmental Education Reform

Innovation Incubator

CCRC COMMUNITY COLLEGE
RESEARCH CENTER
Teachers College, Columbia University

Addressing Disparities in Developmental Education: Exploring solutions through a community of practice

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Slides & handout



Developmental Education Reform Innovation Incubator project

- Research and practice scan
- 1 year community of practice with 4 colleges
- 1 year evaluation of practices at 1 college
- Funded by the Gates Foundation

Agenda

1. The state of developmental education reform
2. Factors in the learning environment that contribute to disparities
3. Examples of innovative practices
4. An inquiry tool to guide the development of innovative practices
5. Inquiry tool brainstorm, group discussion, and share out

The state of developmental education reform

Evidence in support of ongoing reforms

- 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

- Limited rigorous studies comparing impacts among subgroups by race, income, or other student characteristics
- 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)
- 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)

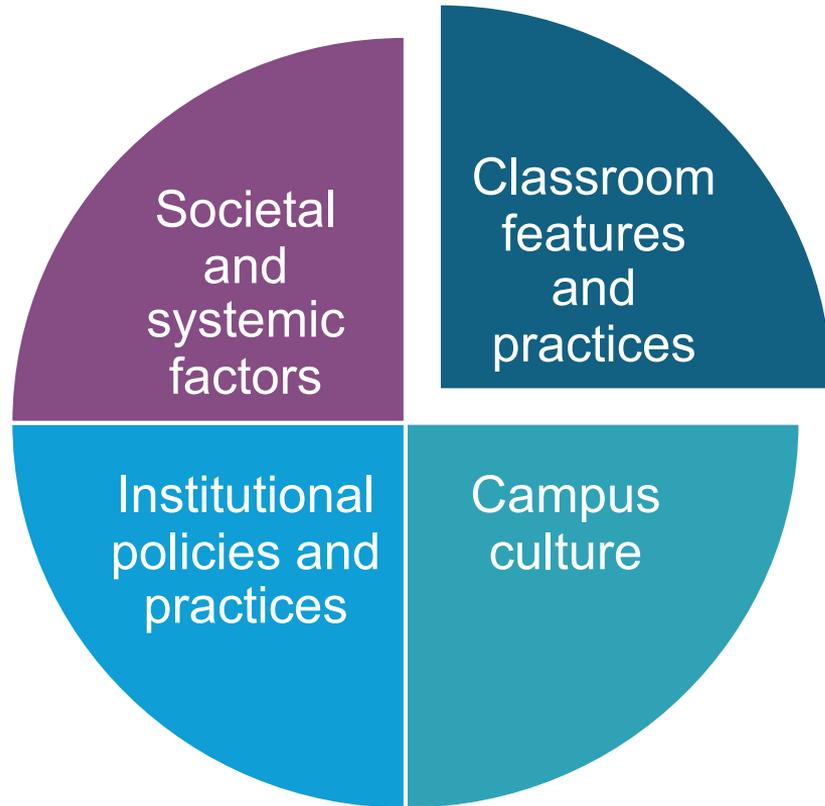
Opportunity to reduce disparities

- Opportunity remains to reduce disparities in academic outcomes by student characteristics (Bickerstaff et al., 2022)
- Tackling these disparities will require the field to identify factors that contribute to disparities in outcomes, develop and test innovations, and learn from faculty

As we continue, reflect on what disparities persist at your own institution amid your developmental education reform work and what factors may contribute.

Insights on drivers of inequitable education outcomes

Factors in the learning environment that contribute to outcome disparities



Within “Classroom features and practices”

The quality and relevance of curriculum are associated with higher student engagement, motivation, and learning (Neumann et al., 2013; Biedzio & Sapanik, 2022)

Curriculum



Student-centered activities in which students can put forward their ideas, deliberate with peers about meaning, and describe their thinking (Bickerstaff et al., 2022).

Pedagogy



Stereotype threat and math anxiety have not yet been addressed through structural reforms to developmental education (Brathwaite et al., 2020).

Attention to
Psychological
dimensions of
learning



Key takeaways

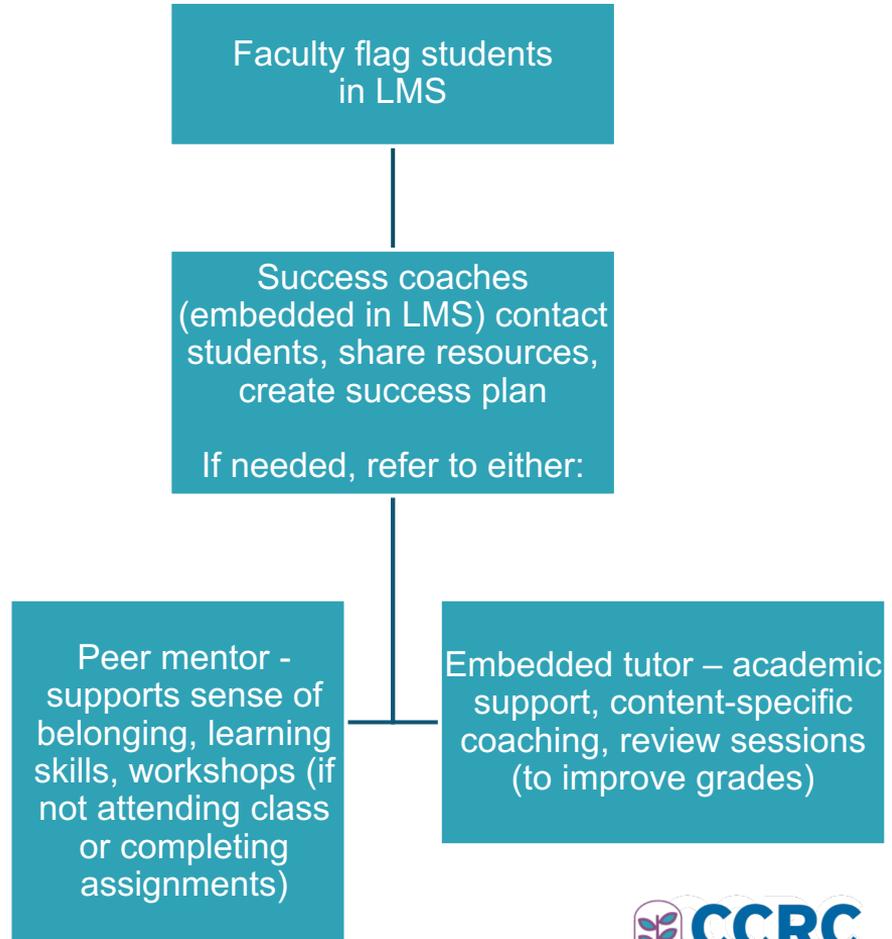
- Important to acknowledge the multiple factors at play for any student or instructional context
- Difficult to understand and map policy/practice responses to them when factors overlap and interact
- Opportunity to learn more about how these factors operate in the DE reform context as well as in community college generally

Examples of innovative practices

Multi-pronged approach to student support

Middle Georgia State University (GA)

- Corequisite math courses (and then scaled to corequisite English and Anat & Phys courses)
- Innovative practice to provide targeted support to students who are not keeping up
- Aims to increase pass rates and reduce withdrawals



Activating prior knowledge to access unfamiliar content

Jesse Cordes Selbin, English faculty at Gettysburg College (PA)

- Intro English course on 19th century literature
- Innovative practice in curriculum / pedagogy that targets first generation and working-class students

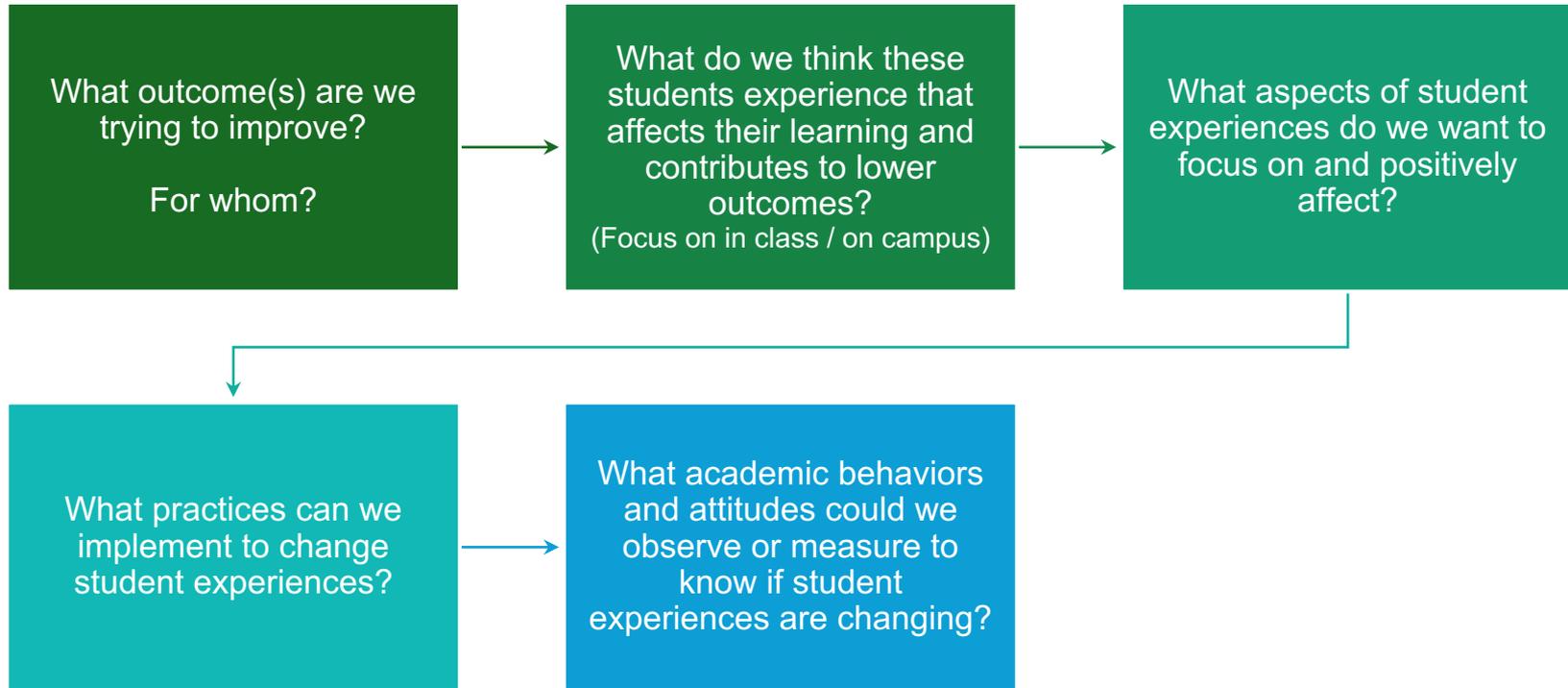
- Students learn about historical context of literature they are studying in part through constructing a digital timeline
- Students add events that tie into their own academic or personal interests
- Aims to bolster sense of belonging and intrinsic motivation and help connect academic realm to students' lives

Key takeaways

- Identified no rigorous evidence on practices intended to reduce outcome disparities within the dev ed reform context
- Growing body of descriptive and practitioner research documents some innovative approaches but often lacks reliable outcome data
- MSIs offer examples for building inclusive campus cultures
- Intermediaries (advocacy and support organizations) continue to actively support student-centered practice/policy changes
 - Complete College America, Strong Start to Finish, Just Equations (math), Achieving the Dream, Excelencia, Transforming Postsec Ed in Math, American Mathematical Association of Two-Year Colleges, Research for Action, RP Group, California Acceleration Project, Level Up
- Culturally supportive, student-centered pedagogy coupled with active academic supports is a promising combination for student success in dev ed reform contexts

An inquiry process to guide the development of innovative practices

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



Volunteer State Community College

- Vol State is located in Gallatin, TN and serves approximately 6,605 students
- The number of students who require at least one Learning Support (LS) course has increased (approximately 70%), as has the number of students who need LS in all three subject areas (MATH, READ, ENGL)
- Inspired in part by that data, the Humanities Division created a new LS Department and our work with CCRC will focus on faculty PD

Volunteer State CC's plan to develop PD for Learning Support faculty, part 1

What outcome(s) are we trying to improve?
For whom?



What do we think these students experience that affects their learning and contributes to lower outcomes?
(Focus on in class / on campus)



- Improve student success in all Learning Support subjects (MATH, ENGL, READ) and attached college-credit classes
- Increase faculty capacity for adapting to changing student populations and needs through a new professional development program for
 - LS faculty
 - Faculty instructing courses that include LS students
- Students experience a range of challenges, including those related to:
 - Familial & work responsibilities
 - Mental health
 - Limited background knowledge
 - Motivation
- Knowing what students may be dealing with will help faculty better serve them

Volunteer State's planned PD, part 2



- Normalize struggle
 - Know when to intervene and connect students with appropriate resources
 - Build classroom community
 - Guide students through critical points in the semester
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- Communicating with faculty about LS students is an important step in improving student outcomes; this includes:
 - Sharing who our students are (LS or otherwise)
 - Implementing discipline-specific training and having interdisciplinary conversations
 - Sharing relevant, current research

Volunteer State's planned PD, part 3



What academic behaviors and attitudes could we observe or measure to know if student experiences are changing?

- We would like to see students:
 - Attend class consistently
 - Engage in class activities
 - Complete assignments
 - See the value in LS classes
 - Use campus/community resources
- We would like to see faculty:
 - Use data shared about LS students and current, relevant research as a jumping off point for making informed changes in their teaching practices and communications with students

Inquiry tool brainstorm, group discussion, and share out

Independent brainstorm (5 min)

- Use the inquiry tool handout to brainstorm what outcome disparities persist for students experiencing dev ed reforms at your institution and what factors may contribute to them
- Focus primarily on the first two rows of the handout (questions 1 and 2), but feel free to work further if time allows

Small group discussion (10-15 min)

- Form a pair or small group and discuss how each person responded, providing feedback and sharing insights
- Consider what differences exist among institutional / departmental contexts

Share out

- What disparities and contributing factors were identified?
- Did any possible practices to address these student experiences emerge?

Thank you!

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

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