Implementation matters: Lessons from large-scale developmental education reforms

Reimagining Developmental Education

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Presenters:

- Mike Leach, Arkansas Community Colleges

- Susan Barbitta, North Carolina Community Colleges

- Tamara Bertrand Jones, Florida State University

- Jane McBride Gates, Connecticut State Colleges and Universities

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Arkansas Statewide Scaling of Co-requisite Support

- Arkansas Community Colleges (ACC) and Arkansas Dept of Higher Ed (ADHE) are co-managing.

- Scaling co-requisite support for math and English across all 2yr and 4yr public institutions.

- Goals by Fall 2021:
    - 1) at least 75% of all underprepared students in math and English at all institutions will receive co-requisite support;

    - 2) all underprepared students will be able to complete gateway math and English in 1 year.

Voluntary Compliance Scaling Model

- No direct state policy mandate, although leveraging new performance funding policy and multiple measures for placement policy.

- Primarily a **Voluntary Compliance** strategy with some elbow twisting from ADHE leveraged by some related policy mandates.

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Implementation Strategies

- Connected to national initiative (Strong Start to Finish) for validation and peer learning related to implementation.

- Extensive faculty and administrator professional development (Dana Center, Complete College America).

- A structure and process to ensure quality course design (e.g., institutional action plans, action plan feedback, personal consultation with content experts).

- A structure and process to measure progress toward goals (e.g., data gathering).

- Patience and reasonable time-line for phase-in of institutional implementation.

Next Phase

- Confirm quality course design models at all institutions.

- Continuous professional development for faculty to improve teaching and learning, based on faculty feedback.

- Monitor data and progress toward goals and prod institutions as needed to achieve goals by fall 2021.

- Connect to K12 concurrent credit and other efforts to prepare high school students for college.

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Thank you!

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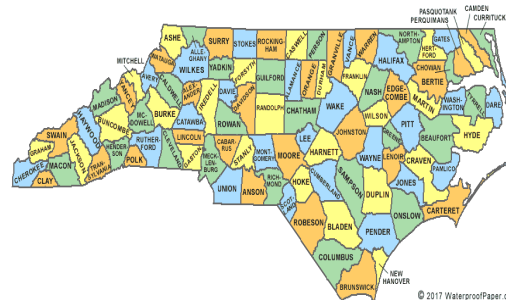# Reinforced Instruction for Student Excellence
RISE

Susan Barbitta
Executive Director, NC Student Success Center
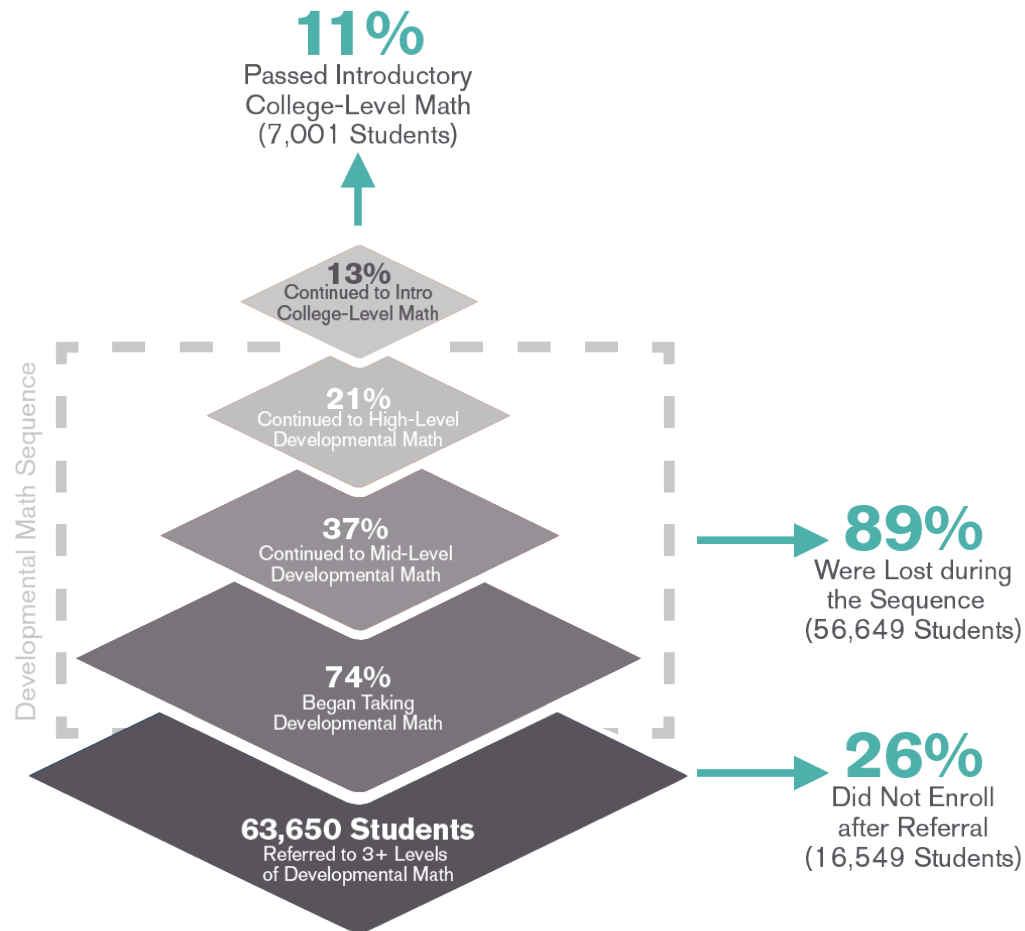barbittas@nccommunitycolleges.edu

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North Carolina

- 58 Community Colleges
- Governed by a System Office
- 710,000 students
- 58,000 dual enrolled students

# Nationally - Student Progression Through the Developmental Math Sequence

11%
Passed Introductory College-Level Math (7,001 Students)

13% Continued to Intro College-Level Math

21% Continued to High-Level Developmental Math

37% Continued to Mid-Level Developmental Math

74% Began Taking Developmental Math

89% Were Lost during the Sequence (56,649 Students)

63,650 Students Referred to 3+ Levels of Developmental Math

26% Did Not Enroll after Referral (16,549 Students)

Developmental Math Sequence

Bailey, Jeong & Cho, 2010

North Carolina Data

In NC We Know…..

NC - Students Attempting College Level Math

17% · 19% · 20 · 22% · 24 · 25 · 26

2008 · 2018-19
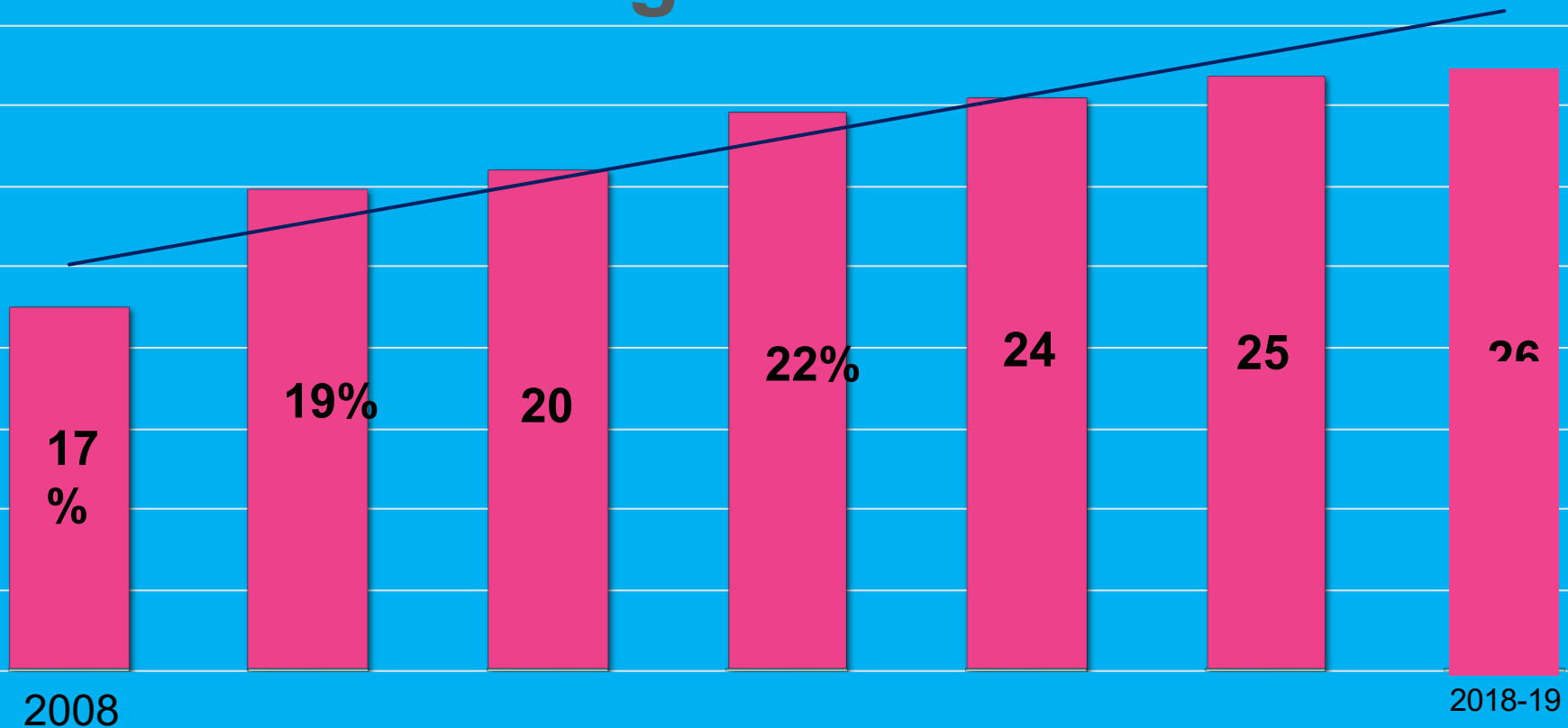
All students, including dual enrolled and repeaters.

7%

10%

14%

Passes a gateway level math course within two years of enrollment

Students that began in Developmental Education

NCCCSO IR Data

NC SSC

ROSE
REINFORCED INSTRUCTION FOR STUDENT EXCELLENCE

RISE

BEFORE: PRE-REQUISITE REMEDIATION

DE Course(s) → College-Level Course

AFTER: CO-REQUISITE REMEDIATION

DE Course(s)   College-Level Course → Other College-Level Courses

Co-requisite Support
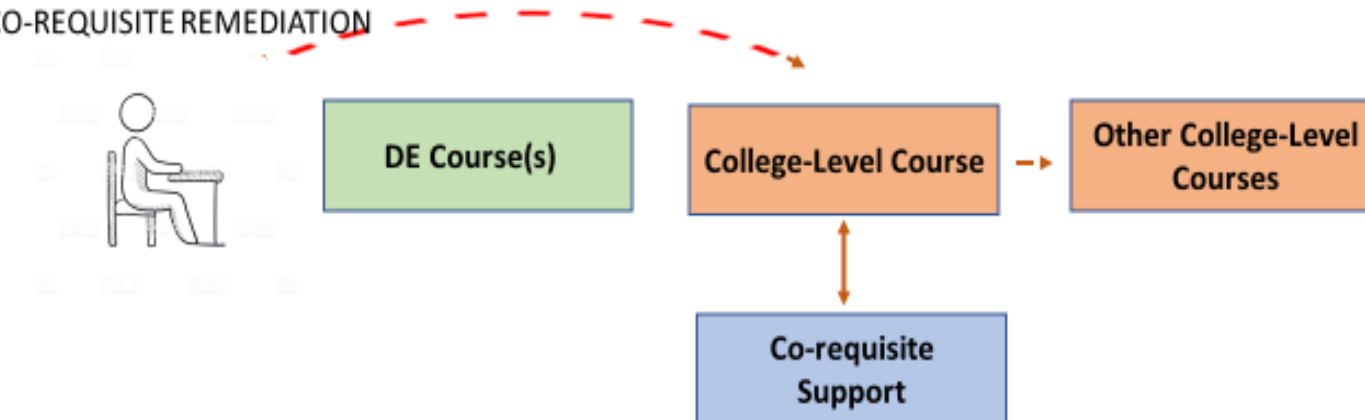
Prerequisite to Co-requisite

HS GPA 2.8+

Gateway math or English without co-requisite

HS GPA 2.2-2.799
If ACT benchmark score then math or English gateway without co-

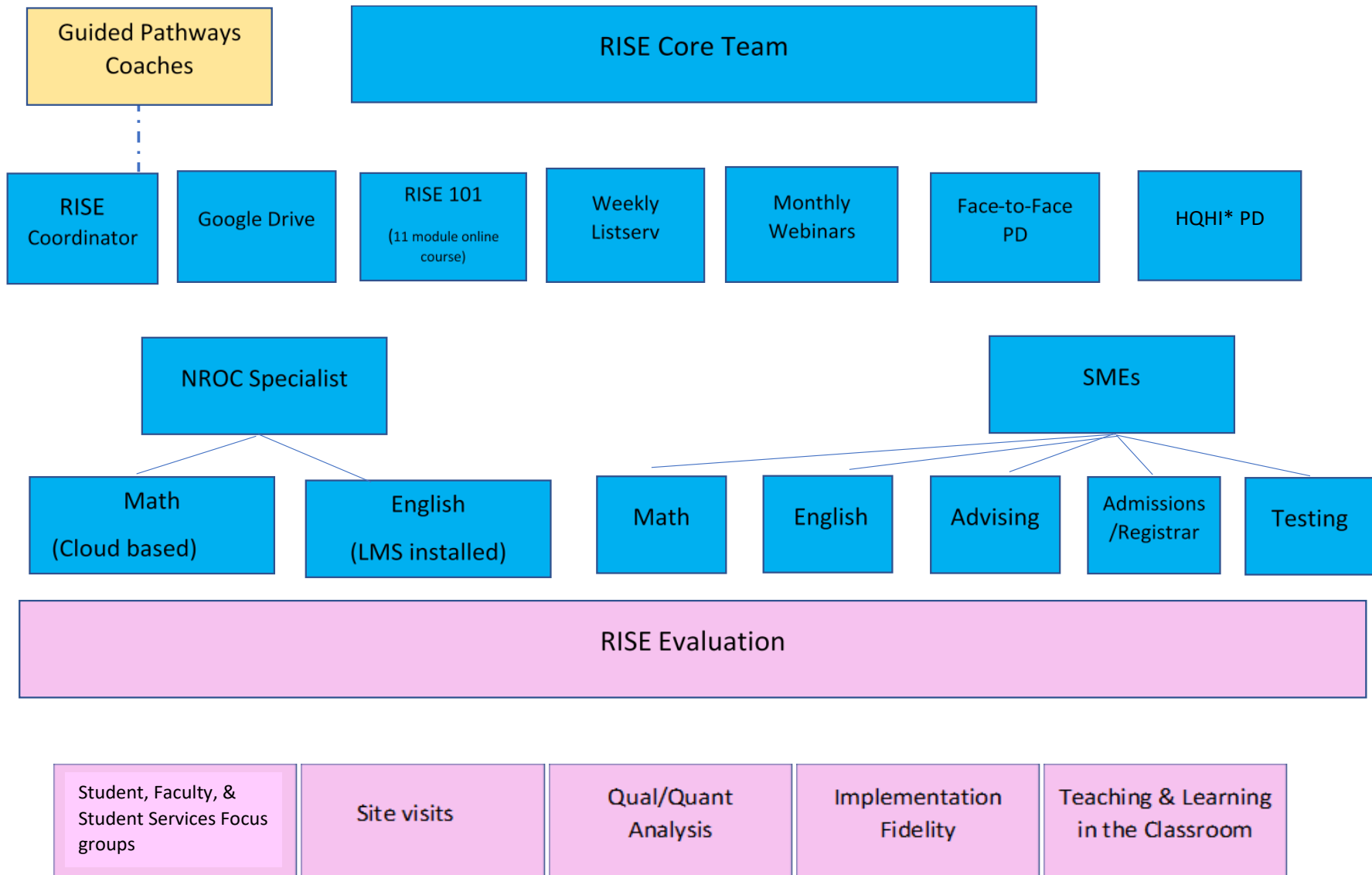Gateway math or English with a co-requisite

HS GPA < 2.2

If ACT score within 2 points of benchmark then gateway course with co-requisite

Transition Math Course and/or Transition English Course

RISE

- No placement test*

- Students are placed:
  - Unweighted high school GPA
  - GED or HiSET
  - ACT/SAT
  - Aligned with our high schools and dual enrollment criteria
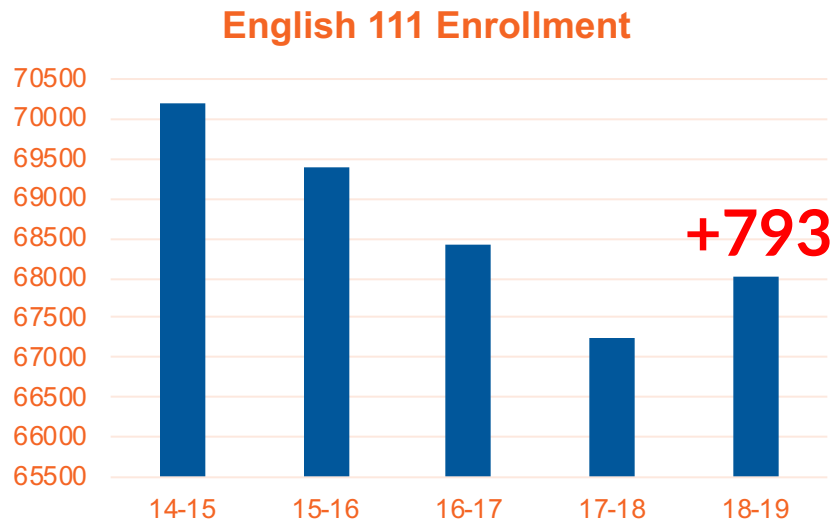
*Placement criteria is valid for students that have graduated from a US high school within the last 10 years.

Beyond 10 years, students take a placement test.

*High Quality High Impact PD – Teams of 8 spend one full day at each of the colleges joining RISE fall 2020. Personalized, high touch PD.

RISE Communication

- RISE Listserv
- RISE Google drive
- Regional coordinators
- Technical software experts
- More than 50 day-long PD opportunities, regionally
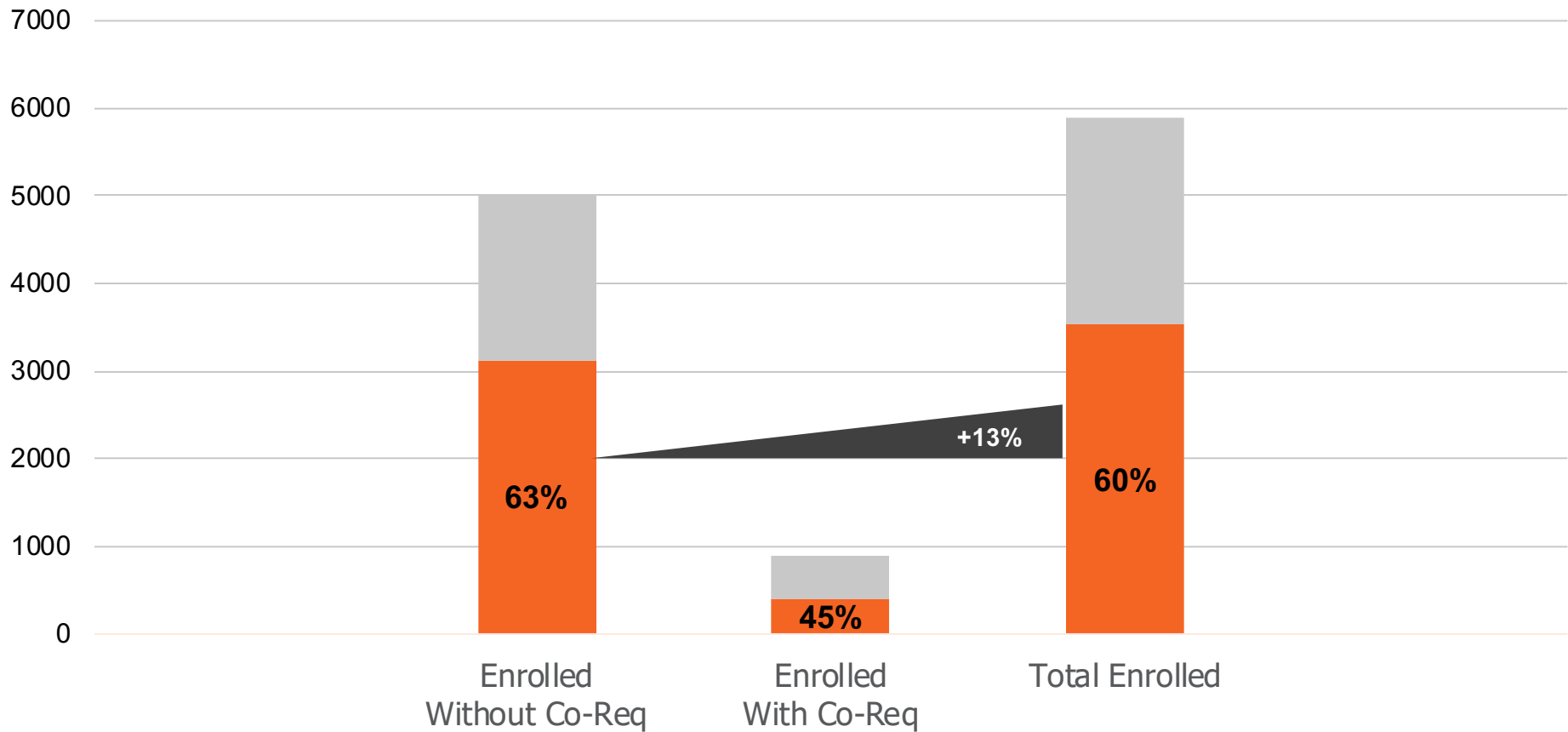- Day-long, team delivered PD at every college

Implementing RISE
in the midst of declining/stagnant enrollments
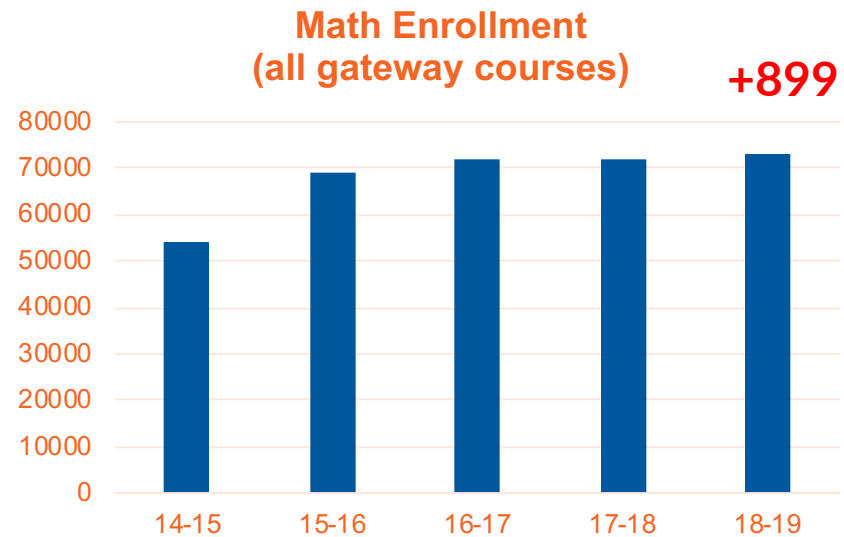
English 111 Enrollment

+793

**Math Enrollment
(all gateway courses)**

+899

14 pilot colleges, 3526 enrolled in ENG-111 and 4787 enrolled in one gateway math, not mutually exclusive.

NC SSC

ROSE
REINFORCED INSTRUCTION FOR STUDENT EXCELLENCE

English Gateway Course Success
Spring 2019 – RISE Colleges

English Gateway Course Success

Spring 2019

■ Success   ■ Success with Co-Req   ■ Non-Success

RISE Colleges: 400

Non-RISE Colleges: 1355

Estimated NCCCS Success with…: 1755
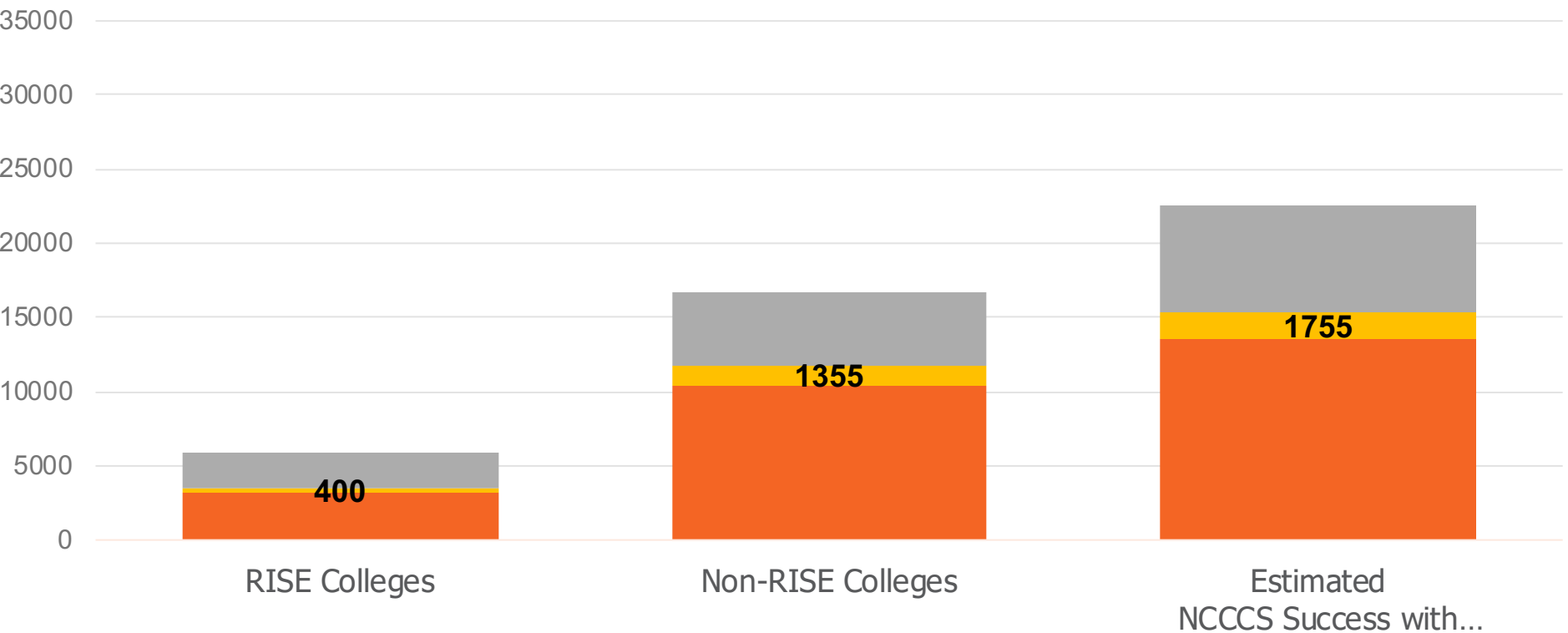
Math Gateway Courses Success

Spring 2019 — RISE Colleges
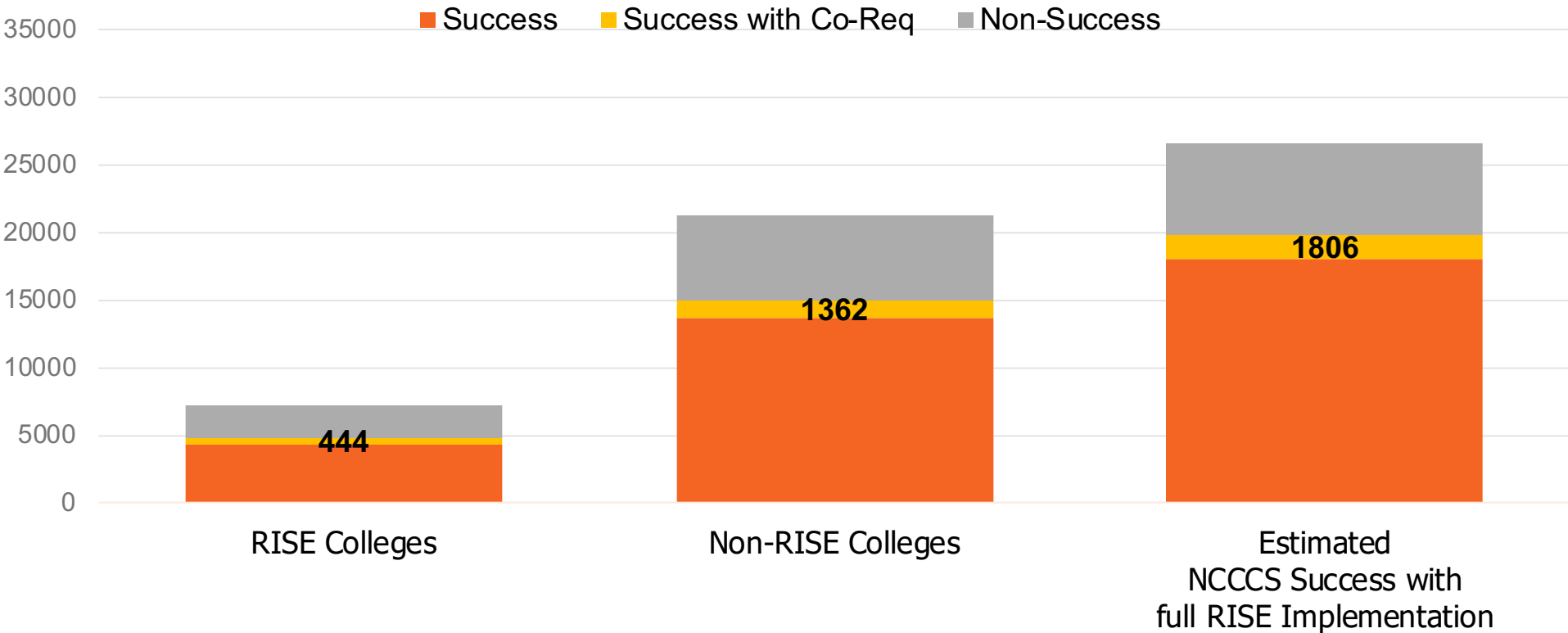
Math Gateway Courses Success

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Thank you!

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Implementing Developmental Education Reform at Florida College System Institutions

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Shouping Hu
Toby Park-Gaghan
Christine Mokher
Rebecca Brower
Amanda Nix

Florida State University

Acknowledgments

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Senate Bill 1720

Dev Ed Exemption → Placement Test no Longer Required → Alternative Modalities → Increased Advising

Our Study

Student Level Data

Six cohorts of first-time-in-college (FTIC) students who began their studies in fall semesters 2011-2013 (pre-reform) and 2014-2016 (post-reform)

Site Visit Data

- 21 site visits between 2014-2019
- Focus groups with students, faculty, administrators, & staff
- Observations of Advising and Instruction
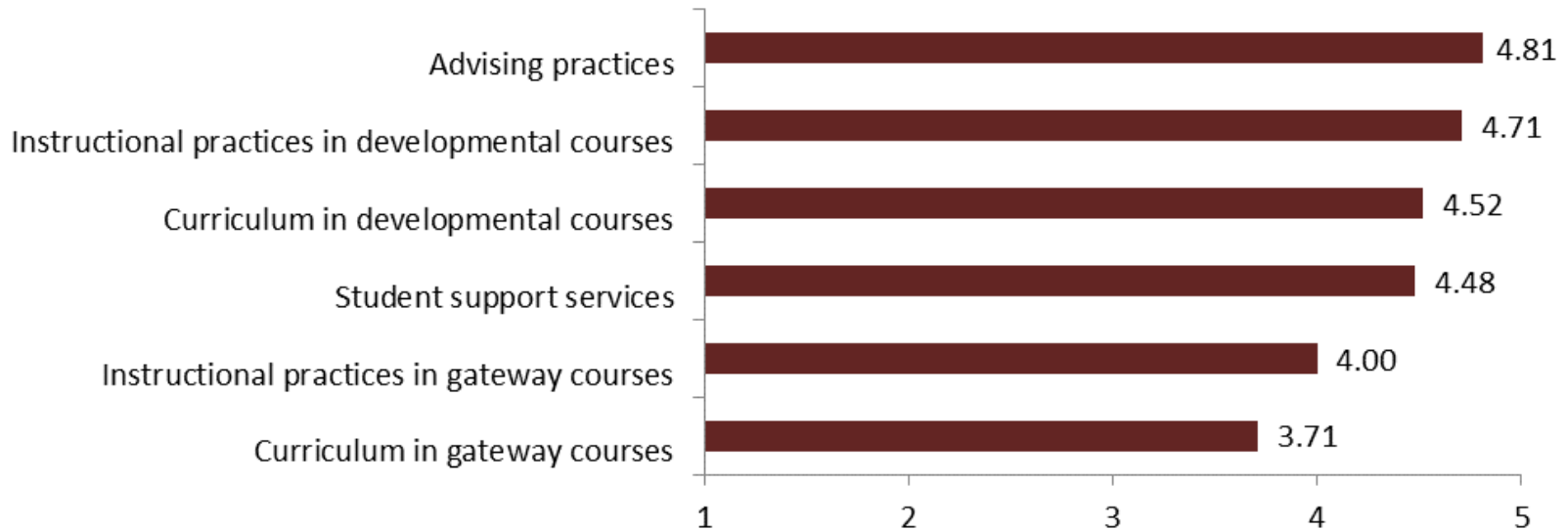- Interviews with Presidents, Policymakers

Admin Surveys

Surveys of administrators at institutions from 2015-2019

Implementation at Florida College System Institutions

Institutions have made extensive changes to student services practices and courses over the past 5 years

Category	Score
Advising practices	4.81
Instructional practices in developmental courses	4.71
Curriculum in developmental courses	4.52
Student support services	4.48
Instructional practices in gateway courses	4.00
Curriculum in gateway courses	3.71

Mean score for perceptions of extent of changes made over the past five years under SB 1720.
Note: Scale from "not at all" (1) to "to a great extent" (5). N=21 institutions.

Implementation Challenges

Instruction
- Lack of student preparation
- Lack of clarity in DE modalities
- Rigor/Success in gateway courses

Advising
- Limited number of advisors
- Varying quality of advising info.

Academic Support
- Increased demand
- Comprehensive supports needed
- No funding for additional services

Implementation Strategies

Instruction	• Added early diagnostic assessments • Embedded instructional support
Advising	• Increased number of advisors • Implemented various advising models • Collaborated with campus partners
Academic Support	• Expanded support services • Developed population-specific supports developed

Embedded Supports

"

We've embedded tutors in certain courses, we have what we call learning assistants in our math courses…professors across the board are requiring lab time and other kinds of support time, supplemental instruction… to provide that support that they're not getting if they're going right into the college level courses and the gateway courses.

Expanded Learning Labs

"

So the writing and reading lab did the same thing. We started with those developmental populations. But we realized very quickly that students who were in the gateway courses also needed help. So [we] quickly absorbed students who were taking 1101 in order to ensure that they, too, were successful because our goal is to serve every student, not just the developmental student[s]..

Students Acknowledge Support

"You can actually walk in and say, 'I need help with this paper,' and there is usually someone on standby that can assist you right then and there."

Implementation Recommendations

- Institutions must balance open-access mission with commitment for next-level preparation.

- Ability to course-correct with little bureaucracy allows institutions to remain nimble and responsive to student needs.

- Innovation and creativity helps sustain student focus and commitment.

- Collaboration and open communication ensure smooth(er) change.

Thank you!

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To read project publications about Developmental Education Reform in Florida visit:
www.centerforpostsecondarysuccess.org

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Thank you!

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Public Act 12-40

- In 2012, a law was passed directing public community colleges and state universities to reconfigure how remedial/ developmental education is delivered.

- The law requires that students' readiness to enter into entry-level courses be based on **"multiple measures."** This means that placement into courses will need to be determined by other factors than just an SAT or Accuplacer score.

- High School reforms- Common Core and 12th grade English and Math

Public Act 12-40

The general levels of courses will include the following:

- 1. **College-level**
- 2. **College-level with embedded support**

This is "just in time" assistance provided to students needing additional assistance with the content while they are taking the college-level course.

- This turns the remedial content into a co-requisite rather than a pre-requisite.
- Additional credit hours may be added to courses to accomplish this

- 3. **Intensive College Readiness Program OR one semester of a remedial course** These developmental courses that will prepare students to be ready to take a college-level course with embedded support within one semester.

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Public Act 12-40

PA 12-40 pilots became institutionalized by Fall 2014.

Transition Levels added by Board or Regents – No cost / Low cost

Transition Levels began to be unique by college (some prior grant funding)

- Partnerships with Adult Ed
- In-house traditional courses
- In-house bootcamps

The Big Cohort

- First-time, Associate's-seeking students beginning in the semesters Fall 2011 through Spring 2017 (for course-level outcomes) or Spring 2015 (for career outcomes)

- Transitional, Intensive and Embedded Math and/or English Students

- Tracked progress for three years/twelve terms

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College Level Math & English
Attempt, Completion & Pass Rates

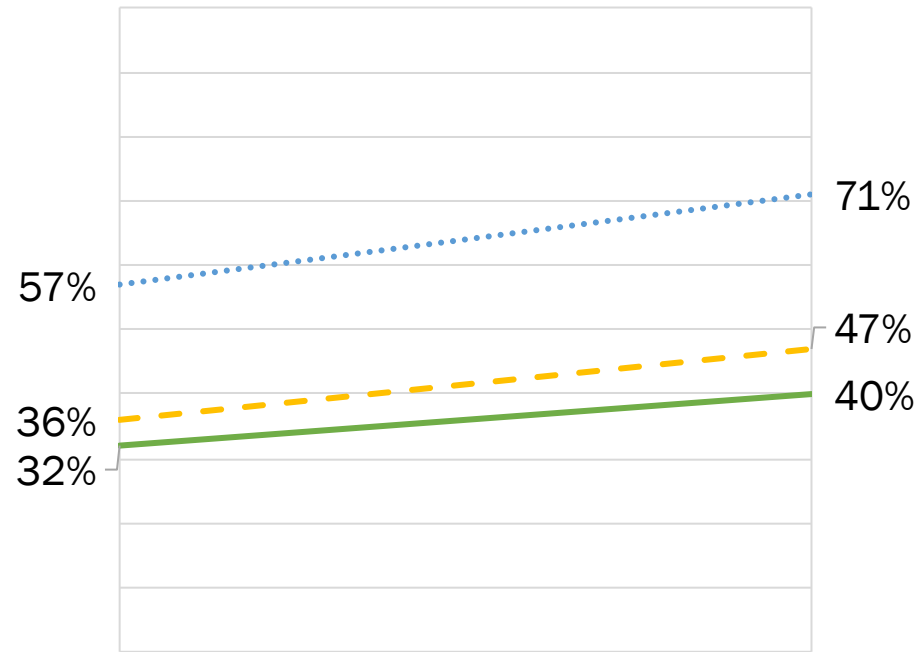**College Level Math**
Attempt, Completion and Pass Rates

42% ... 59%
22% ... 31%
18% ... 24%
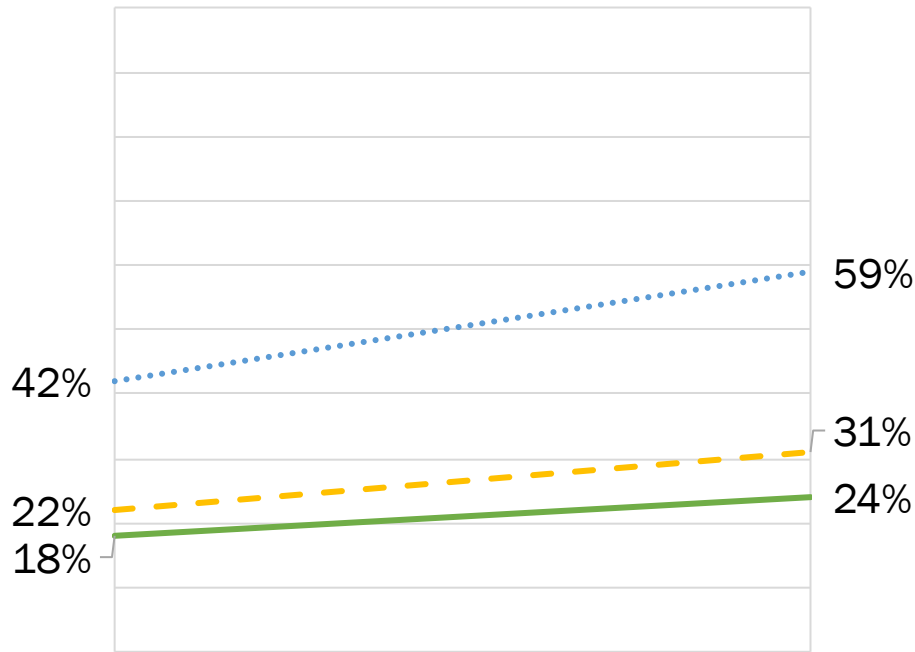
Traditional → PA 12-40

······ % Attempt　　─ ─ % Complete　　── % Pass

College Level English
Attempt, Completion and Pass Rates

57% ... 71%
36% ... 47%
32% ... 40%

Traditional → PA 12-40

······ % Attempt　　─ ─ % Complete　　── % Pass

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College Level Math & English
Time to Attempt, Complete & Pass

**College Level Math
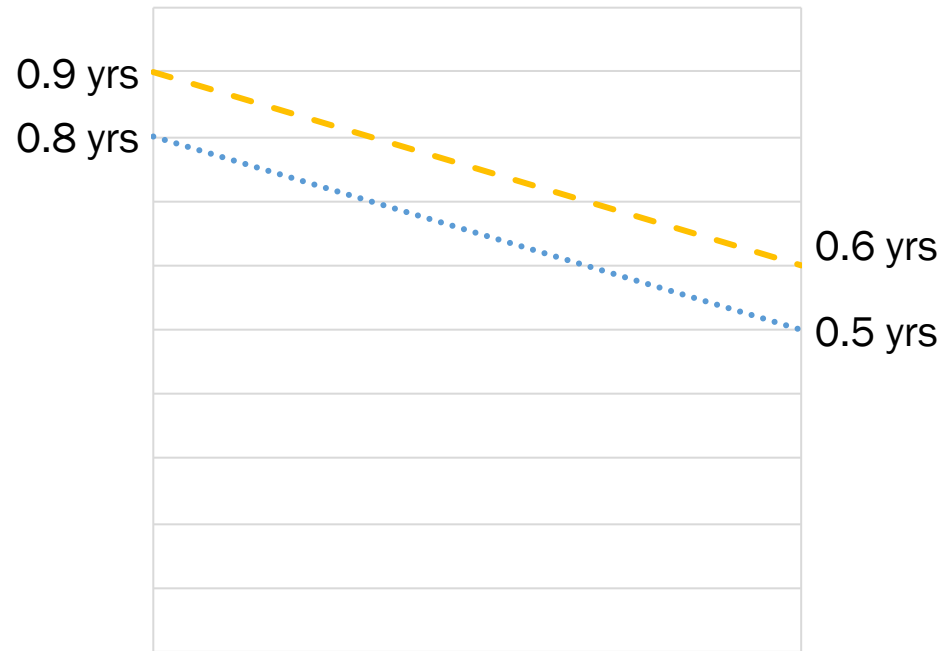Time to Attempt, Complete & Pass**

1.0 yrs
0.9 yrs
0.8 yrs
0.7 yrs
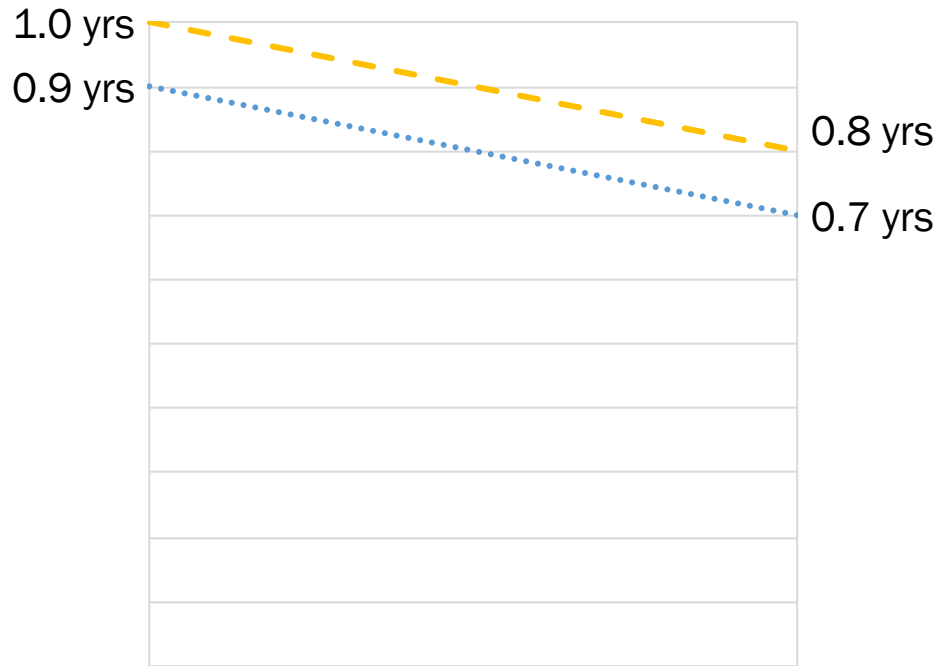
Traditional   PA 12-40

········ Time to Attempt   ─ ─ Time to Complete & Pass

**College Level English
Time to Attempt, Complete & Pass**

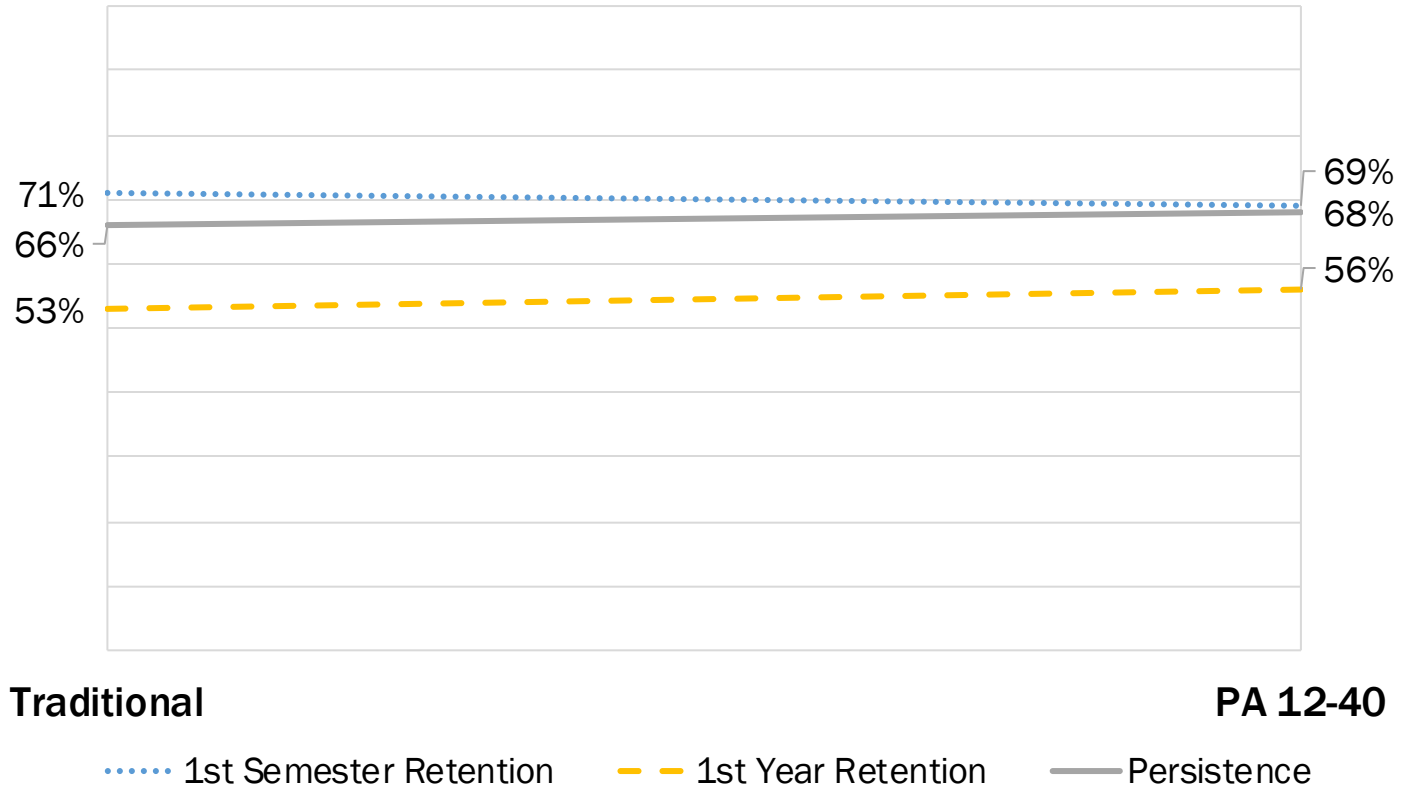0.9 yrs
0.8 yrs
0.6 yrs
0.5 yrs

Traditional   PA 12-40

········ Time to Attempt   ─ ─ Time to Complete & Pass

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Career Statistics
Retention and Persistence

71%

66%

53%

69%

68%

56%

Traditional
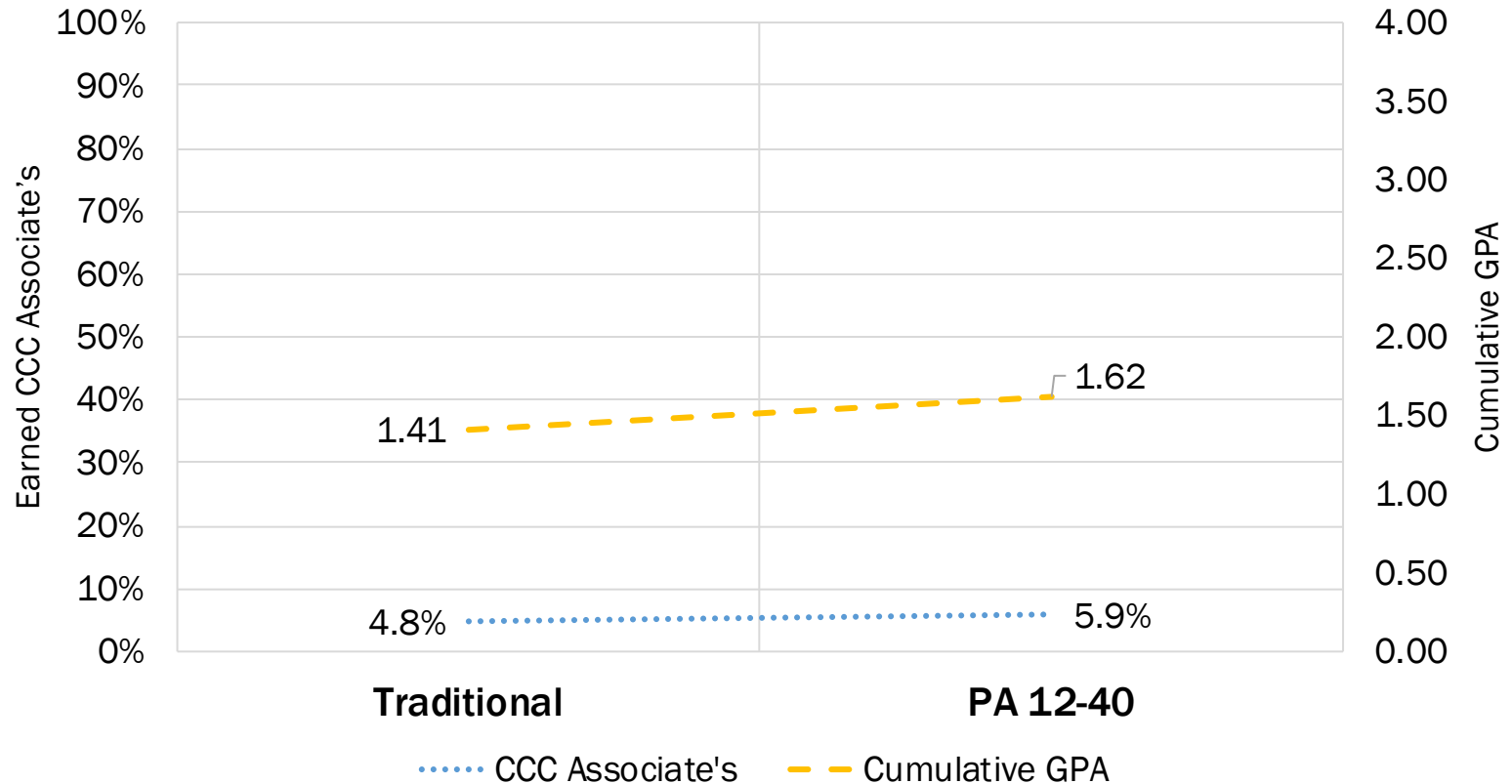
PA 12-40

········ 1st Semester Retention   — — 1st Year Retention   —— Persistence

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Career Statistics
Grade Point Average and Graduation Rate

The Narrow Cohort

- First-time, Associate's-seeking students beginning in the semesters Fall 2011 and Fall 2014

- Developmental Math or English Students
  - Accuplacer Algebra score between 28 and 49
  - Combined Accuplacer Reading and Sentence Skills score between 111 and 159

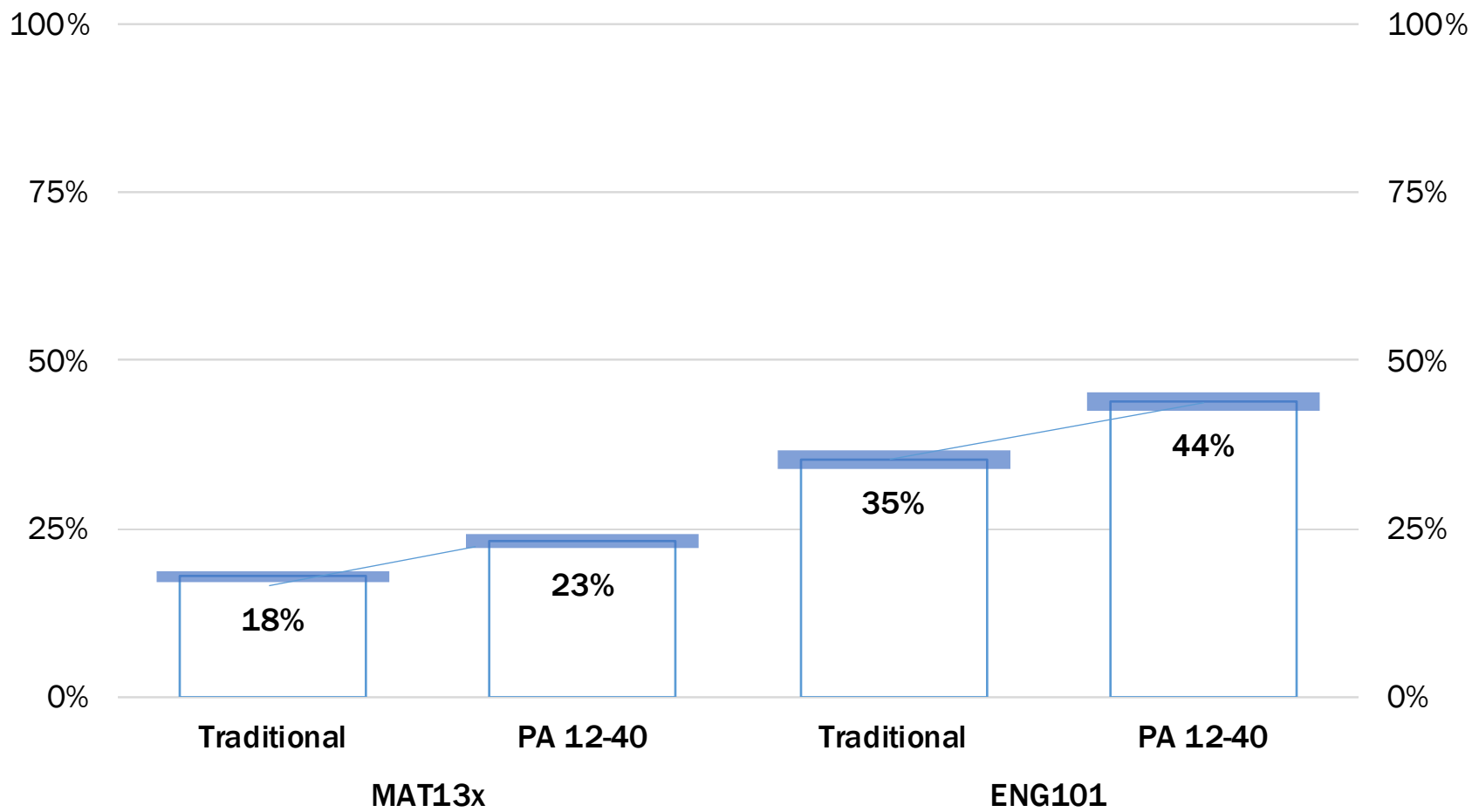- Tracked progress for three years/twelve terms

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Percent of Cohort Enrolling in College-Level Courses

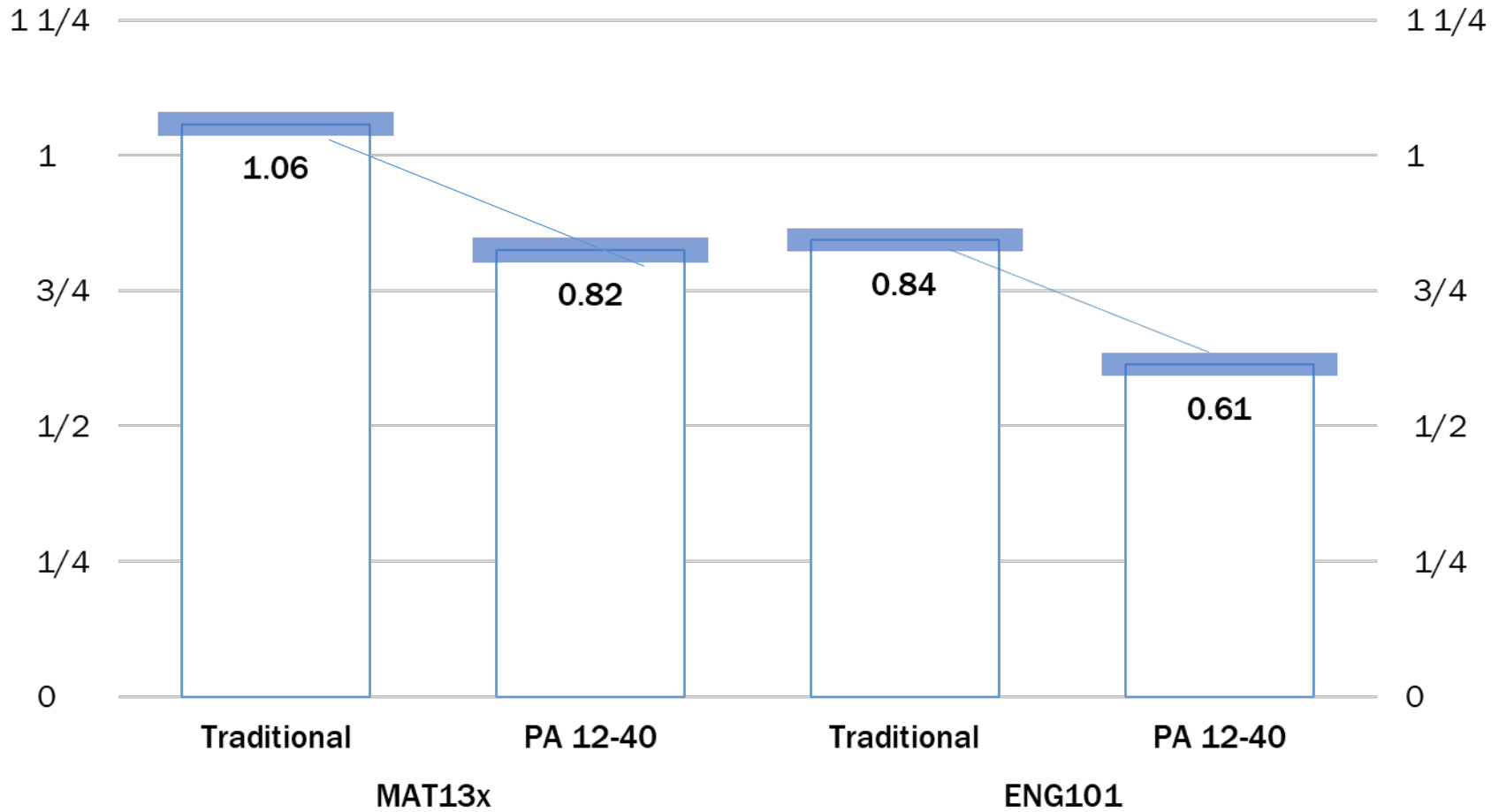|			
46%	53%	61%	66%
Traditional	PA 12-40	Traditional	PA 12-40
MAT13x		ENG101	

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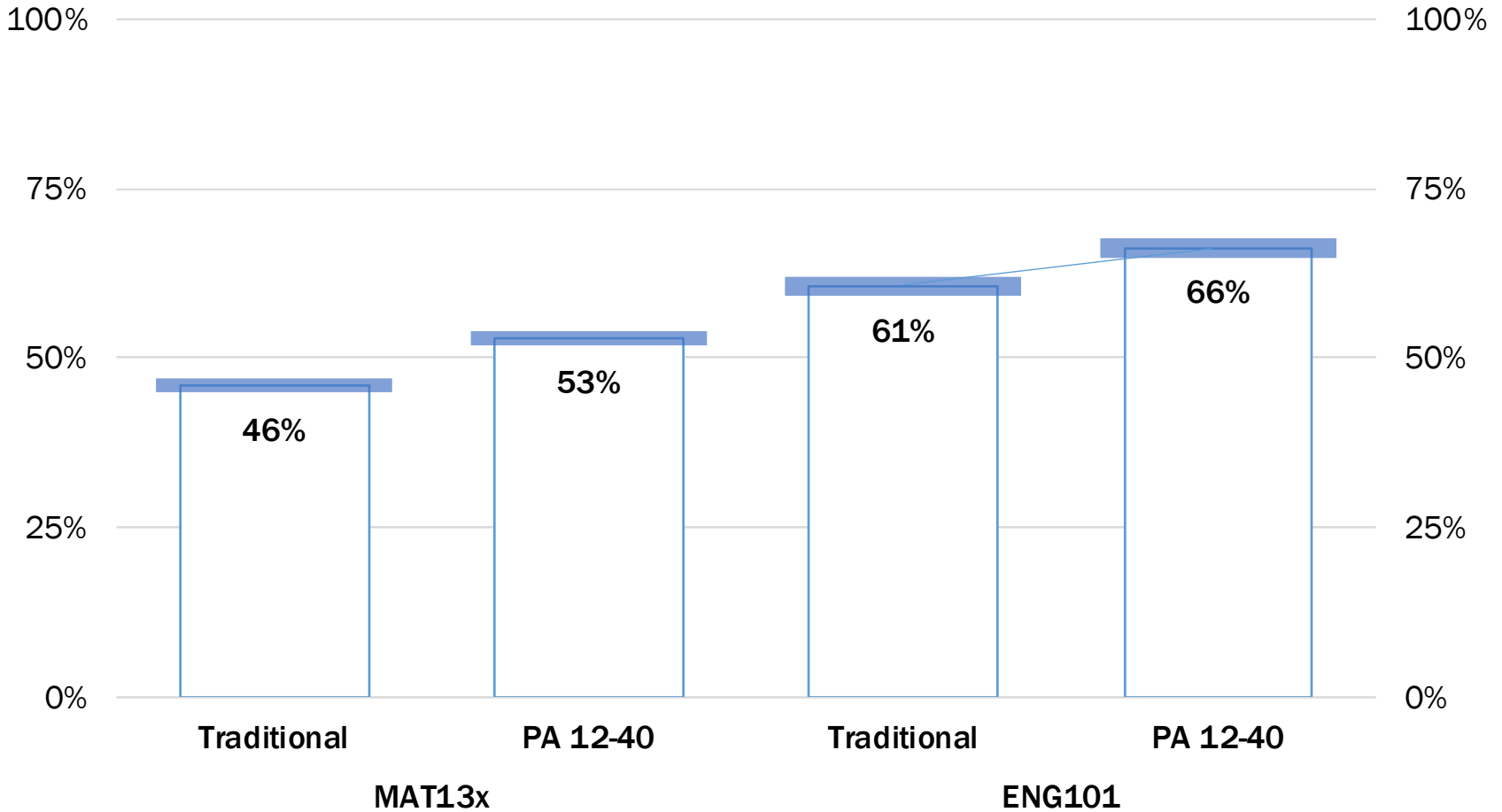
Percent of Cohort *Completing* College-Level Courses on Time
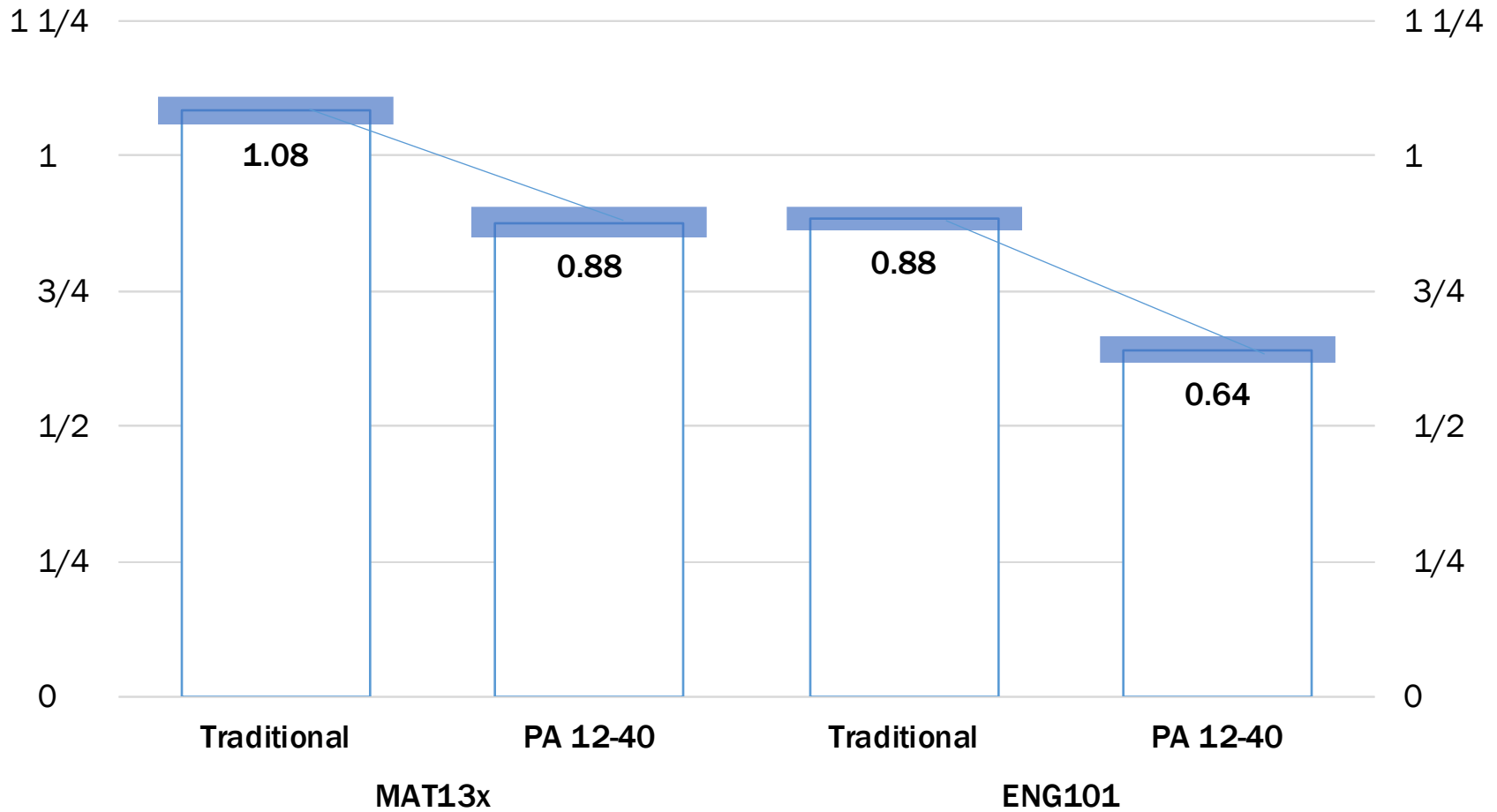

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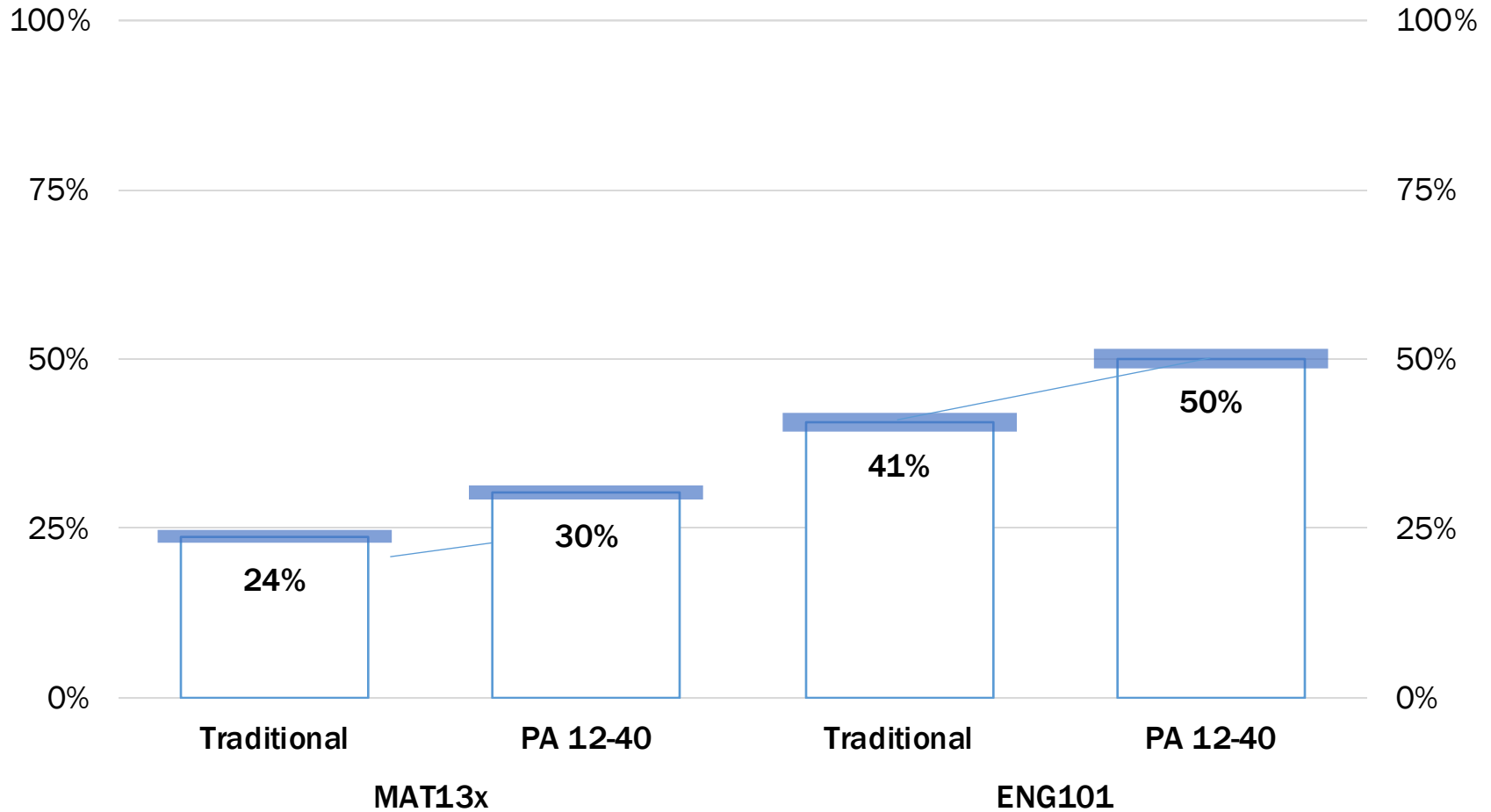
Percent of Cohort *Passing* College-Level Courses on Time

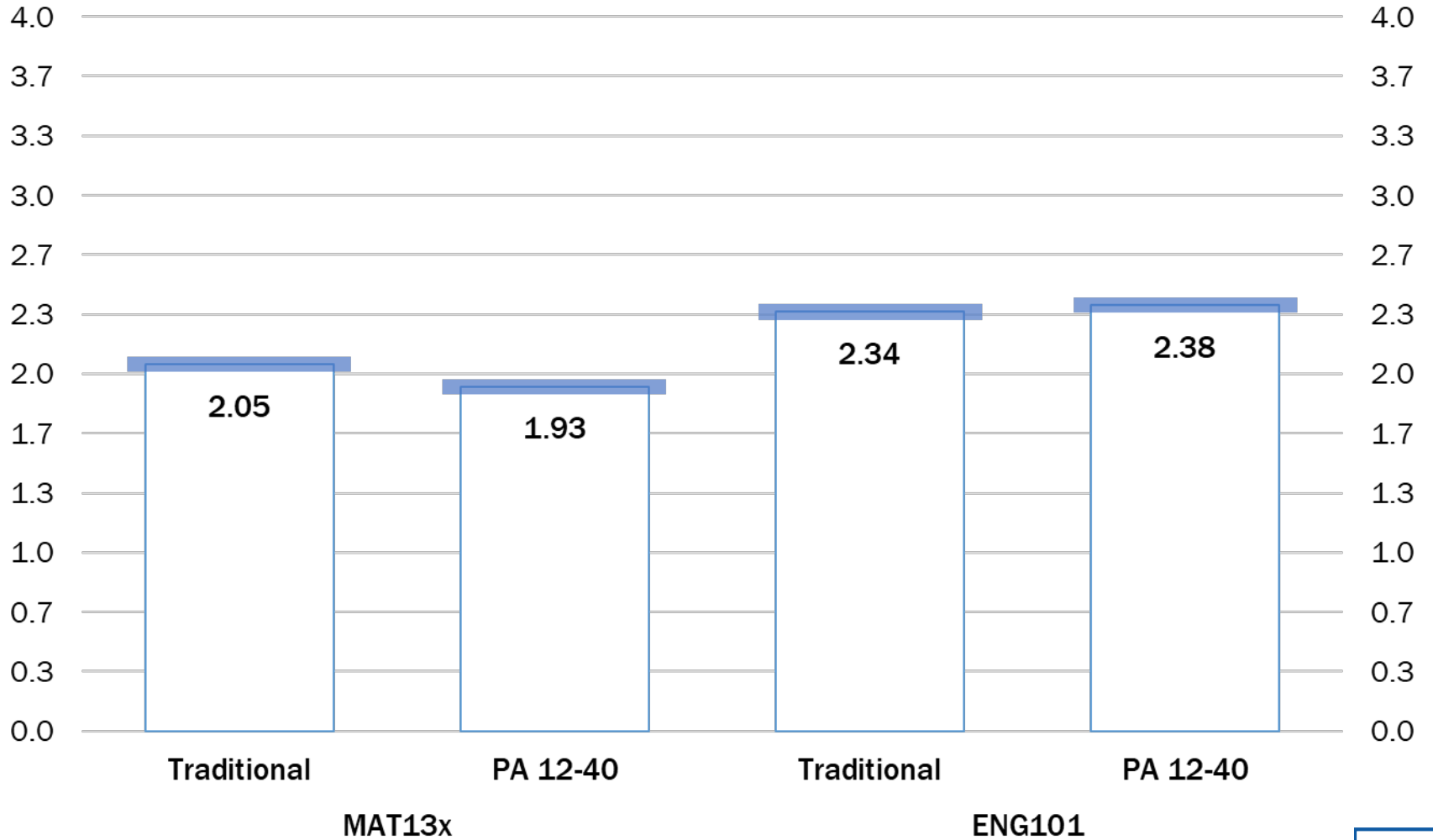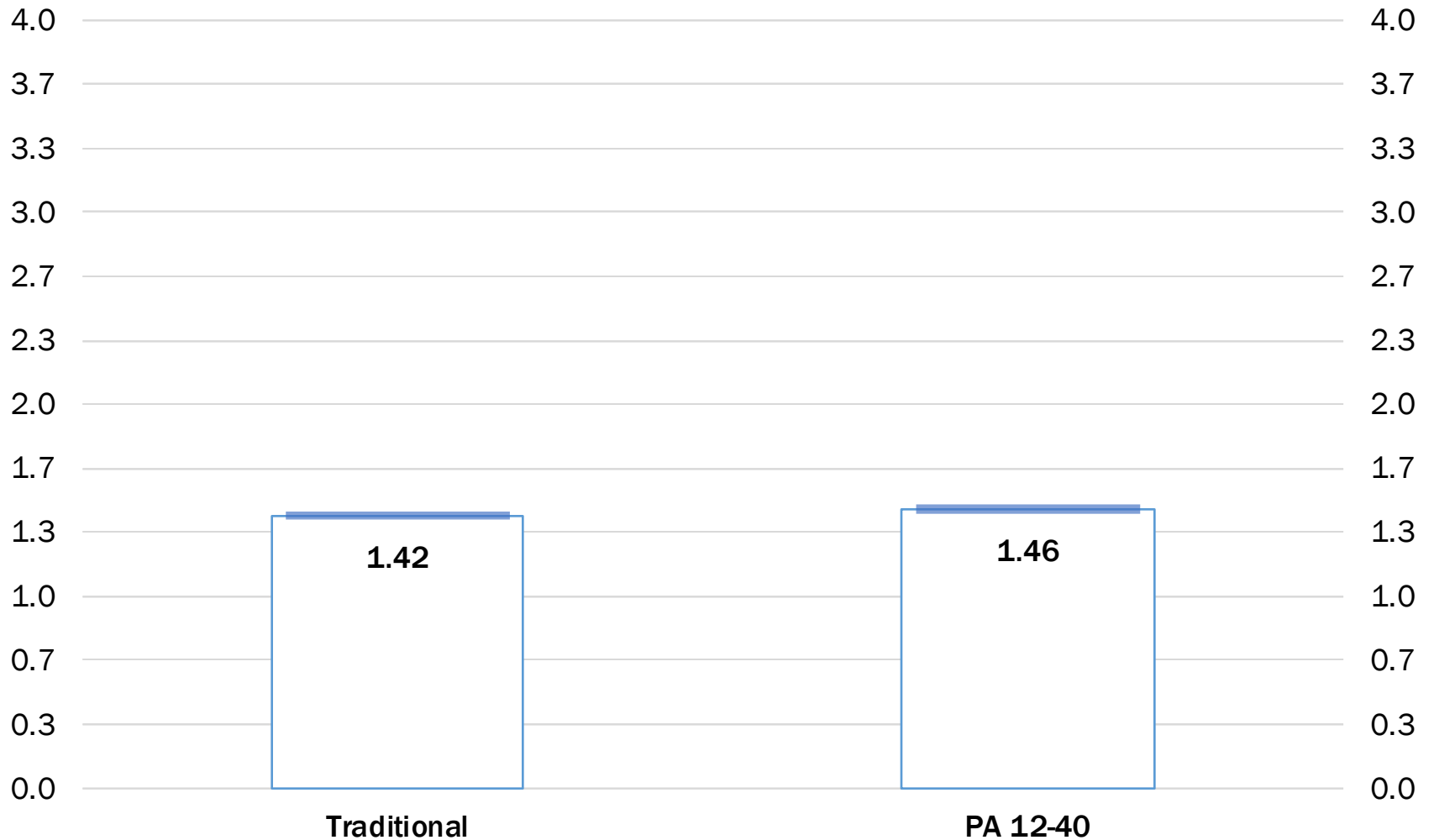# Mean Years to College-Level Course *Completion*

Mean Years to College-Level Course *Passage*

	MAT13x		ENG101	
	Traditional	PA 12-40	Traditional	PA 12-40
	1.08	0.88	0.88	0.64

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Mean Best Score in College-Level Course

2.05	1.93	2.34	2.38
Traditional	PA 12-40	Traditional	PA 12-40
MAT13x		ENG101	

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Cohort Three Year Cumulative Grade Point Average

	Traditional	PA 12-40
GPA	1.42	1.46

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Cohort One-Year Retention Rate

	Traditional	PA 12-40
	56.4%	55.9%

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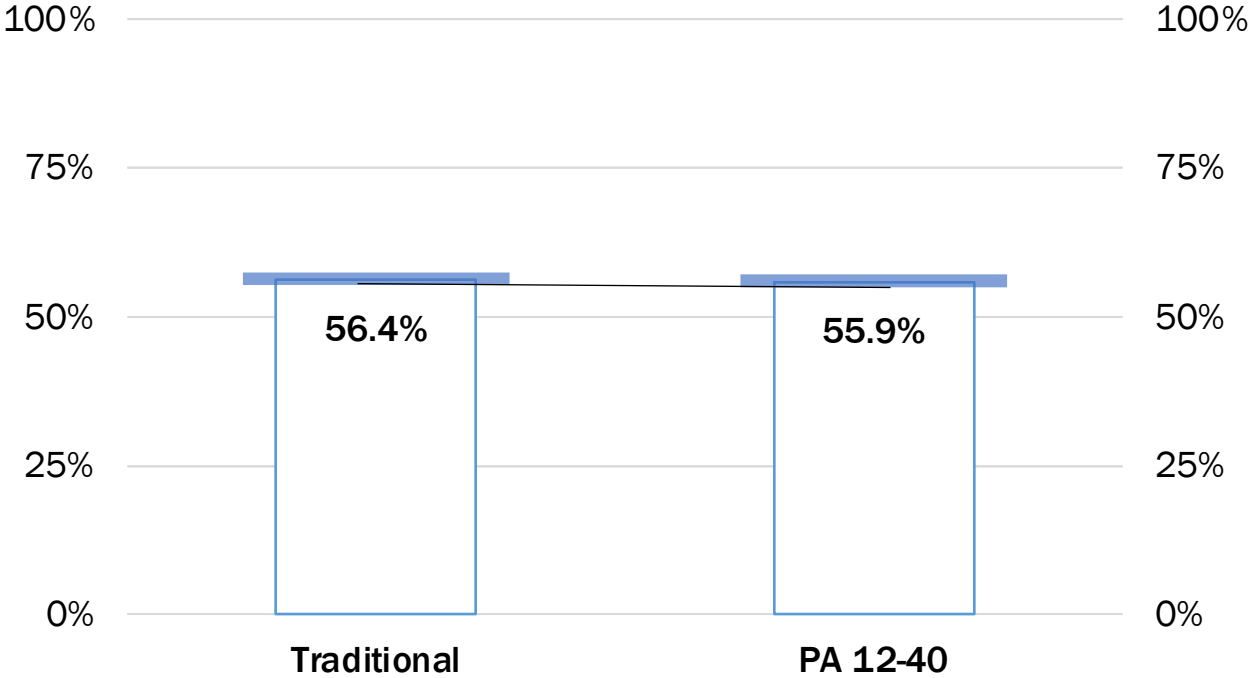
Cohort In-System 150% Graduation Rate
(Includes Certificates)

Traditional: 8.5%

PA 12-40: 8.9%

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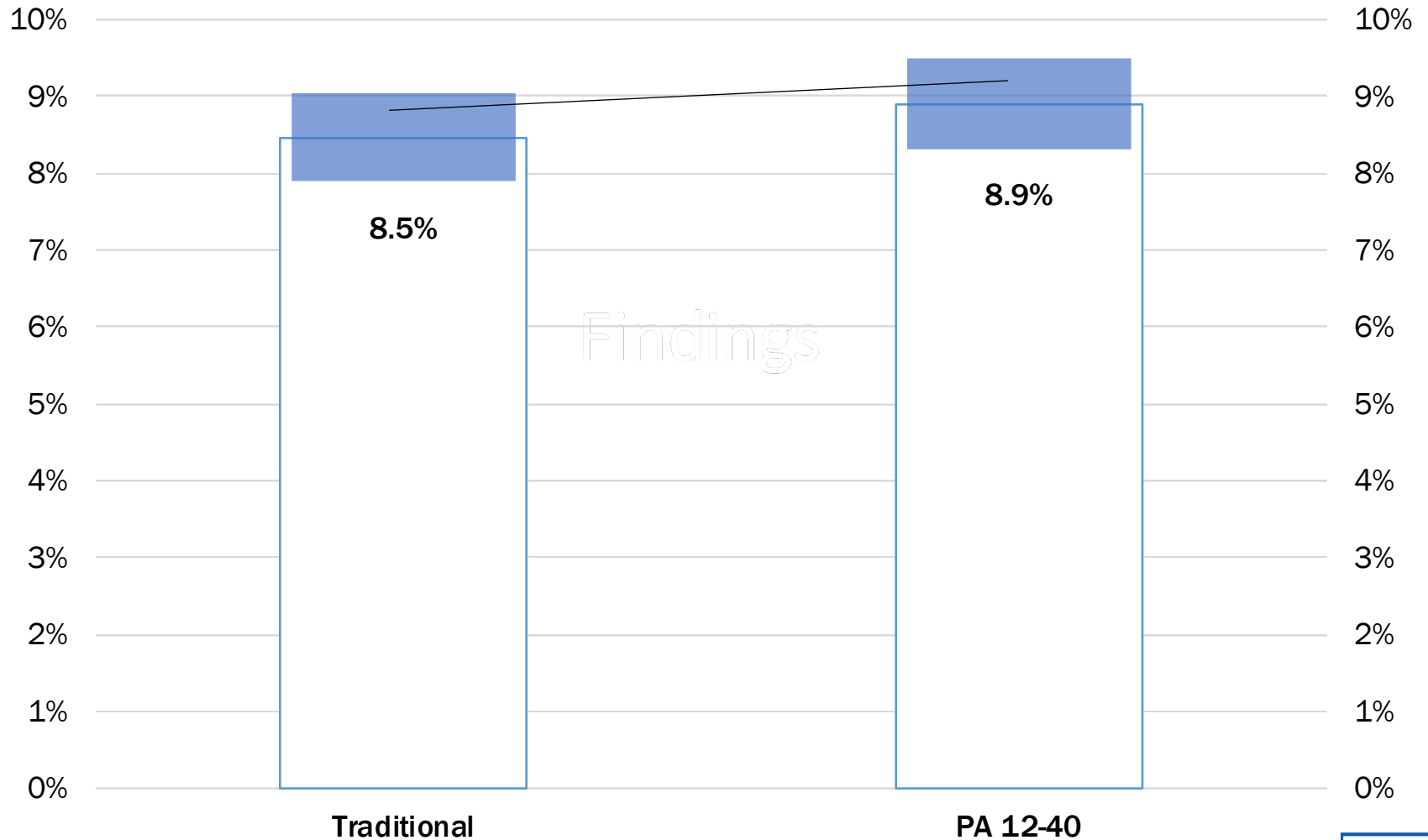
Findings

- Attempt and completion rates are up under PA 12-40 by a statistically significant degree even when controlling for test scores and demographics.

- Time to completion is down under PA 12-40 by a statistically significant degree even when controlling for test scores and demographics.

- PA 12-40 has had no conclusive effect on grades, retention or graduation rates.

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Unexpected Consequences

- Multiple models were developed and piloted across the twelve colleges leading to varying levels of effectiveness.

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Lessons Learned

- Accelerating the developmental education, with intensive one semester offerings has enabled students to reach college level courses faster.

- The embedded/co-requisite models work very well, and allow students to access gateway courses in their first year. However they are more expensive to offer – not every student who may benefit may be in an embedded/co-requisite model.

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Lessons Learned Continued

- At the lowest level, the Transitional level, we have a mix of models: "boot camps", traditional semester instruction, and partnerships with Adult Ed providers. Because these are offered externally or through the credit-free sides of the colleges, data collection has been difficult. It has been difficult to assess the efficacy of these models.

- Multiple Measures are placing more students at higher levels.

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Looking Forward

- Test effects across demographics

- Test against Guided Pathways KPIs

- Take a closer look at grading effects

- Test downstream effects on next-level courses

- Break down by embedded model

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Acknowledgement

A note of thanks to Mike Stefanowicz and Dr. J.D. Mathewson for data and analysis of PA 12-40.

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Thank you!

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