# Tackling Academic Underpreparedness in Four-Year Institutions: Research, Policy, and Practice

Maria Cormier, CCRC Michal Kurlaender, UC Davis Tiffany Beth Mfume, Morgan State University Tara L. Parker, UMass Boston

#### Reimagining Developmental Education

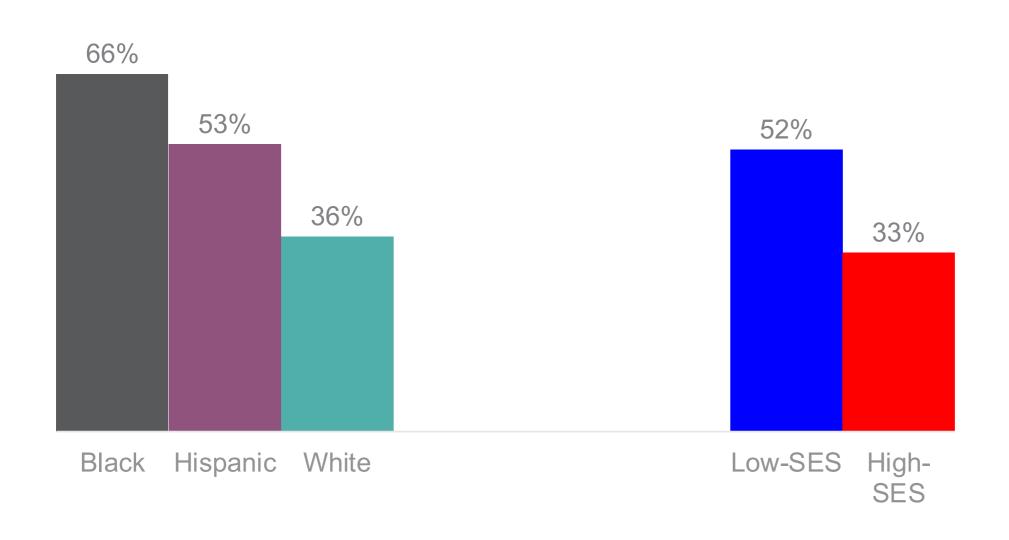
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#### **Enrollment in developmental education**

40% enroll in at least *one* remedial courses

21% enroll in at least *two* remedial courses

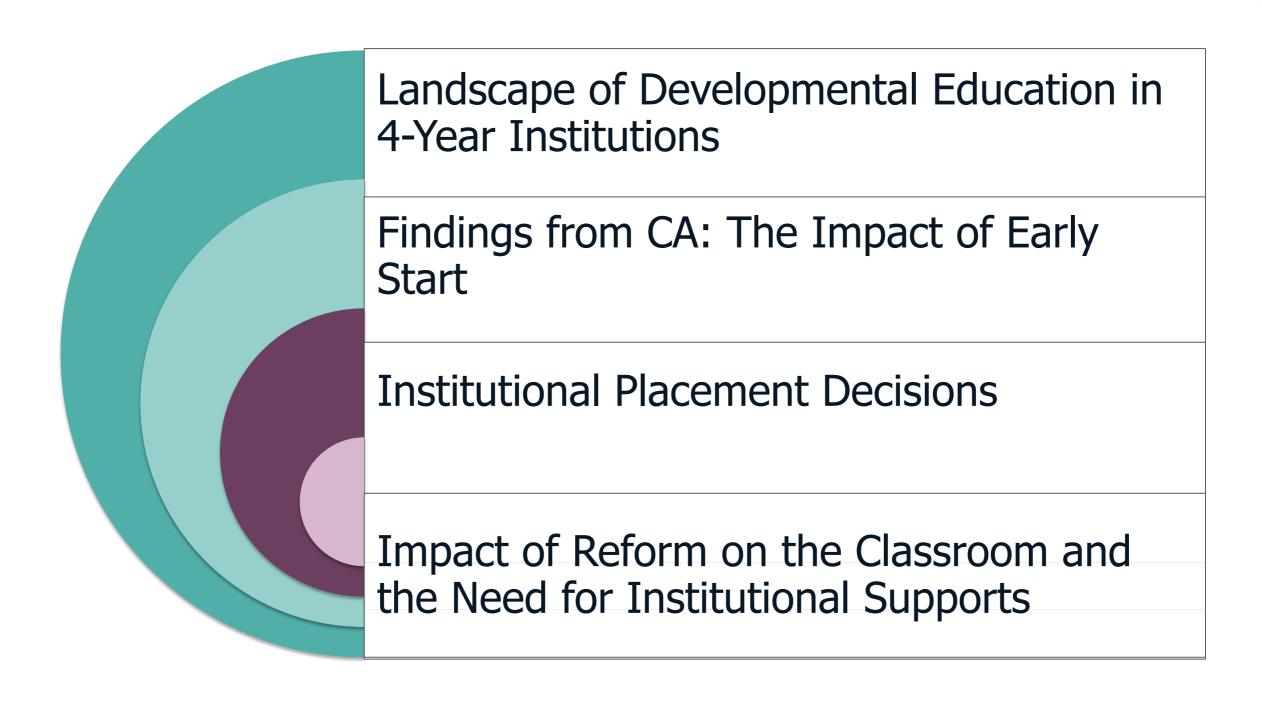
# Percentage of students in developmental education by race and class



Eliminate developmental education

Reform developmental education

#### Today's session



Examining
Developmental
Education
Practices in
Four-Year
Institutions



#### **CAPR National Survey**

What are the current developmental education practices used in broad-access 2- and 4-year colleges?

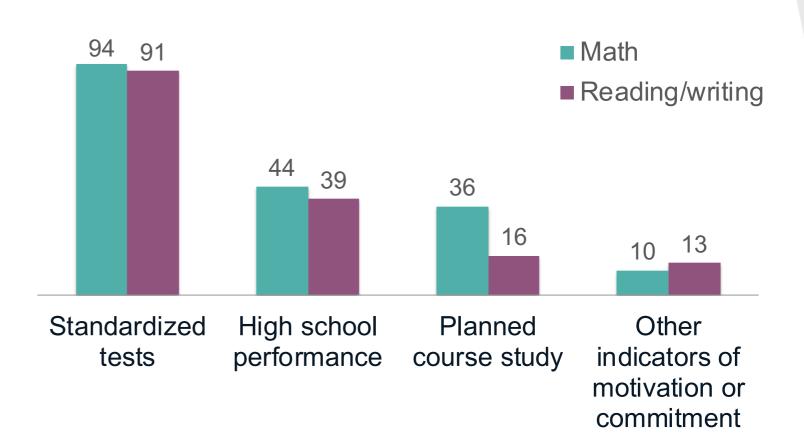
Over 60% of public broad access 4-year colleges require a minimum skill level in math and reading/writing



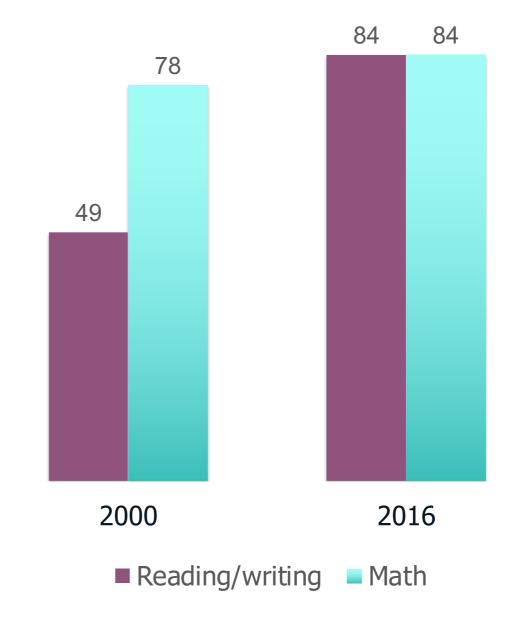
## Most public 4-year institutions use at least two methods of assessment

70% Math

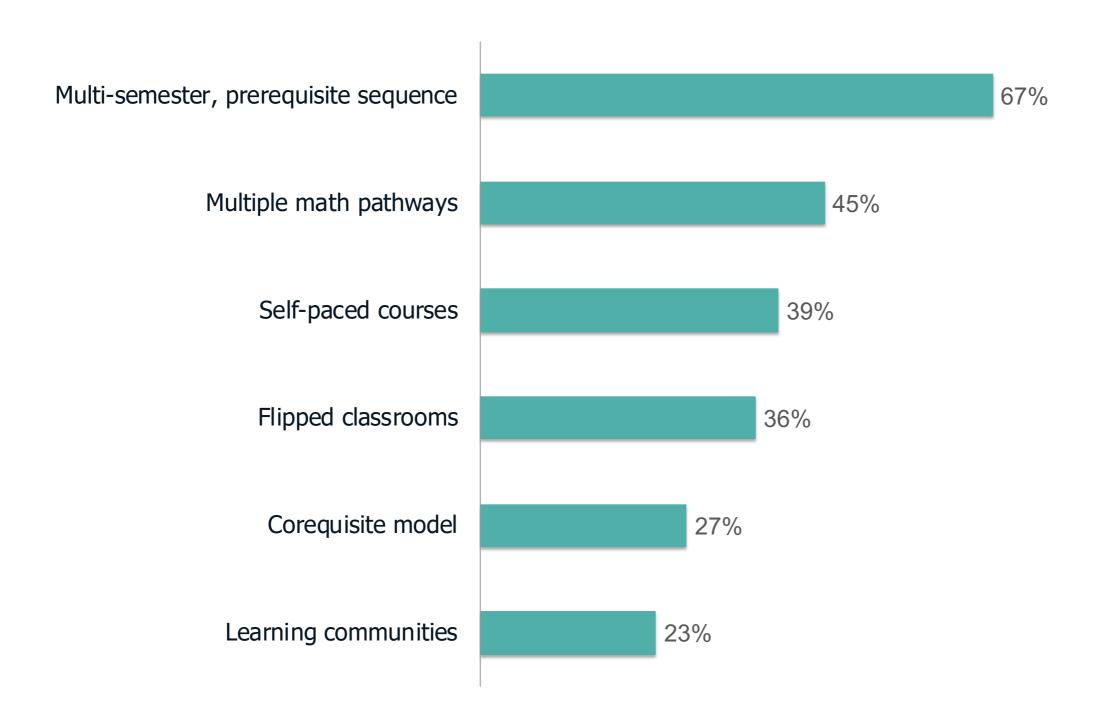
76%
Reading/writin
g



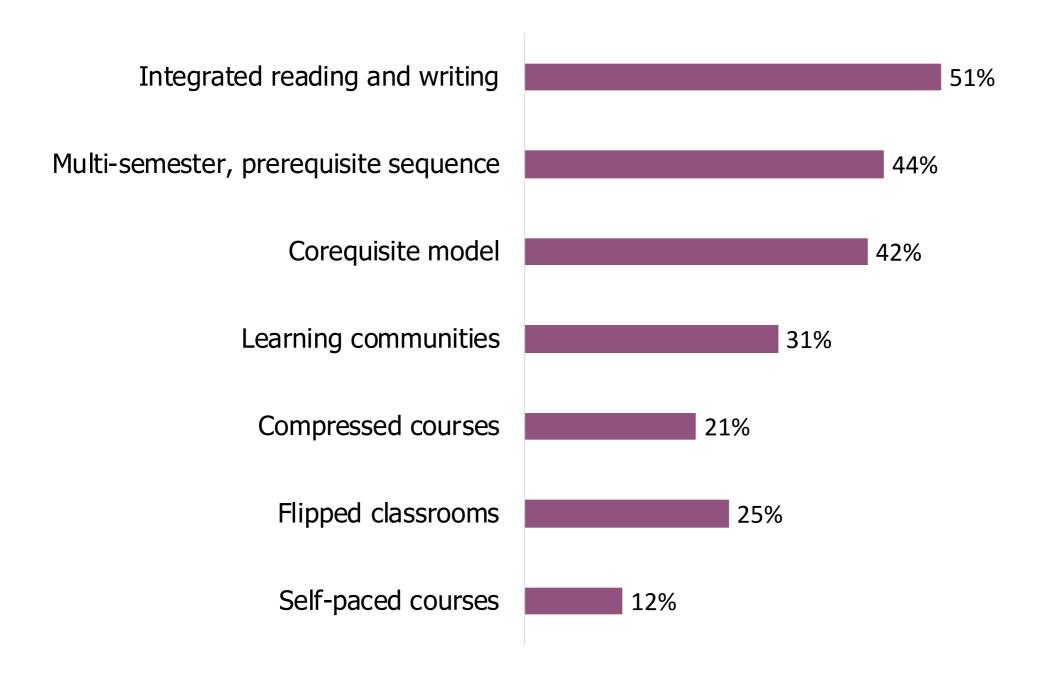
# More public 4 year colleges offer developmental education in 2016 compared to 2000



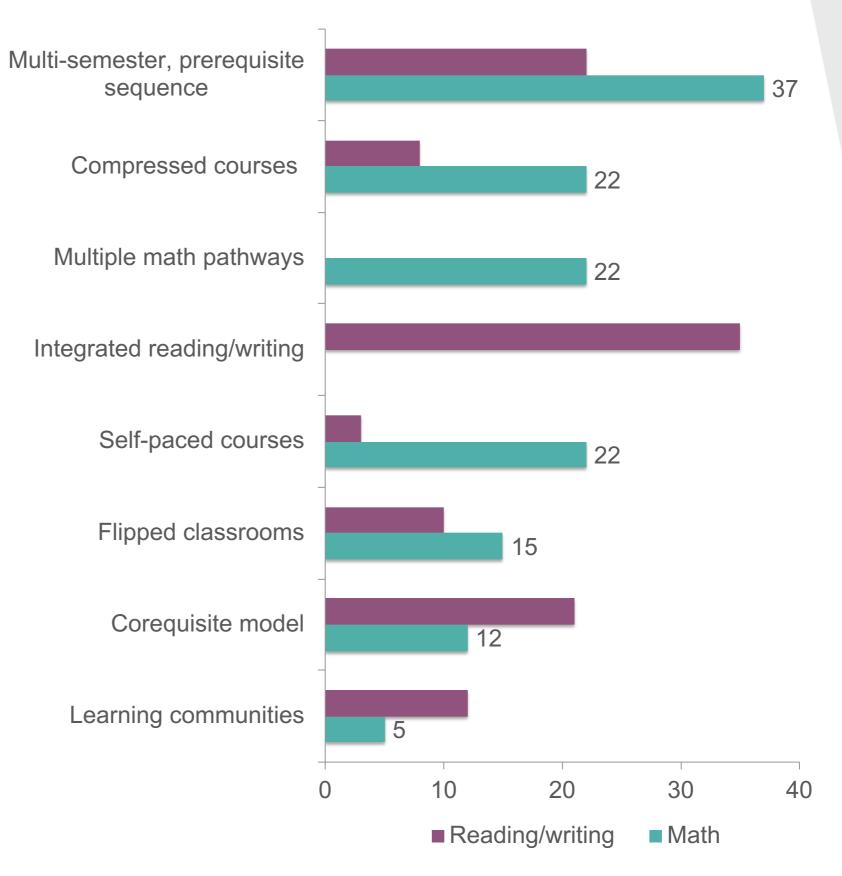
#### **Instructional math practices**



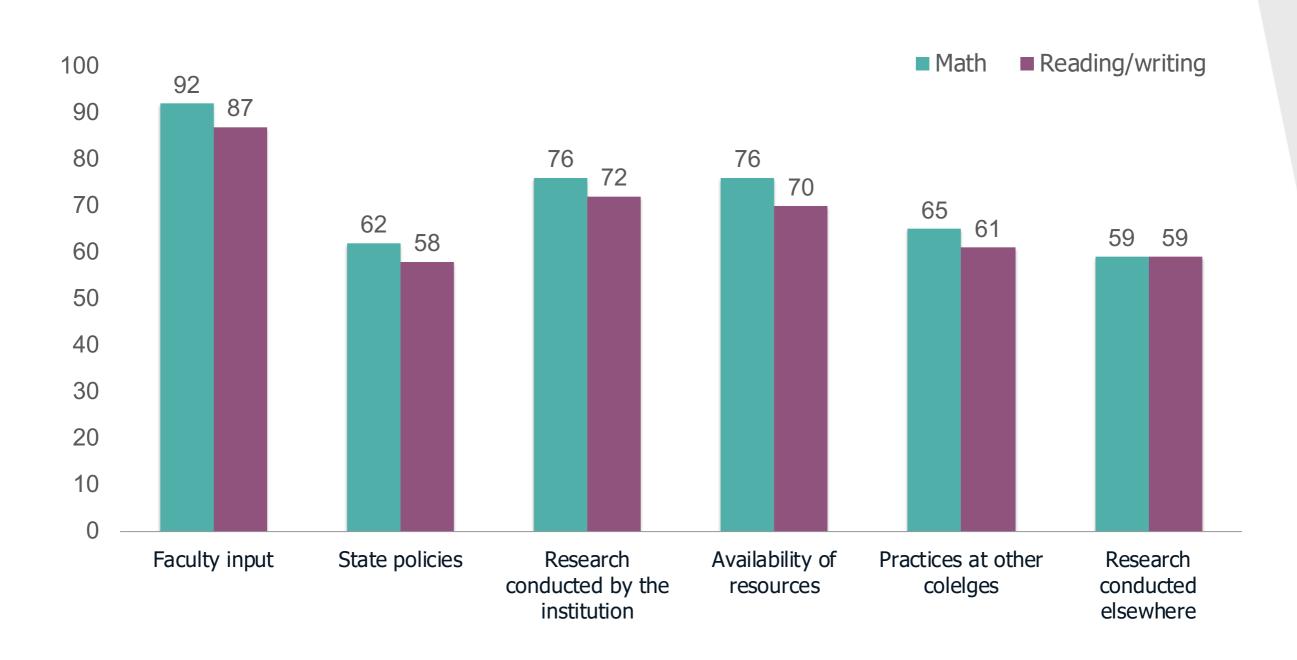
#### Instructional reading/writing practices



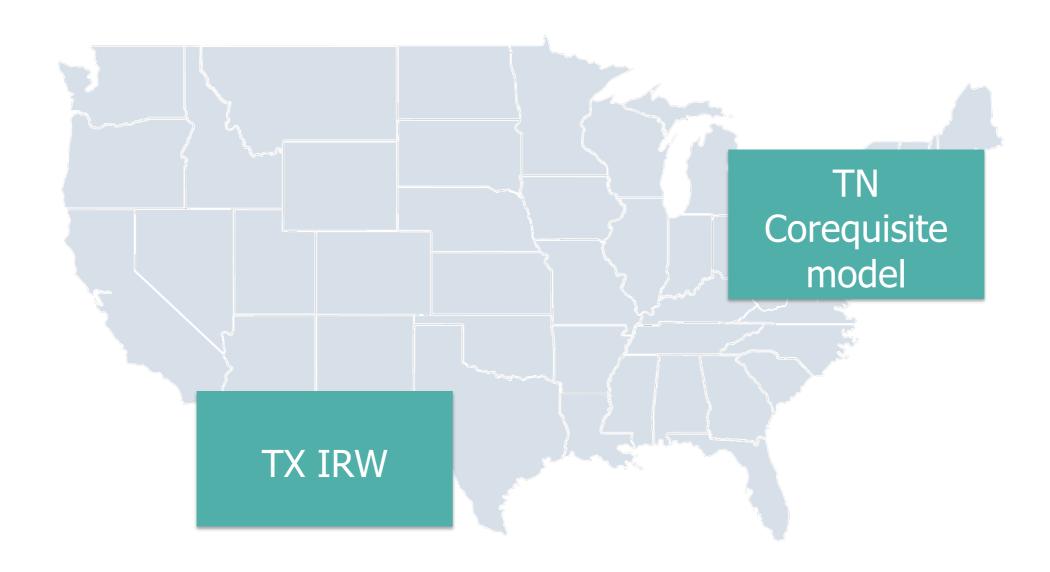
Few institutions are implementing instructional approaches at scale



#### A range of factors shape developmental Education practices in 4-year institutions



# State mandated reforms among public colleges in TN and TX



#### Reimagining Developmental Education

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### Thank you!

The Center for the Analysis of Postsecondary Readiness (CAPR) is funded through a grant (R305C140007) from the Institute of Education Sciences, U.S. Department of Education.



### CAPR 2019 Conference: Reimagining Developmental Education Remediation at Four-Year Colleges: Approaches and Outcomes

#### **Dr. Tiffany Beth Mfume**

Assistant Vice President for Student Success and Retention Morgan State University













**Blackboard** 



#### **MORGAN STATE UNIVERSITY**

Morgan Designated As Maryland's Preeminent Public Urban Research University





#### Morgan State University Office of Student Success and Retention (OSSR)

Morgan State University has increased its retention rate from 63% (2006 cohort) to 73% (2017 cohort) and graduation rate from 28% (2005 cohort) to 39% (2012 cohort), both **ten-point+ increases** that are directly correlated to the ongoing efforts of the OSSR.









In the Fall (2015) our retention rate for the 2014 freshman cohort was 76% for the 2nd year in a row, Morgan's highest retention rate in 20 years; Morgan has had **nine consecutive years** of a retention rate above 70%.

The Spring 2019 graduation rate at Morgan is **up an additional +4 points** to **43%** for the Fall 2013 cohort of freshmen.







#### Morgan State University Enrollment Management and Student Success (EMASS)

- The only HBCU to win a \$100,000 grant from the Bill & Melinda Gates Foundation for the implementation of Integrated Planning and Advising Services (IPAS) technology (2013)
- Winner of the Association of Public and Landgrant Universities (APLU) Project Degree Completion Award (2015)
- Invited participant: Ed Trust OASIS (Optimizing Academic Success and Institutional Strategy)
   Network (2016)
- Winner of the Association of Public and Landgrant Universities (APLU) Turning Points Video Competition Award (2016)
- Winner of a \$760,000 HBCU Student Success
   Project grant from the Lumina Foundation (2016)
- Winner of the Hobsons Education Advances
   Award for Student Success and Advising (2017)



Assistant Vice President for Student Success and Retention, Dr. Tiffany Mfume, receiving APLU 2015 Project Degree Completion Award



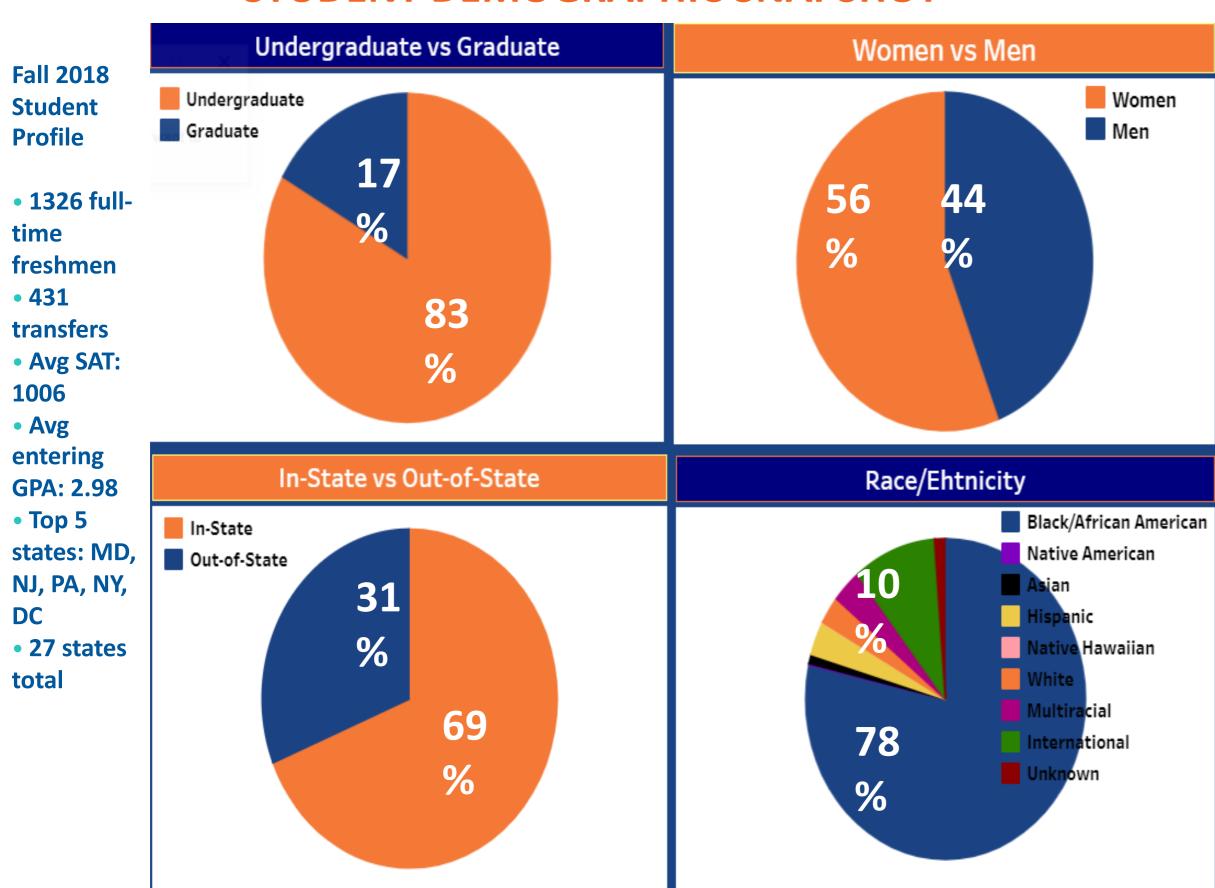


# Morgan State University Office of Student Success and Retention (OSSR)



- Morgan is largest of four, public historically black colleges and universities (HBCUs) in the State of Maryland.
- Morgan has an enrollment of 7,800 students with approximately 6,500 undergraduate students.
- More than 90% of our undergraduates receive some type of financial aid and approximately 60% are Pell-eligible.
- Morgan State University still is primarily a first-time, full-time population of African American students, many of whom are first generation college students.
- More than 65% of our undergraduate students test into developmental English, reading, and mathematics courses.
- By every traditional measure, many Morgan students are "high risk" students.

#### STUDENT DEMOGRAPHIC SNAPSHOT



#### A "SNAPSHOT" OF THE OFFICE OF STUDENT SUCCESS AND RETENTION (OSSR)



- ≥20 full-time OSSR staff
- Established in Fall 2003

#### Responsibilities include:

- summer orientation
- placement testing
- Starfish Early Alert system
- Academic Recovery Program
- academic advisement for freshmen
- early intervention
- monitoring & tracking of student success
- parent program
- financial literacy program
- Reclamation Initiative

## ENROLLMENT MANAGEMENT AND STUDENT SUCCESS (EMASS) DIVISION



#### **Moving Forward**

50 by 25 focus areas:

1) advising/degree planning;

2) faculty development/course redesign; and

3) Beyond Financial Aid (BFA)



#### SELECT HIGHLIGHTS OF ACTIVITIES AND INITIATIVES

#### 1) Enhancing advising/degree planning

Degree Works

**EAB** Navigate

College Scheduler

Second-Year Experience

Advising training series

Online Advising Manual

#### 2) Faculty development/course redesign

Course redesign projects including Developmental Education

Center for Excellence in Teaching and Learning

Regular review of DFW rates

#### 3) Beyond Financial Aid (BFA)

Beyond Financial Aid website and hard copy

https://www.morgan.edu/bfa





# CREATING A CULTURE OF INNOVATION: TECHNOLOGY AS A STRATEGY FOR PROMOTING STUDENT SUCCESS



#### With grants from:

- the Lumina Foundation
- the Bill & Melinda Gates Foundation
- the Maryland Higher Education Commission

#### Morgan has invested in new technologies:

- the Education Advisory Board's (EAB) Student Success Collaborative (SSC)
- Hobson's Starfish Retention Solutions
- Ellucian's Degree Works

#### **Morgan State University – Advising Tools Model**



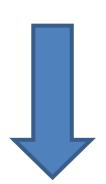




Ellucian Degree Works™







**Primary Users: Executive Leaders** 

(VPs, AVPs, deans, chairs)

**Secondary Users:** Advisors/Specialists

(OSSR, CASA, program directors)

**Additional Users:** Institutional Research

**Functions/Features:** predictive analytics

student risk

institutional reports

success markers

**Advisors/Faculty** 

(OSSR, CASA, faculty)

**Students** 

(undergraduate)

VPs, AVPs, Deans, Chairs

early alert

advising notes

appointments

attendance

**Students** 

(undergraduate)

**Advisors/Faculty** 

(OSSR, CASA, faculty)

VPs, AVPs, Deans, Chairs

degree audit

degree pathway

course availability

registration checklist

#### Placement Testing at MSU: The Origins of Change



During the Fall 2004 semester an Ad Hoc Placement Committee was commissioned and charged with the task of investigating the Morgan State University Placement Test and determining whether the test and testing format was efficiently and effectively accomplishing the University's goal of evaluating the reading, writing, and mathematical skill levels of new first-time freshmen.



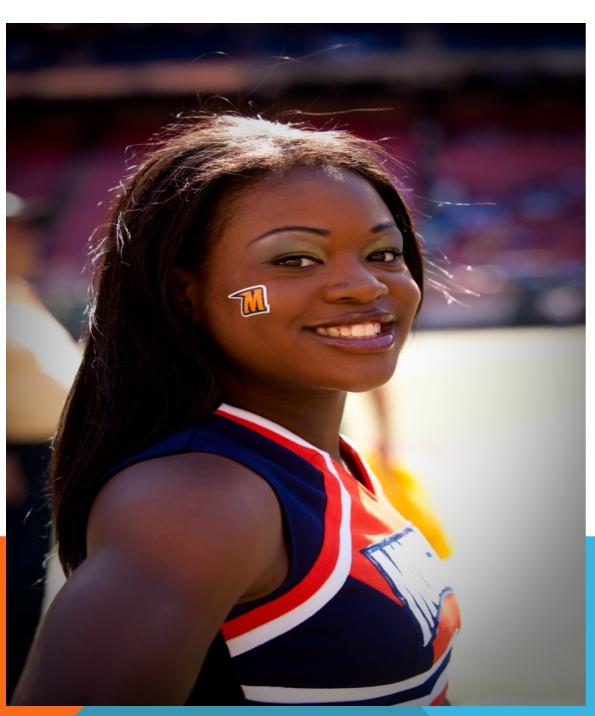
#### Placement Testing at MSU: The Origins of Change



Once the Ad Hoc Placement Test
Committee recommended the use of the
Accuplacer computer-based placement
test, an Accuplacer Implementation
Committee was appointed in the Spring,
2005 semester to oversee and to facilitate
all aspects of the conversion from the old
ETS "paper & pencil" placement test to
the new Accuplacer computer-based
placement test.



# TRANSITIONING FROM PENCIL & PAPER TO COMPUTER-BASED ASSESSMENT AT MSU



- ➤ The Accuplacer Implementation Committee's charge was as follows:
  - ▶1) to determine appropriate "cut-off" scores;
  - ≥2) to study the test's correlation to and consistence with freshman courses;
  - ➤ 3) to consider all test logistics including test proctors, computer labs, and the distribution of test results;
  - → 4) to investigate the role of Accuplacer in academic advising; and,
  - ➤ 5) to visit the Accuplacer website and to investigate its testing and scoring capabilities.

# TRANSITIONING FROM PENCIL & PAPER TO COMPUTER-BASED ASSESSMENT AT MSU



- ❖ The committee concluded that the Accuplacer placement test could provide the University with a level of individual student adaptability, systematic accuracy, and administrative flexibility that was far superior to the old ETS "paper & pencil" placement test.
- ❖ However, because the Accuplacer placement test is a computer-based, proctored test, new levels of planning, organization, coordination, and communication were required to facilitate and to execute the Accuplacer placement test.

# WHY ACCUPLACER? PLACEMENT TESTING AT MSU 2006-2017



The purpose of ACCUPLACER is to provide useful information about students' academic skills in math, English, and reading. The results of the assessment are used by academic advisors to determine students' course placement.

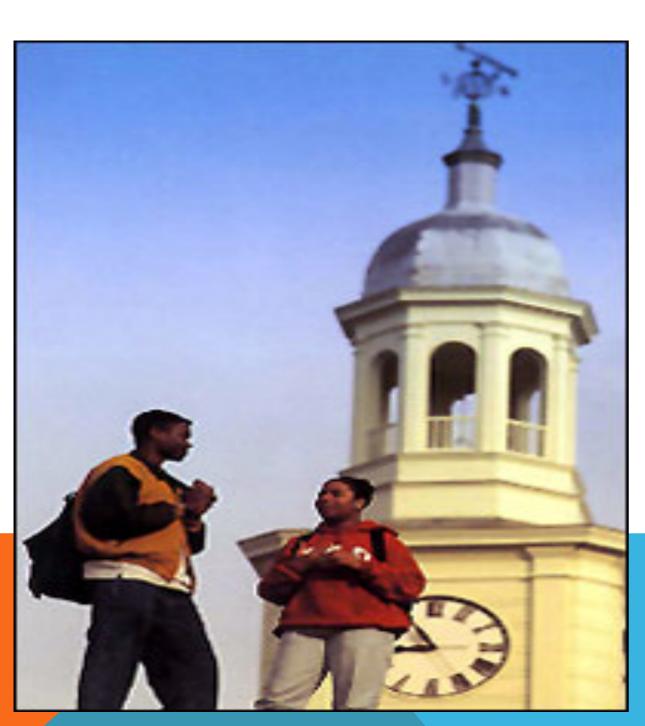
ACCUPLACER is an adaptive test.

Questions are chosen on the basis of students' answers to previous questions.

This technique selects just the right questions for students' ability level.

All first-time freshmen (except CASA Academy and Transfer students) are required to take the Accuplacer placement test.

# IMPLICATIONS OF PLACEMENT RESULTS 2006-2017



- With an average of 67% of students testing into one or more developmental courses, results were consistent with national data;
- Accuplacer results were consistent with the previous ETS placement test results at Morgan, although rates of developmental courses were increasing;
- ➤ And, results confirmed the CLA (Collegiate Learning Assessment) data.

# WHAT IS THE COLLEGIATE LEARNING ASSESSMENT (CLA)?



The Collegiate Learning Assessment (CLA) was an innovative approach to assessing our institution's contribution to student learning and the "value added" by our institution.

CLA measures are designed to simulate complex, ambiguous situations that every successful college graduate may face in the future. Life is not like a multiple-choice test, with four or five simple choices for every problem; thus, students are asked to analyze complex material and provide written responses.

The CLA measures are uniquely designed to test for critical thinking, analytic reasoning, written communication, and problem solving, skills that most academicians agree should be the outcomes of a college education.

CLA study participants assessed their institution crosssectionally, testing a sample of first-year students in the Fall (2005) and a sample of seniors in the Spring (2006).

#### CLA Results: How did our students score after taking into account their incoming academic profile?

\*\* Students' "expected" CLA score is based on two factors, namely: (a) their mean SAT score and (b) the school's typical average SAT score and its average CLA score. \*\*

Morgan State University	Freshmen	Seniors	Value Added
Expected CLA score	1056	1093	37
Actual CLA score	997	1063	66
Difference (actual minus expected)	-59	-30	+29
Performance level	below expected	at expected	at expected

#### **IMPLICATIONS OF THE 2005-2006 CLA RESULTS:**



- Although freshmen performed below the expected level, seniors performed at the expected level.
- The value-added score was higher than expected for MSU.
- Future longitudinal data will provide insight into the analysis of the cross-sectional data.
- Although the 2005 cohort of freshmen performed below expected, when compared to seniors in the Spring of 2006, results demonstrate that the University is providing substantial contribution or overall "value added" to student learning outcomes.

# PROFILE OF FIRST-TIME FRESHMAN STUDENTS AT MSU



- Twelve years of Accuplacer results indicated that at least 2 out of every 3 first-time freshmen at MSU needed development or "remediation".
- ➤ Only a handful of students passed the diagnostic tests in the developmental English and math courses during the first week of class.

# CLASSIC ACCUPLACER TESTS WERE TO BE DISCONTINUED PERMANENTLY IN 2018



The discontinued Accuplacer Sentence Skills test will not be replaced by another assessment; instead, the freshman studies sections of English 101 will be discontinued by the Department of English and Language Arts.

The discontinued Accuplacer Reading
Comprehension test will be replaced by the
Department of English and Language Arts' inhouse reading proficiency test which has
served as a validation instrument for
Accuplacer for more than a dozen years.

The discontinued Accuplacer Arithmetic,
Elementary Algebra, and College Level
Mathematics tests will be replaced with
ALEKS, a placement and remediation tool that
has been used by the School of Engineering
for more than a decade and piloted campuswide in Summer 2017.

Do you want to get a higher score on the Mathematics placement test?

✓ Improve your math placement

✓ Work online from home

✓ Cost included in **ACCESS Orientation** Program fee

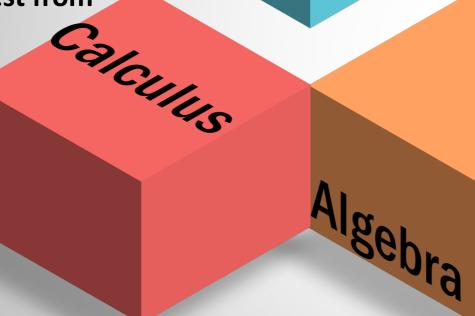
✓ Practice the math placement test from

home



#### Register for the **ACCESS Orientation** Program Today

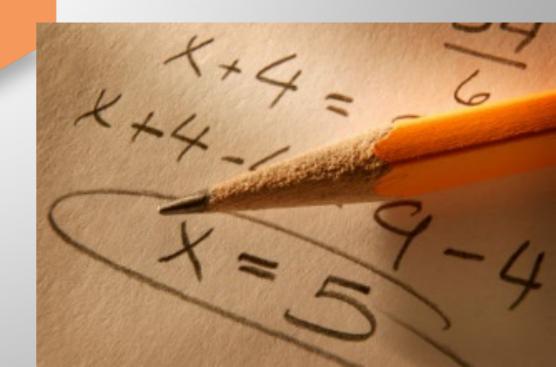
\* \* program registration is required, assigned ACCESS week is on a first come, first served basis





see reverse side for details \*\*

Math











All Morgan freshmen are required to take a mathematics placement exam, this year freshmen can participate in an online math prep course from home.

- ★ Initial math placement plays a key role in the success of students in all majors
- ★ Great for students who can work from home or are out of state or overseas
- ★ Only requires about 2-3 hours of time on a daily basis
- ★ Focuses on improving skills in Arithmetic, College Algebra, and Trigonometry
- ★ Helps freshman students avoid being placed in Developmental Math (Math 106), a
   3-credit prep course that does not count toward graduation requirements
- ★ Includes up to four practice math placement exams with online remediation modules
- \* Register for the ACCESS Orientation Program, pay the \$250 registration fee, and receive an online access code for the ALEKS online placement exam prep course

#### FALL SEMESTER 2018 – FRESHMAN CLASS

	TOTAL # TESTED	Developmental Reading (ALCR) REQUIRED	Developmental Reading (ALCR) NOT REQUIRED	MATH 106	ABOVE MATH 106
TOTAL	1,152	1,025	127	911	241
(%)	(100%)	(89%)	(11%)	(79%)	(21%)

#### Implications of the Fall, 2018 Placement Test Results:

- With an average of 84% of students testing into one or two developmental courses, results have decreased from previous years using Accuplacer;
- The 2018 results are somewhat inconsistent with the previous ETS & Accuplacer placement test results at Morgan, although rates of developmental courses have been increasing;
- And, the Placement Testing Committee has plans to review the placement test cut-off scores and diagnostic tests administered during the first week of class.

#### **CHANGES TO PLACEMENT TESTING IN 2019**



- The in-house departmental reading test was replaced with Accuplacer's new Next Generation Reading test.
- ALEKS math placement would continue with comprehensive marketing strategies including mailings, incentives, and nudges designed to increase at-home ALEKS participation.

#### **Greetings Morganite!**

Thank you for registering for the ACCESS Orientation Program. This letter signifies that you have successfully registered and are confirmed to attend an orientation session. After June 1, 2019, you will receive more detailed instructions specific to your orientation arrival.

Enclosed are instructions for ALEKS Placement Testing and setting up your online profile. Please pay close attention to these key pointers:

- 1. Once you have set up your profile, you **MUST** remember your username info and password.
- 2. If you get a score of 45 or above on the ALEKS Math Placement Assessment, you will not be required to take a developmental math course (Math 106), a three-credit math prep course.
- 3. If you get a score of 60 or above on the ALEKS Math Placement Assessment, you will skip a math and receive a proficiency grade for the course that you skipped.
- 4. You will be eligible to receive one of three \$100 University Bookstore gift cards if you complete three (3) math assessments at home AND place into the first math course required for your major (a minimum score of 45).
- 5. If you complete three (3) math placements at home, along with the corresponding education modules between each assessment, you will NOT be required to take the placement test inperson during your specified orientation.

We want you to be successful in your math placement and have given you four (4) assessments to use at home to be able to prepare and make the best score possible for your in-person testing.

If you have any questions or concerns, you may contact me at 443.885.3945 or the Office of Student Success and Retention at 443.885.3651. You may also email access@morgan.edu.

## ALEKS VIDEO

#### FALL SEMESTER 2019 – FRESHMAN CLASS

Accuplacer Next Generation Reading Test	TOTAL # TESTED	Developmental Reading (ALCR) REQUIRED	Developmental Reading (ALCR) NOT REQUIRED
TOTAL	1,185	477	708
(%)	(100%)	(40%)	(60%)

ALEKS Math Placement Test	TOTAL # TESTED	Score 0-44 MATH 106 REQUIRED	Score 45-59 MATH 108, MATH 109, MATH 110, MATH 113, MATH 118, MATH 120	Score 60-74 MATH 114, MATH 141, MATH 201	Score <b>75-100</b> MATH 241
TOTAL	1,236	874	159	119	84
(%)	(100%)	(70%)	(13%)	(10%)	(7%)

#### IMPLICATIONS OF THE FALL, 2019 PLACEMENT TEST RESULTS:



- ➤ With an average of 40% (89% in 2019) of students testing into developmental reading and 70% (79% in 2018) testing into developmental math, results have improved from last year;
- The OSSR's additional strategies to promote ALEKS preparation from home including mailings, emails, video, and phone calls were successful- 24% (301) of students competed at least three ALEKS practice tests at home.
- The ALEKS results indicate that at least 7 out of every 10 first-time freshmen need mathematics development or "remediation".
- The Accuplacer reading test results suggest that only about 2 out of 5 students need to take the Analytical and Critical Reading (ALCR 101) course.



### PLACEMENT TESTING AT MSU: NEXT STEPS



An analysis of students who took Math 106 and then took Math 109 and who took Math 106 and then took Math 113 over the past 3 years. How many students passed Math 106 the first time around? How many passed the subsequent course (109, 113) the first time around?

Are there students who took and failed Math 106 and never passed it, but still ended up going on to pass Math 109/113?

Analyses for CASA students who took the developmental math over the summer, and then took 109 or 113?

Analysis of students who took DVRD 101/ALCR 101 and then took English 101, and who took DVRD 101/ALCR 101 and then took History 101 or 105?

Analysis of students who took DVRD 101/ALCR 101 and took a biology course BIOL 101 or 102 or 105 or 106 in the same semester vs. those who took DVRD 101/ALCR 101 and took a biology course in a subsequent semester?

An analysis of our students with the highest SAT scores: how many of them took one or more developmental courses? How did they do in the developmental courses? How did they do in their first credit-bearing Math course?

#### TIFFANY BETH MFUME PUBLICATIONS



- What Works at Historically Black Colleges and Universities (HBCUs): Nine Strategies for Increasing Retention and Graduation Rates, published in 2016 by Rowman & Littlefield
- The College Completion Glass—Half-Full or Half-Empty? Exploring the Value of Postsecondary Education, published in 2019 by Rowman & Littlefield



### Reimagining Developmental Education

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# Thank you!

**Tiffany Beth Mfume**Morgan State University

The Center for the Analysis of Postsecondary Readiness (CAPR) is funded through a grant (R305C140007) from the Institute of Education Sciences, U.S. Department of Education.

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# Toward a Racial Justice and Equity Framework in Developmental Education

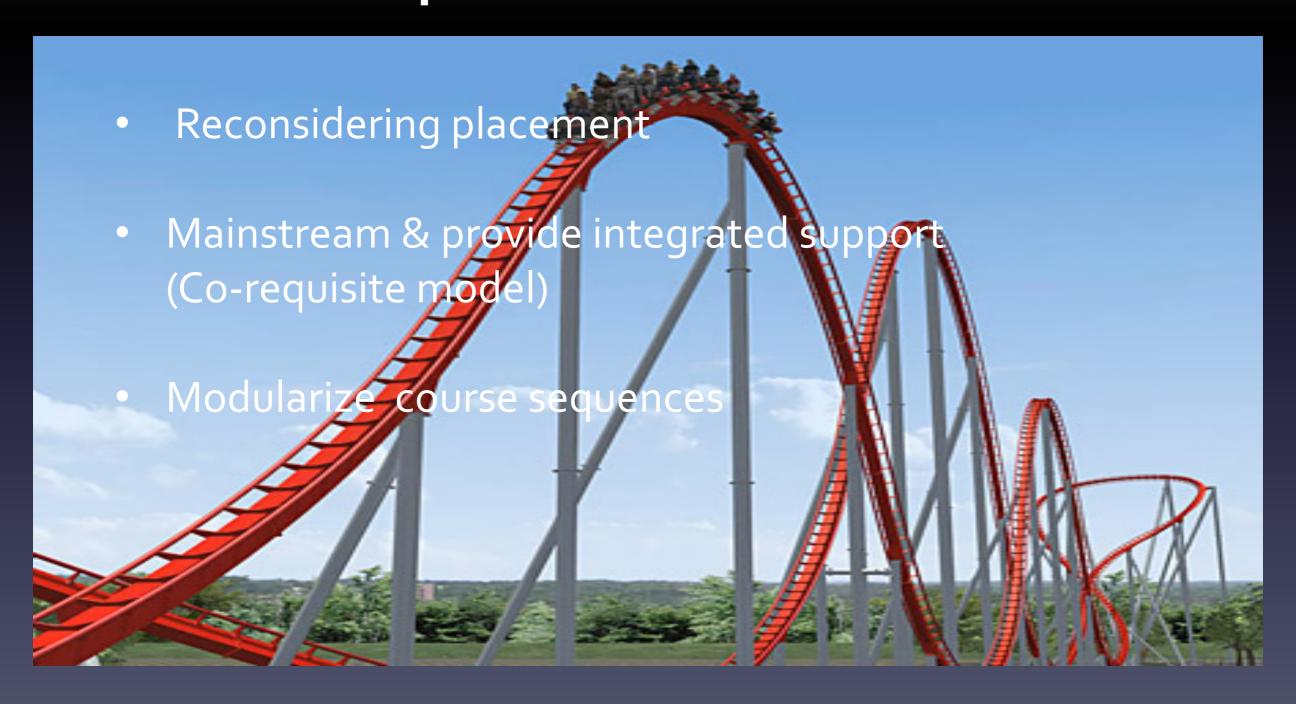
Tara L. Parker

**CAPR** 

New York, NY

November 21, 2019

# "Reforms" in Developmental Education





Exploring Racial Justice

# Developmental education as a racial justice issue

- Students of color who take developmental courses at twoyear institutions want a bachelor's degree
- Black and Latinx students are more likely to be placed in developmental education courses.
- A majority of Black and Latinx students take at least one developmental course in two-year institutions
- Black and Latinx students are less likely to earn college-level credit in English or Math.

#### Toward a Racial Justice Framework

- Develop and Expand Awareness of Systemic Racism
- Cultivate cultures of inquiry to achieve equity
- Focus on a vision to foster culturally engaging campus environments
- Engage five dimensions of institutional diversity mission, capacity and structure, scholarship and pedagogy, campus climate, access and success for students (and faculty) of color

# Transforming Classrooms in Developmental Education

- Believe in them. Maintain high expectations.
- Reveal "hidden figures."
- Develop a "math for social justice" course:
   Review curriculum and classroom materials.
- Value their thinking.



# Thank you!

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- Twitter: @taralparker
- Ph: 617-287-7728

### Reimagining Developmental Education

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# Thank you!

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