

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

What We're Learning from Our Research on Guided Pathways

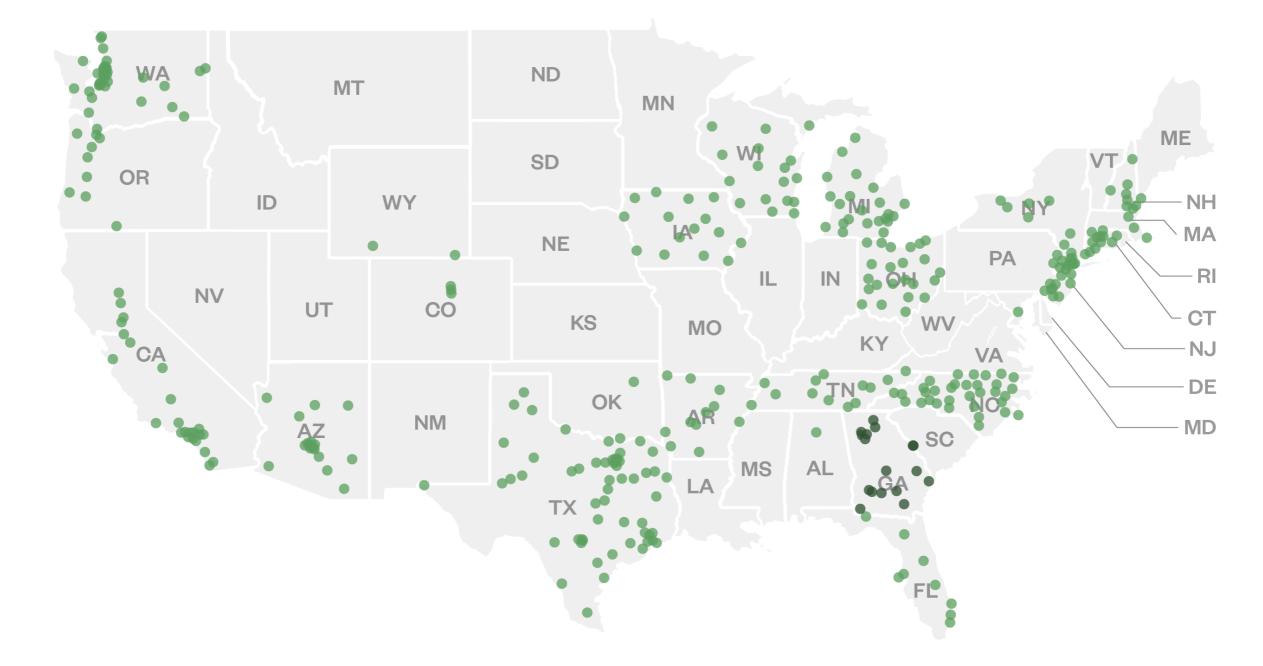
Davis Jenkins Community College Research Center

Texas Guided Pathways Institute, Nov. 7, 2019, San Antonio

How many colleges are implementing guided pathways reforms and why?



A National Movement: Colleges Implementing Guided Pathways

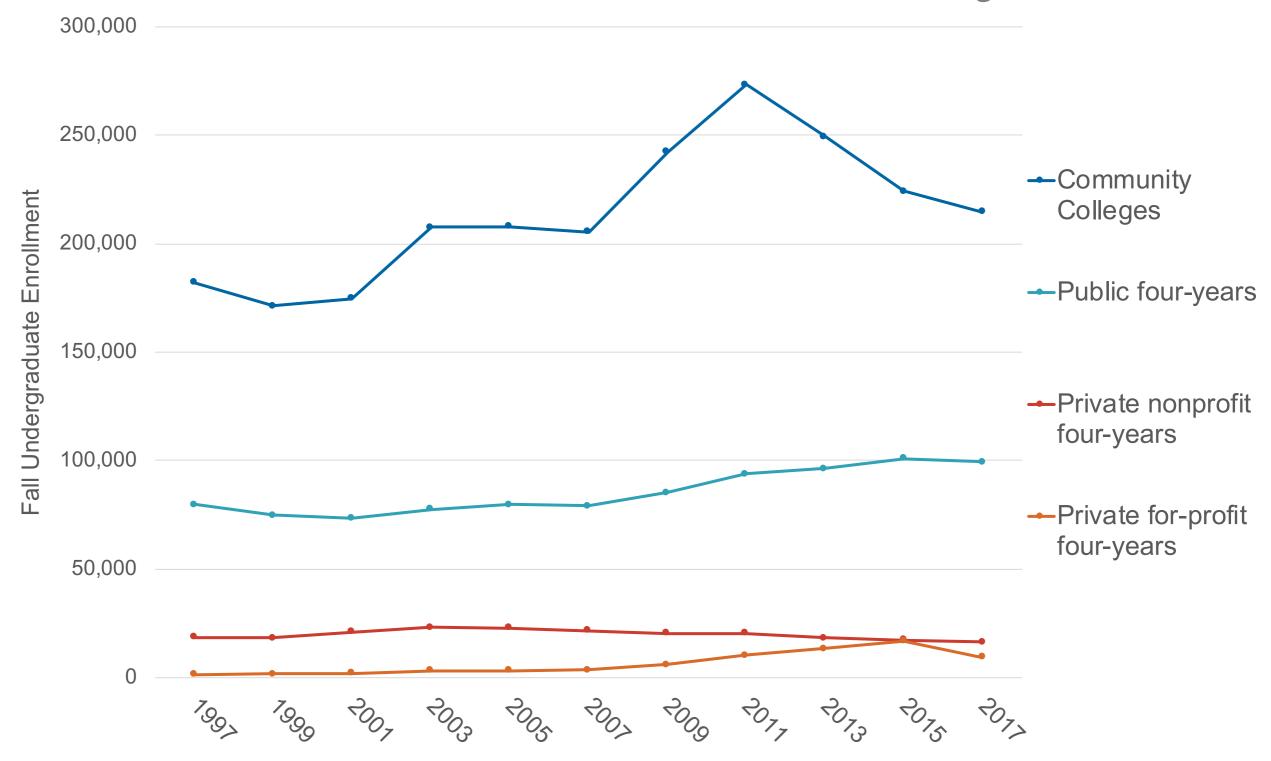


Community colleges implementing guided pathways as part of formal state or national initiatives

Four-year colleges implementing pathways practices as part of state initiatives

TX Fall Enrollment by Sector, 1997-2017

25 and older undergraduates

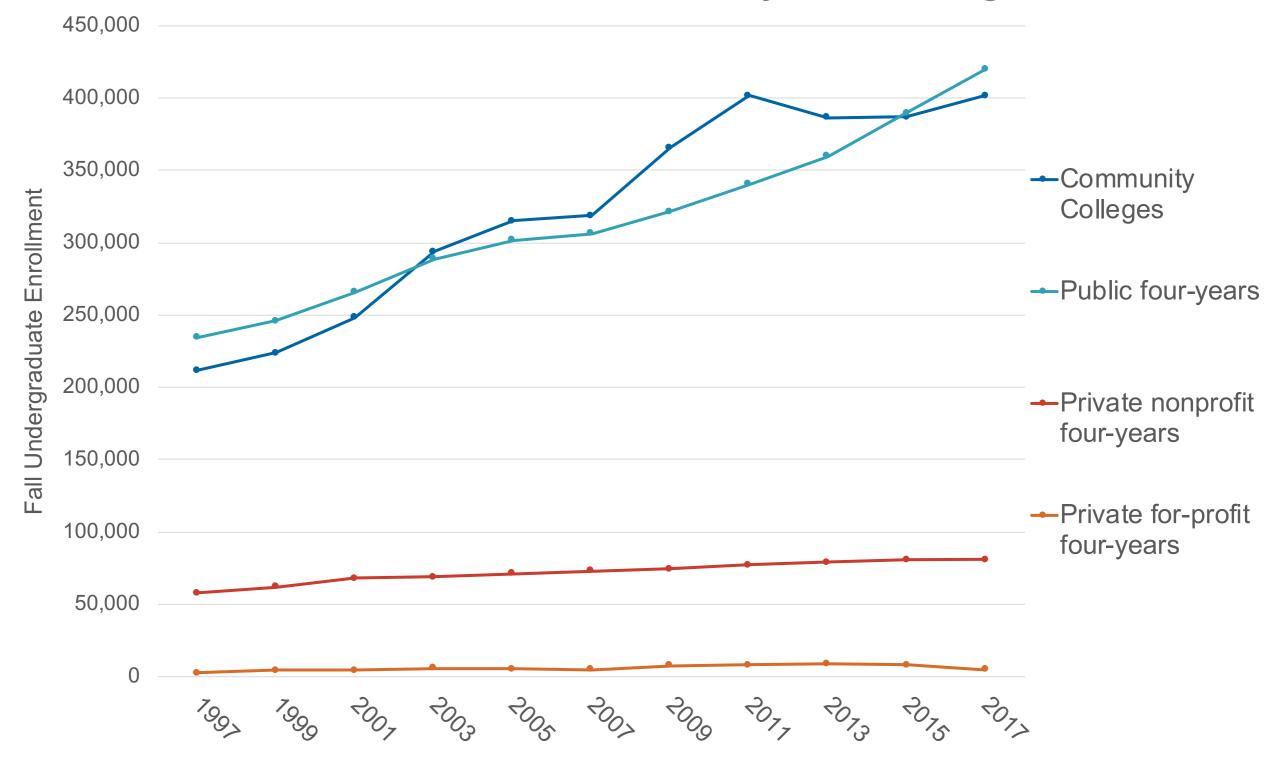


Source: CCRC analysis of IPEDS fall unduplicated headcount enrollment data.

CCRC

TX Fall Enrollment by Sector, 1997-2017

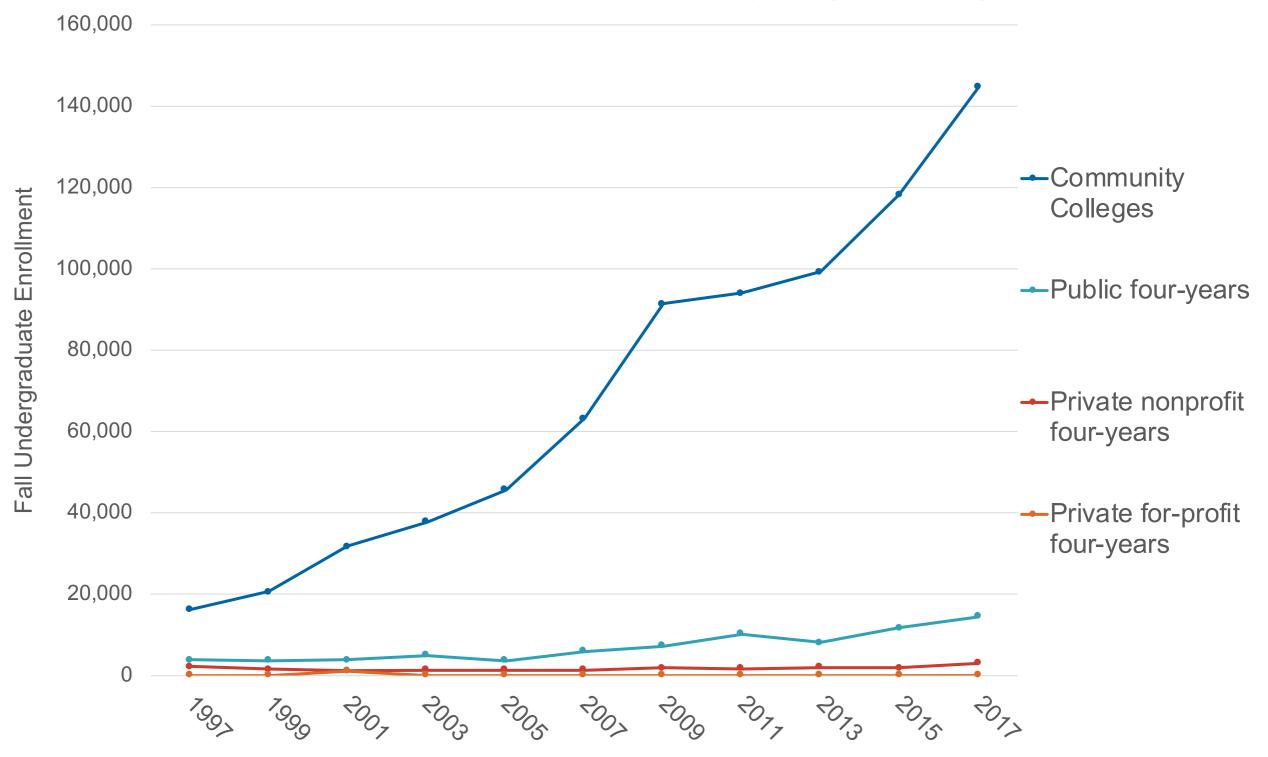
18-24 year old undergraduates



Source: CCRC analysis of IPEDS fall unduplicated headcount enrollment data.

TX Fall Enrollment by Sector, 1997-2017

17 and younger undergraduates

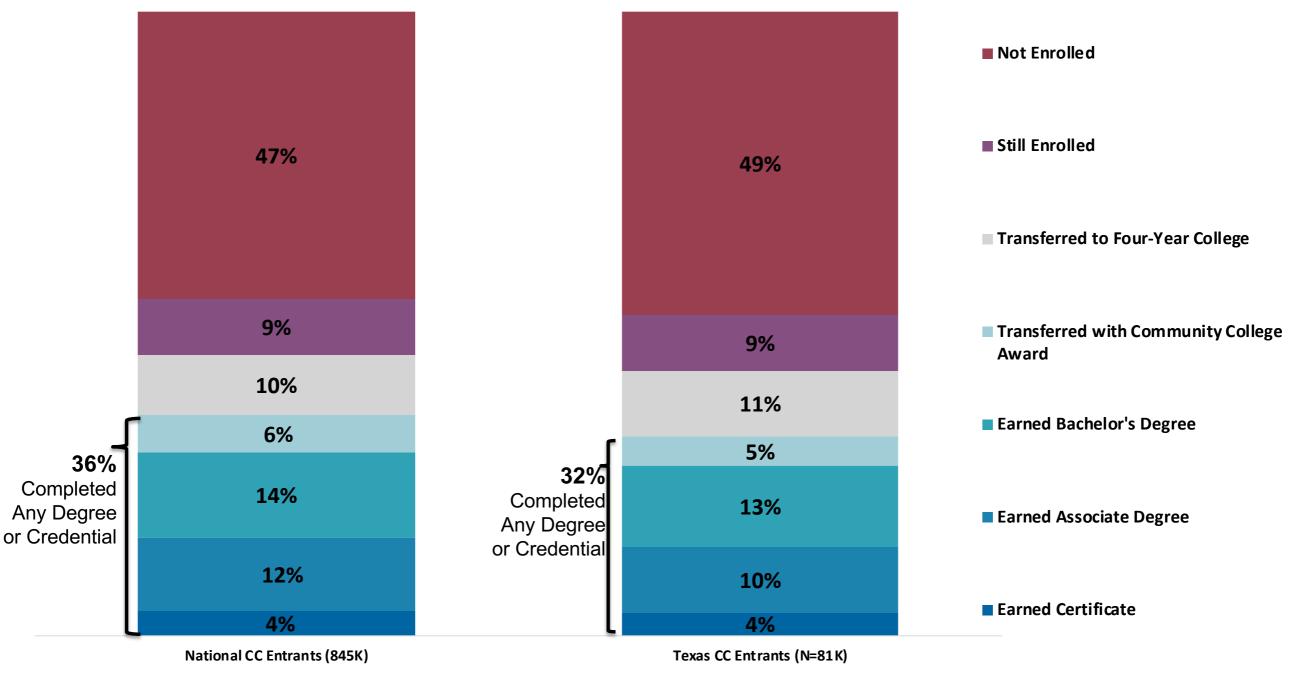


Source: CCRC analysis of IPEDS fall unduplicated headcount enrollment data.

A Very Leaky TX Education Pipeline

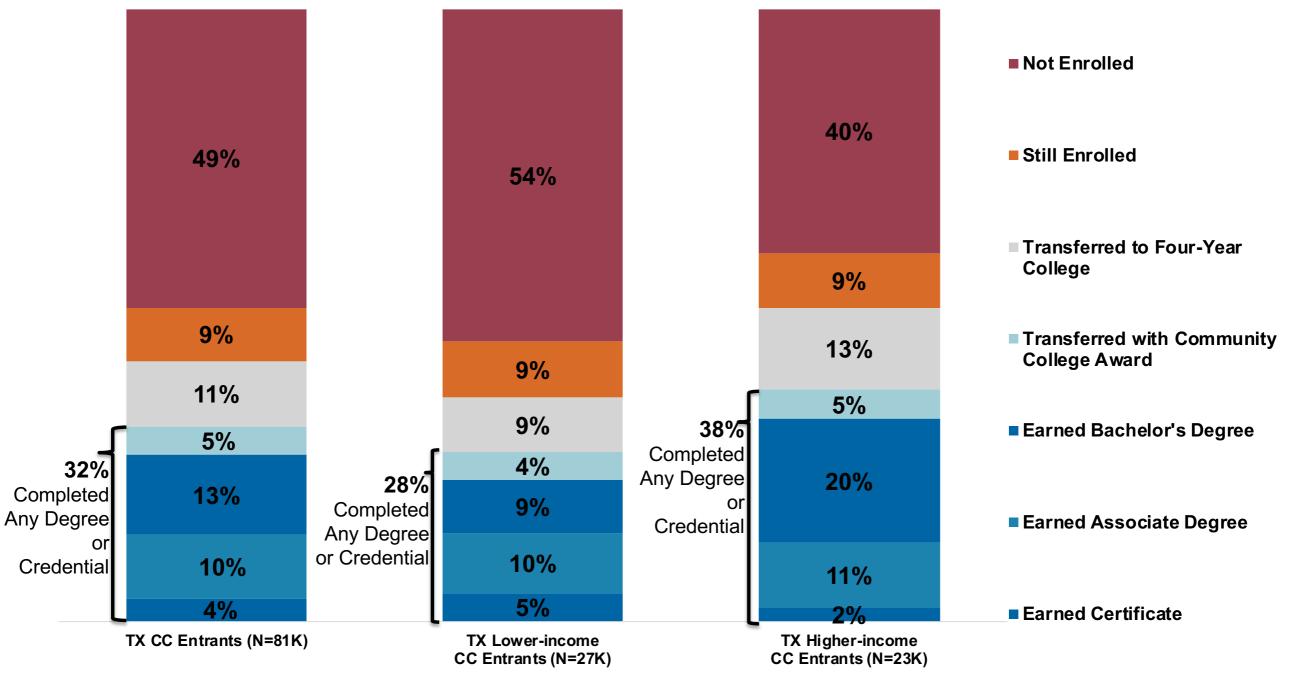
- Many students (10-40%) who apply don't show up on day 1
- Almost 40% of first-time students are gone from higher ed by start of year 2
- Too many students meander, earning credits that don't apply to a degree
- Many students intend to transfer but do not
- Most students transfer without earning cc credential; many students who transfer can't apply credits toward major
- Only about 1/3 complete any credential; achievement gaps by race, income and age are stark
- Over 20% still enrolled or transferred with no credential after 6 years
- Few non-credit students enroll in credit programs

Highest Outcomes in Six Years Among FTEIC Degree-Seeking Community College Students (Excluding Dual Enrollment Students)



Source: CCRC analysis of NSC data on the fall 2010 FTEIC, degree-seeking community college cohort.

Texas: Highest Outcomes in Six Years by Income Among FTEIC Degree-Seeking Community College Students (Excluding Dual Enrollment Students)



Source: CCRC analysis of NSC data on the fall 2010 FTEIC, degree-seeking community college cohort.

CC Practices that Drive Students Away

- Education paths to degrees, careers and transfer are unclear
- Intake process discourages many students from enrolling
- New students not helped to explore options/interests, develop a plan
- Pre-requisite dev ed sorts out students; fails to prepare for success in college-level courses
- Students' progress not monitored; advising grossly inadequate
- Colleges fail to schedule courses students need, when they need them
- Too many students experience abstract, rote instruction in subjects they see as irrelevant; too few experience active learning on issues of interest
- Too many poorly prepared students allowed to take fully on-line courses
- Instructors not systematically helped to adopt high-impact practices
- Students not helped to gain program-relevant experience

New CC Business Model

From: Cheap, accessible college *courses* for gen ed transfer or technical training

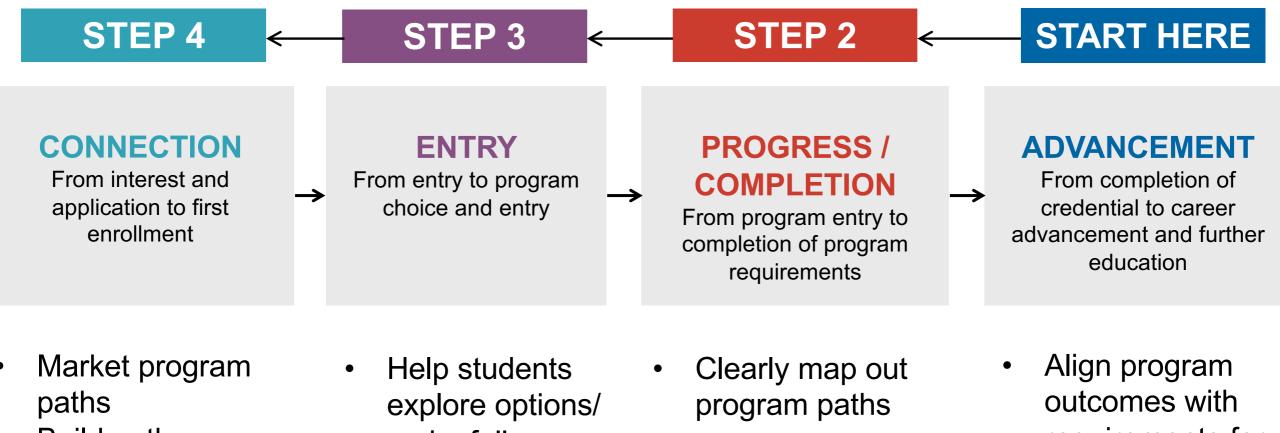


To: Affordable, well-taught <u>programs</u> leading to **degrees + skills + experience + contacts** needed for livable wage, careerpath employment



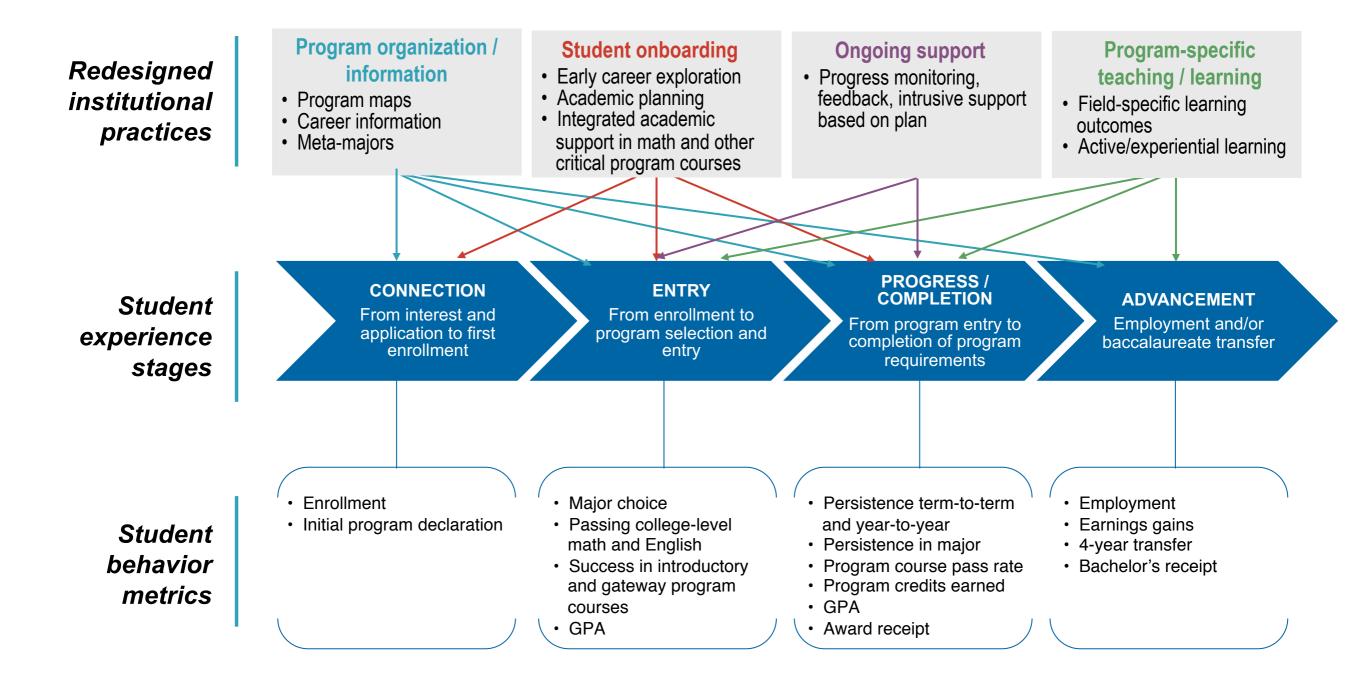
How is our understanding of the guided pathways model evolving?

Redesign, Starting with the End in Mind



- **Build pathways** into high schools and adult ed programs
- make fullprogram plan
- Integrate academic support into critical program gateway courses
- Redesign advising/scheduling around maps/plans
- Monitor student progress, provide feedback and support as needed
- requirements for success in career-path employment and further education

Guided Pathways Theory of Change



Guided Pathways Essential Practices

- Organize programs by field to facilitate exploration and engage students in an academic and career community
- Map <u>all</u> programs to good jobs and/or transfer in a major
- Help all new students explore options and interests
- Ensure all new students have a "light the fire" learning experience
- Replace prerequisite remediation with teaching students to be effective learners in college-level program gateway courses
- Help all new students develop a full-program plan in term 1
- Schedule courses and monitor progress based on plans
- Ensure every student gains program-relevant experience
- Help high school students to explore interests and options, develop a plan, take plan-related courses

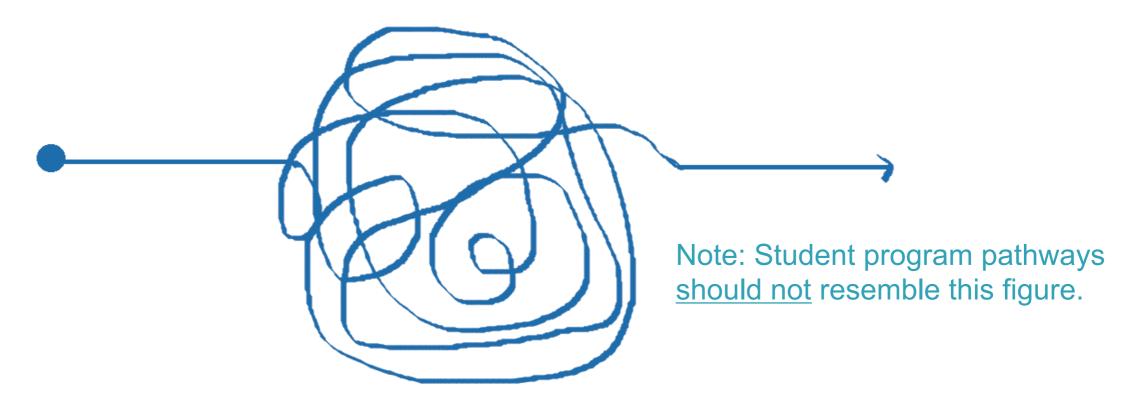


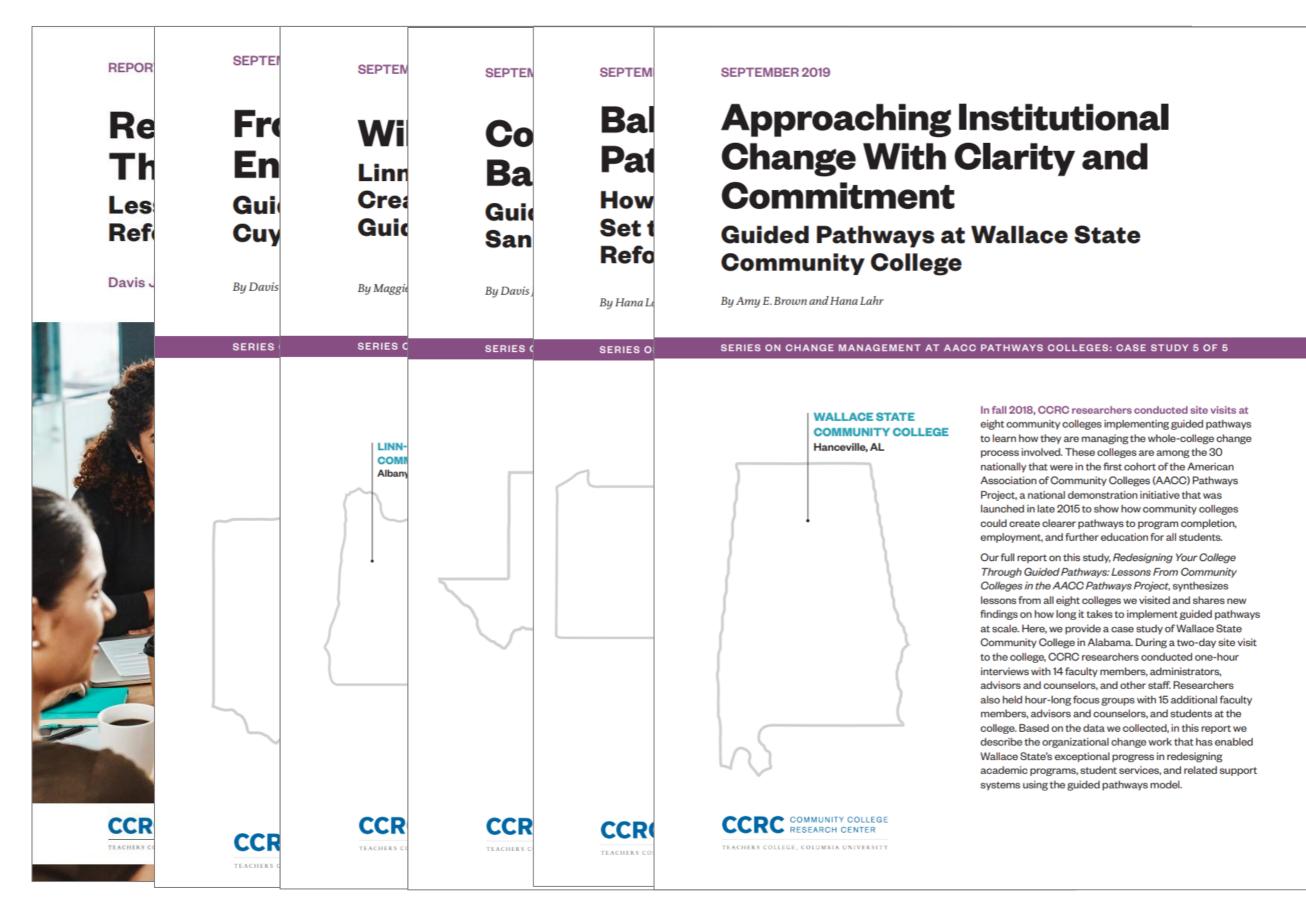
How are colleges managing whole-college guided pathways reforms?

As our research focus has evolved,

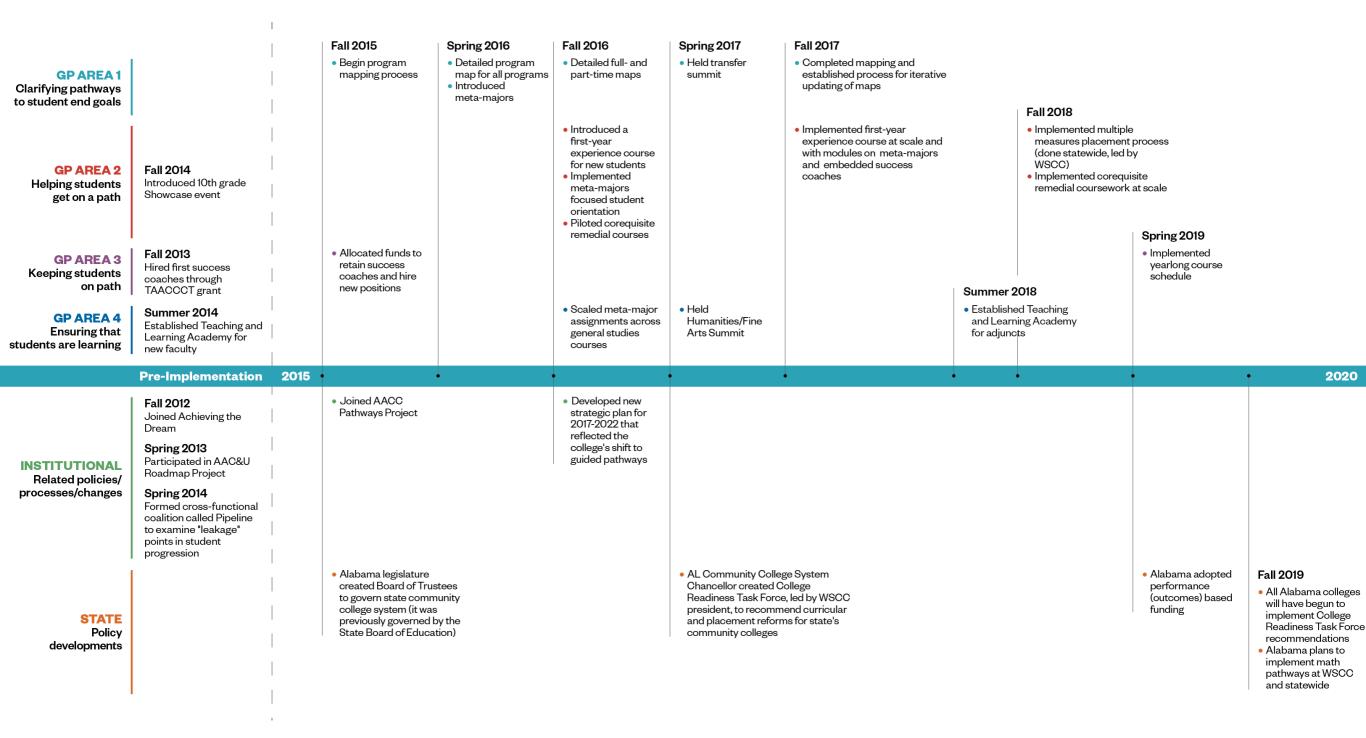


our understanding of guided pathways implementation has become more complex.





Timeline of Guided Pathways Implementation Activities at Wallace State Community College



Timeline and Strategies for Leading Guided Pathways Redesigns

Pathways implementation

Laying the Groundwork for Whole-College Redesign 2+ Years Prior to Pathways

- Build awareness that college creates barriers to student success and that only large-scale, cross-college reforms will remove them
- Build a culture of data-informed practice
- Reorganize decision-making roles and structures to facilitate broad engagement in planning and implementing improvements
- Foster individual accountability for contributing to the college's goals for student success
- Encourage creativity and experimentation in developing strategies to improve student success
- Provide time and support for collaborative planning and professional development

Introducing Guided Pathways to the College Community Starting in Year 1

- Make the case for guided pathways by showing how a lack of clear program paths and supports hurts students
- Communicate a guiding vision for the reforms
- Cultivate a shared understanding of guided pathways through college-wide in-person meetings and virtual communication
- Allow time for reflection and deliberation
- Present guided pathways as a framework for aligning and enhancing existing student success efforts

Supporting Collaborative Planning and Implementation Starting in Years 2 – 3

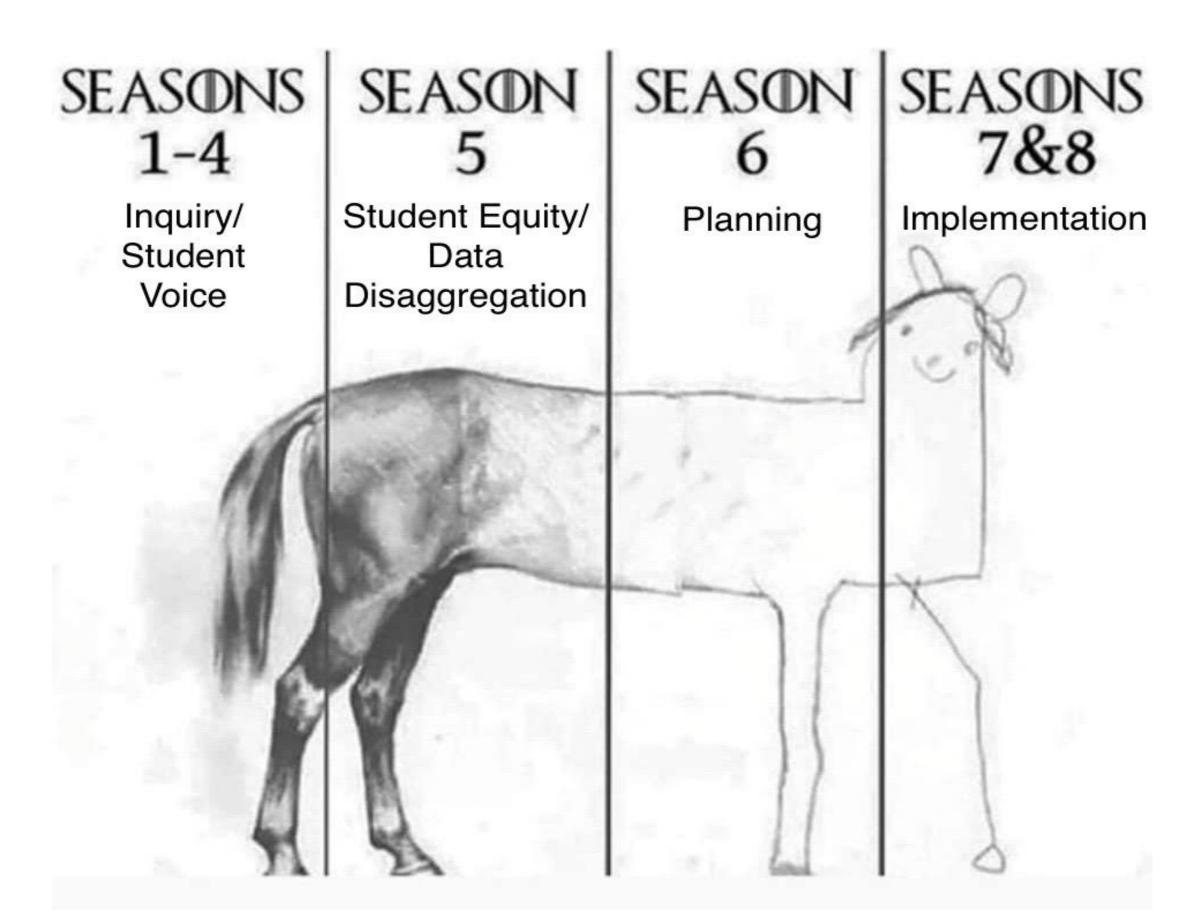
- Support cross-functional leadership and collaboration to plan and implement pathways
- Engage faculty and staff from across divisions in mapping program pathways to good jobs and transfer in a major
- Ask staff and faculty to map the entire student experience—both the status quo and what it should be
- Identify and support change leaders throughout the college

Sustaining and Institutionalizing Student Success Reforms Starting in Years 4+

- Take time to celebrate wins, reflect on progress, and plan next steps
- Reallocate and align resources to help scale and sustain effective practices
- Ensure that employee hiring, onboarding, and promotion practices support a culture focused on improving success for all students

Lessons on Leading College Transformation

- Redesigning colleges on guided pathways model is a big technical challenge, but even bigger cultural one
- Effective leaders lay the groundwork: a) engage stakeholders across college in examining barriers the college creates to student success, b) develop vision and goals for improving experience for all students; c) empower teams to plan and design innovations at scale
- Critical importance to implementation of well-managed cross-functional teams
- Critical importance to redesign of broad engagement in program and student experience mapping (status quo and desired)
- Challenge: creating time and resources for reflection, design, planning, professional development and evaluation
- Challenge: sustaining and institutionalizing innovation in face of turnover, uncertain policy/fiscal environment; exhaustion



Guided Pathways Guiding Questions

- Does every program lead to: a) a livable-wage job (with clear paths to further education), or b) transfer with junior standing in the student's field of interest?
- How do we help new (and dual enrollment) students explore interests, choose a program that is a good fit, and develop a full-program plan?
- How do we ensure that every entering student has a "light the fire" learning experience in a field of interest in term 1?
- How can we monitor students' progress to make sure they stay on plan?
- How can we schedule classes so that students can take the courses they need to advance on their plans when they need them?
- How do we ensure that all students gain program-relevant experience?
- How can we enable more underrepresented students to enroll and complete programs leading to higher-opportunity outcomes?



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Thank you!





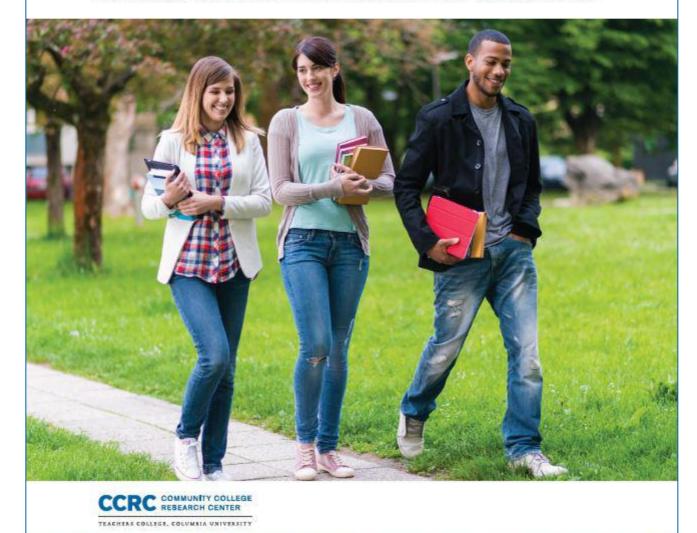
Findings from new CCRC causal analysis of Tennessee corequisite remediation

REPORT | SEPTEMBER 2018

Building Guided Pathways to Community College Student Success

Promising Practices and Early Evidence From Tennessee

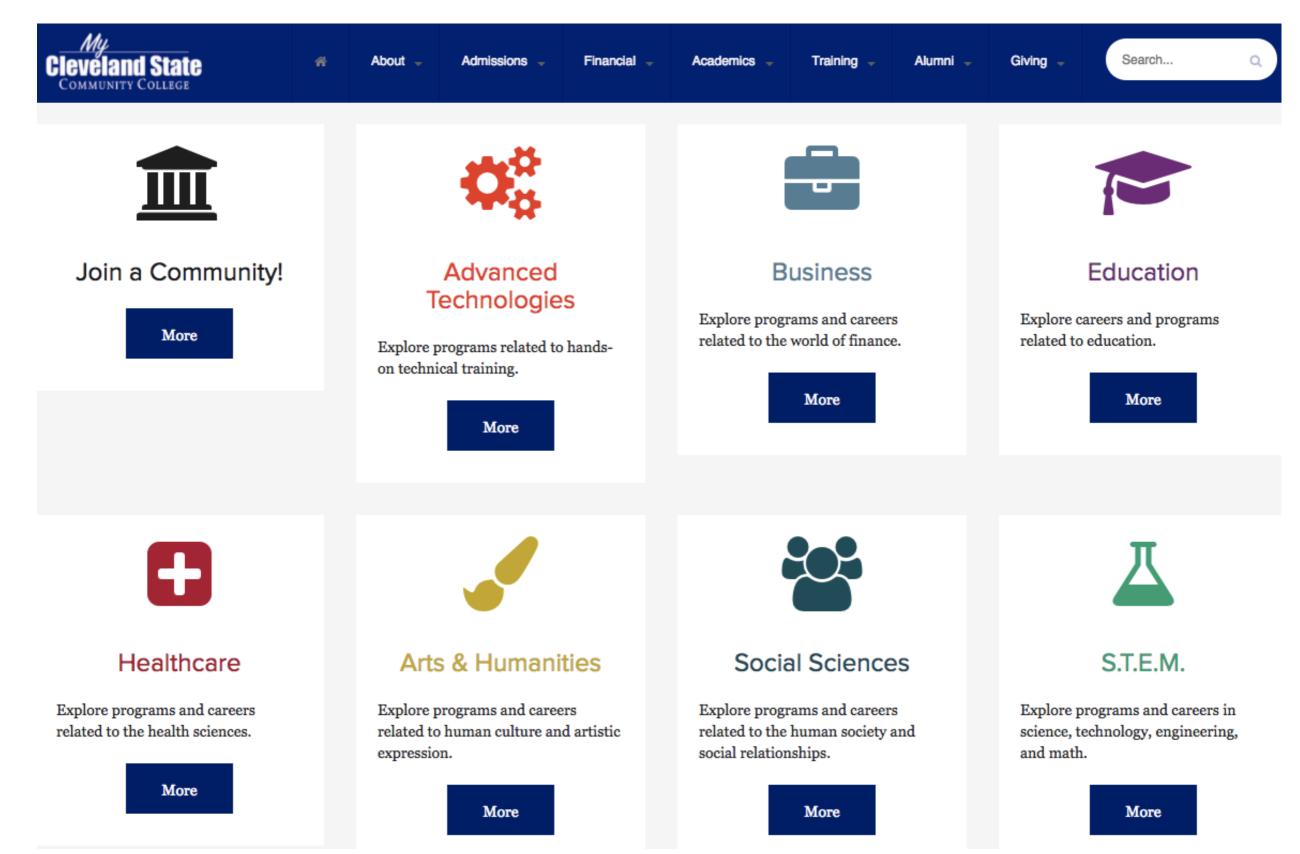
Davis Jenkins | Amy E. Brown | John Fink | Hana Lahr | Takeshi Yanagiura



Tennessee "Momentum" Practices

- Map all programs to career outcomes; include the "right" math on each map
- Redesign intake experience to help students explore, choose a major or focus area, develop full-program plan
- Require students with ACT of 13-18 to take "corequisite" math (aligned with math pathway), writing and/or reading
- Require students with ACT below 13 to develop learning plan and give them intensive support
- Increase exposure of all students to high-impact teaching practices

Cleveland State Community College (TN)





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Q

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Elementary Education (K-5)

Academics > Academic Programs > Programs >

Request More Information | Print Map

Transfer Teaching, Elementary Education (145) Associate of Science in Teaching

A day in the life

Elementary education requires patience, creativity and a passion for helping students learn. Teachers are on their feet a lot and spend hours outside the classroom preparing lessons. Few professions are as rewarding.

Three reasons to consider this program.

EDU 101 Introduction to Teaching 🔎 ENGL 1010 Composition I MATH 1530 Introductory Statistics 🔊 SPCH 1010 Fundamentals of Speech

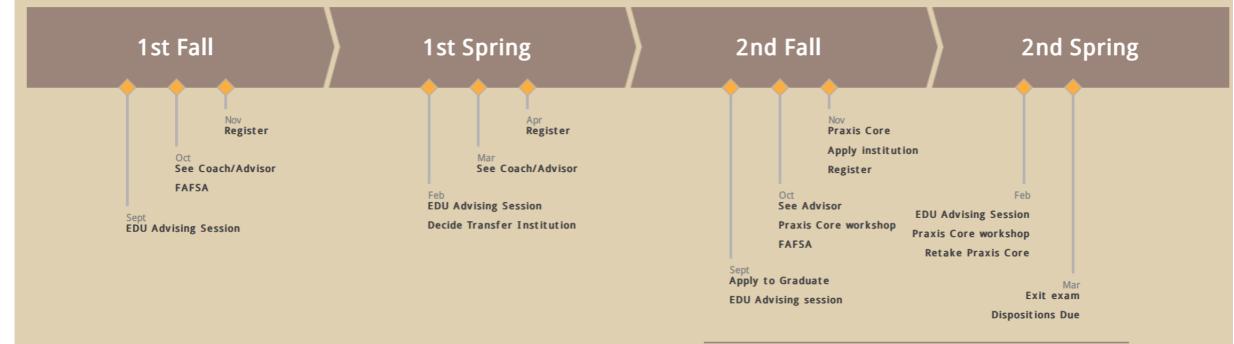
EDU 111 Intro to Education of Exceptional Childr... 🔎 ENGL 1020 Composition II BIOL 1110 General Biology I ARTH 1030 Art Appreciation 🛧 MATH 1410 Number Concepts/Algebra Structures



GEOG 2010 World Regional Geography ENGL 2110 Survey of American Literature I 🚓 HIST 2010 Survey of US History I MATH 1420 Problem Solving Geometry GEOL 1040 Physical Geology 🔬

EDU 211 Educational Psychology 🔎 HIST 2020 Survey of US History II POLS 1030 American Government 🔊

MSC 1012 Introduction to Physical Science Humanities Elective 🔬



Key Course: program faculty have identified this course as key to your success Recommended Elective: check catalog for other acceptable courses This map assumes completion of course prerequisites

Roane State Community College 276 Patton Lane Harriman, TN 37748-5011

Campus Maps Roane State Police Department President's Welcome

College Catalog VP of Student Learning Academic Divisions

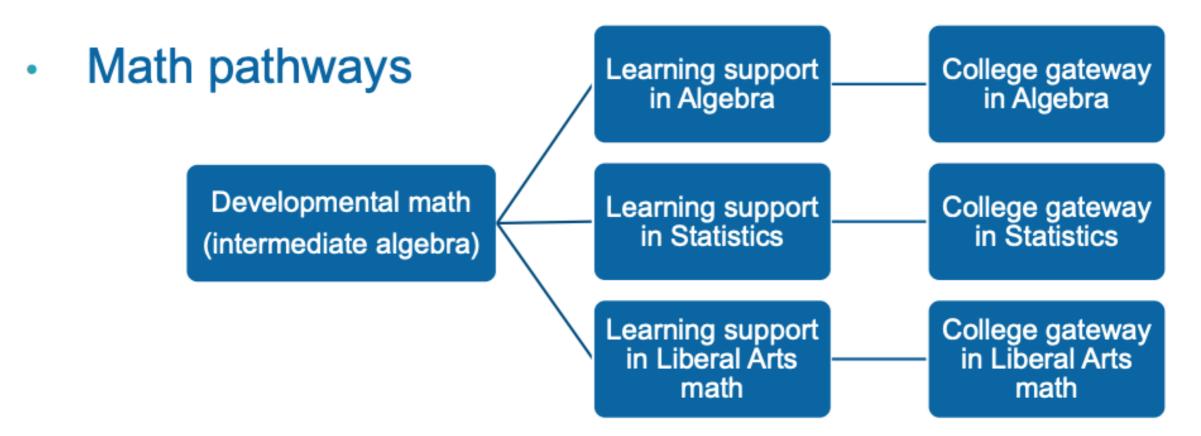
About the College Accreditation Policies

Tennessee co-requisite reform context

Timeline

CCRC

- Before 2015: pre-requisite design (+ co-requisite pilot)
- At scale in 2015: 10 institutions
- At scale after 2015: 3 institutions
- Some variations in writing/reading versus math

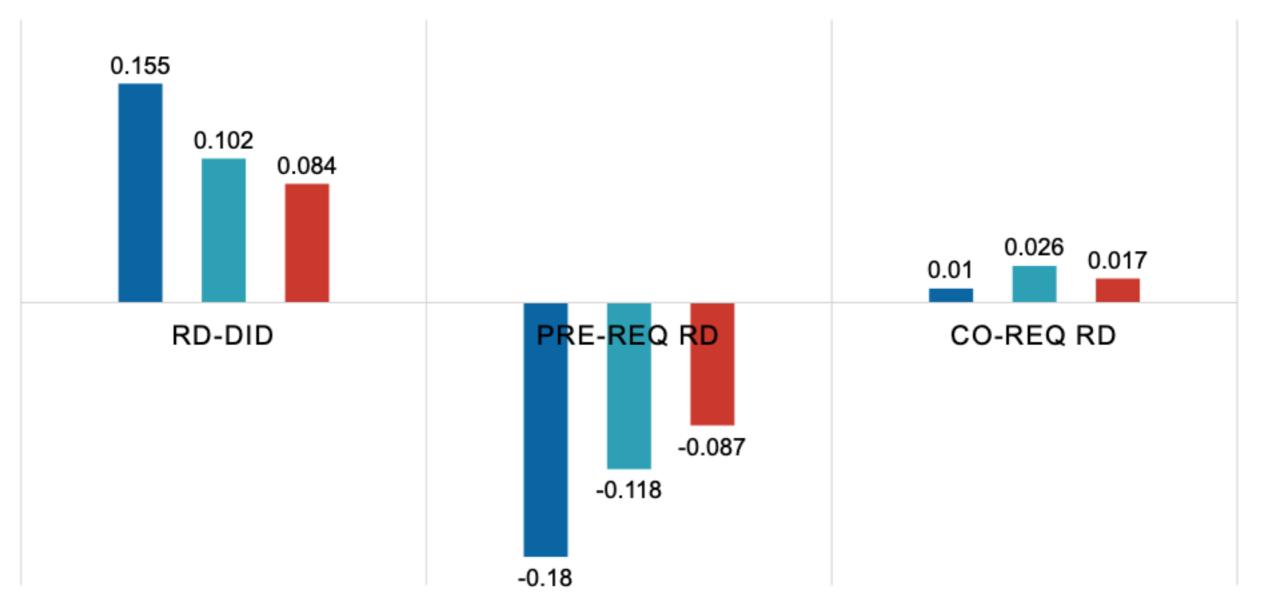


Ran, F. X., Lin, Y. (Forthcoming). Better Together? The effect of co-requisite remediation in TN Community Colleges.

Large impacts on gateway completion

COMPLETE GATEWAY MATH

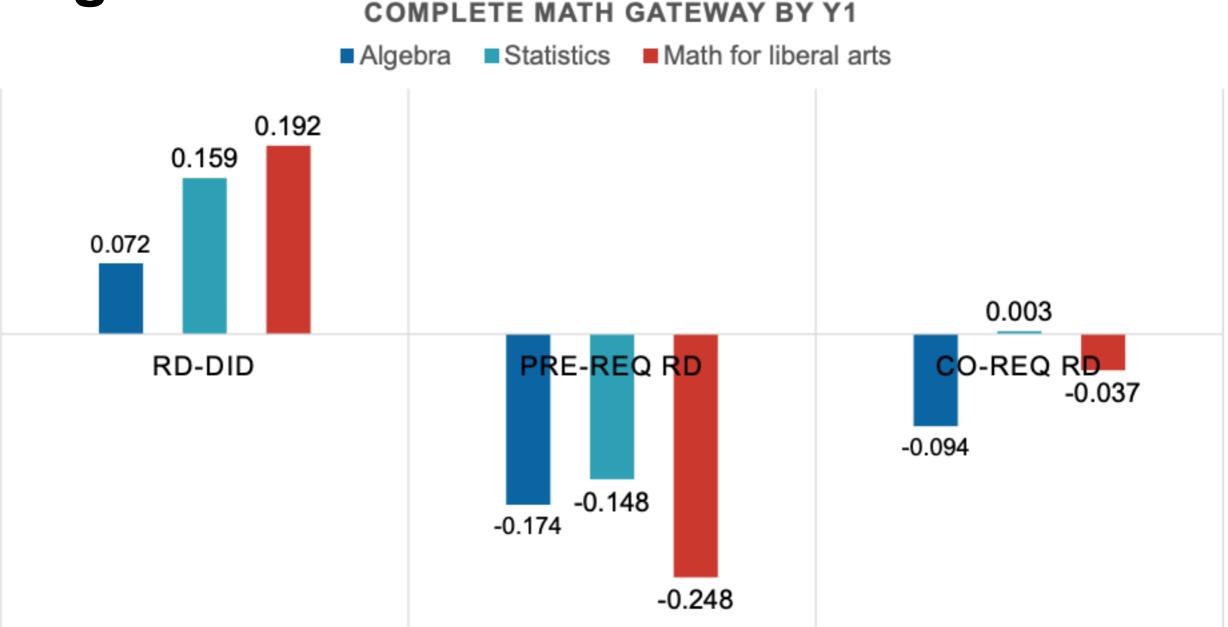
■Y1 ■Y2 ■Y3



All coefficients of RD-DID and pre-req RD are significant at 1% level; coefficients on co-req RD are not significant.

Ran, F. X., Lin, Y. (Forthcoming). Better Together? The effect of co-requisite remediation in TN Community Colleges.

Math results are driven by pathway alignment

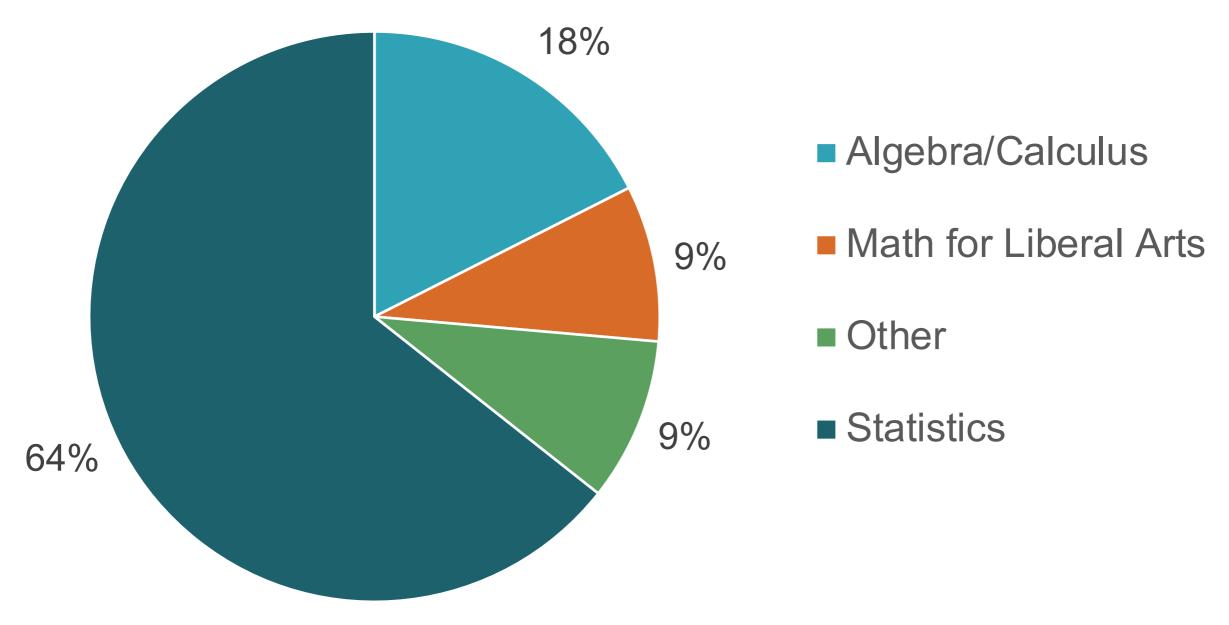


Coefficients for RD-DID for statistics and math for liberal arts are significant; all coefficients for pre-req RD are singificant

Ran, F. X., Lin, Y. (Forthcoming). Better Together? The effect of co-requisite remediation in TN Community Colleges.

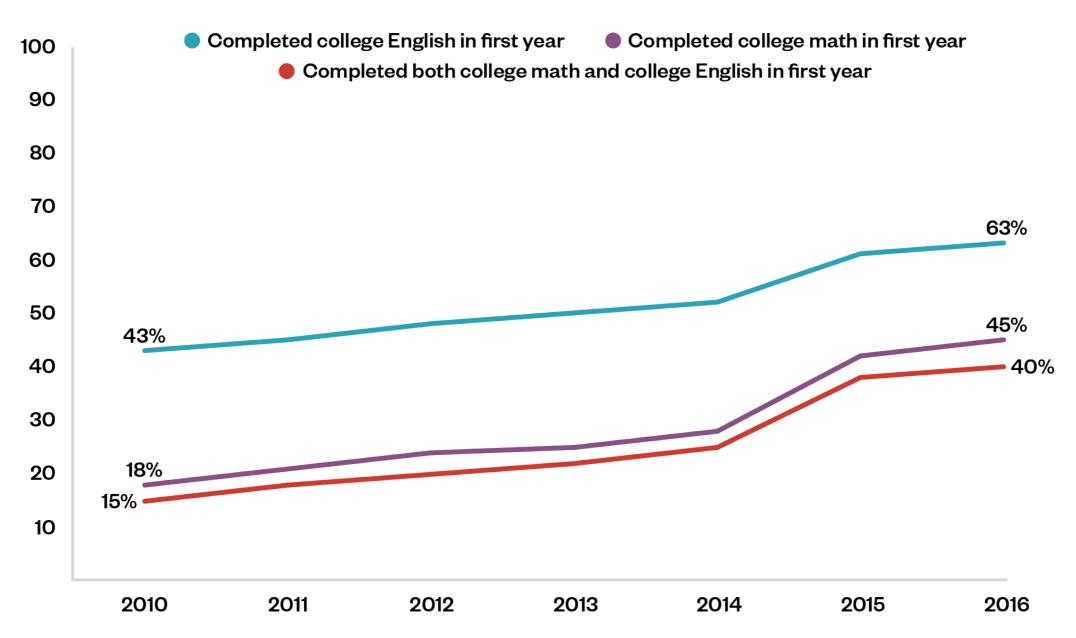
Program-Aligned Math Pathways

Math Courses Taken by First-Time College Students: Tennessee Community Colleges, Fall 2016



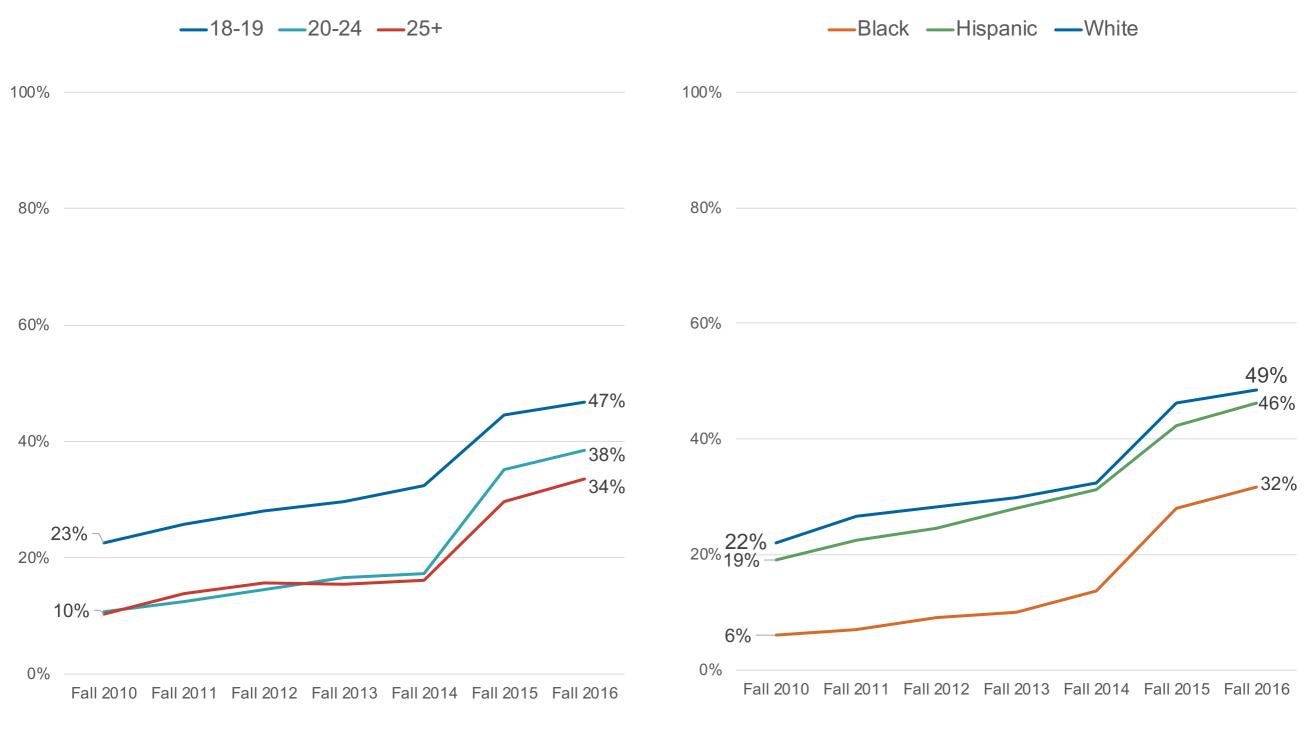
Source: CCRC Analysis of Tennessee Board of Regents data. N = 18,956.

TN CCs: First-Year Gateway Course Completion



Fall Cohort of First-Time-Ever-in-College Students

TBR CCs: Passed college math in year 1, by Age Groups and Race

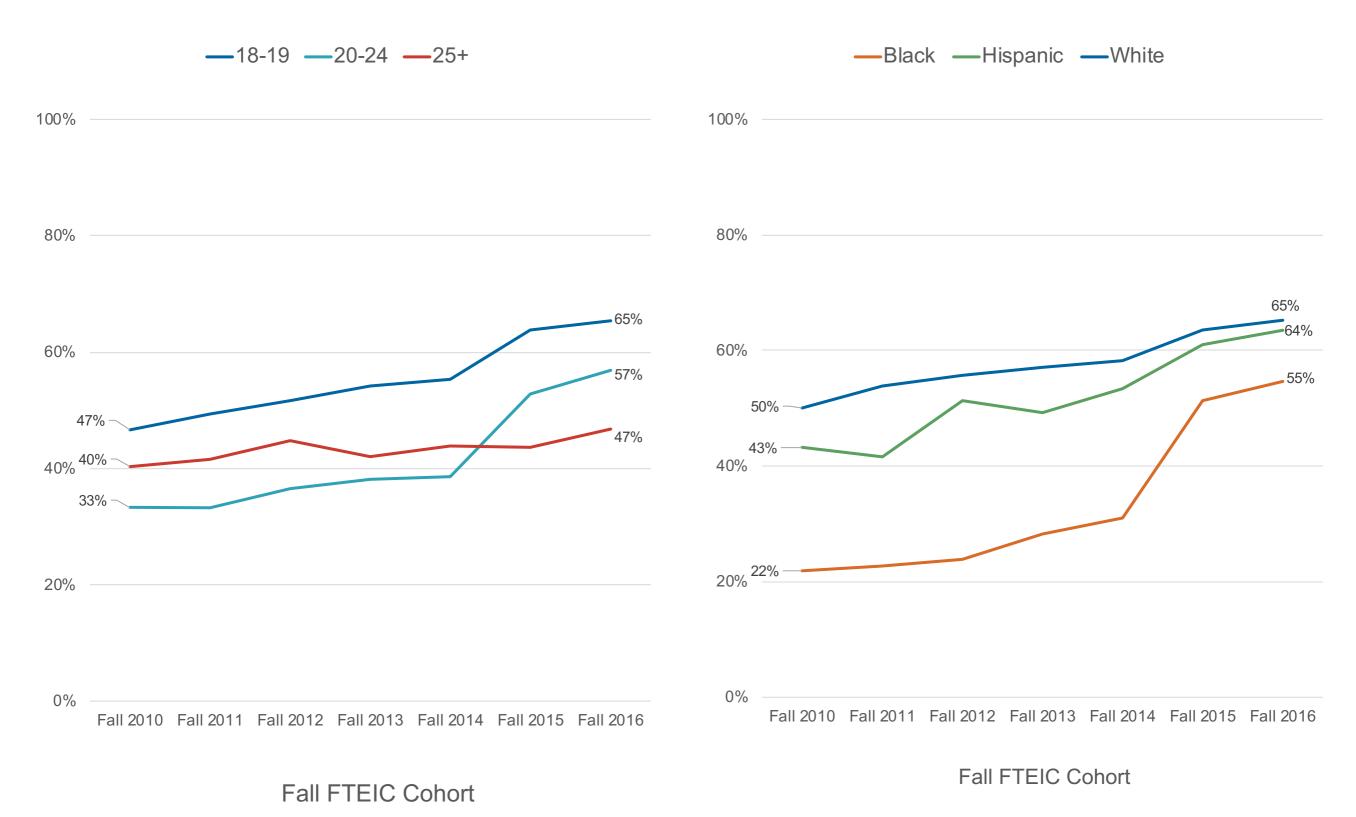


Fall FTEIC Cohort

Fall FTEIC Cohort

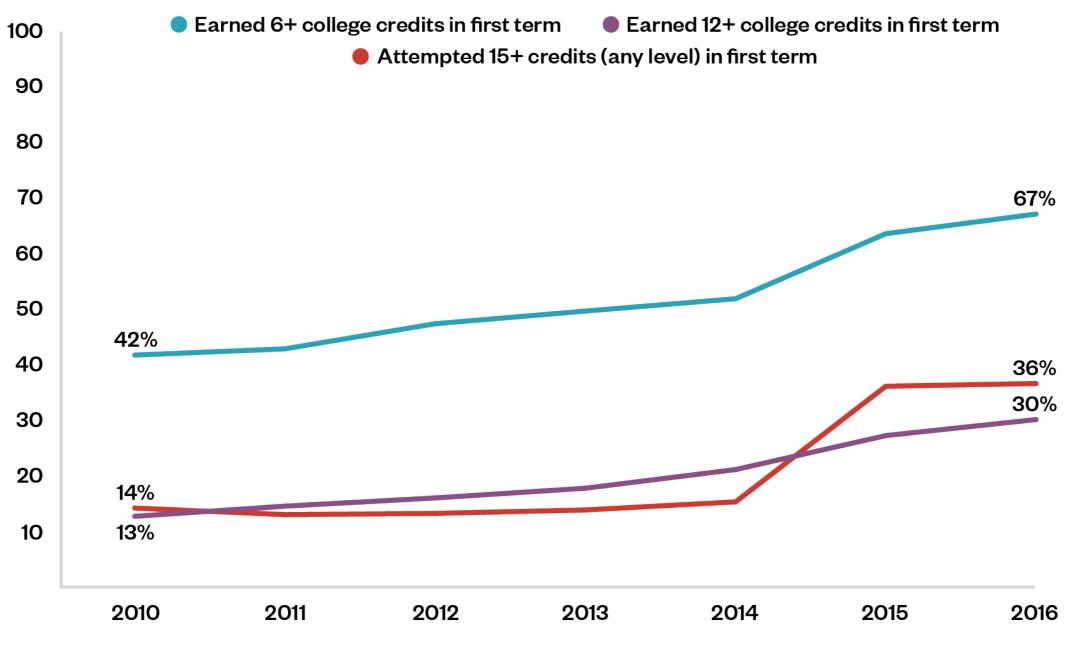
Source: CCRC Analysis of TBR Data

TBR CCs: Passed college English in year 1, by Age Groups and Race



Source: CCRC Analysis of TBR Data

TN CCs: First Term Credit Momentum KPIs



Fall Cohort of First-Time-Ever-in-College Students

TN Coreq Evaluation Takeaways

- Corequisite model results in much higher rates of passing college-level Enlish and math (compared to previous modular "emporium" approach)*
- Benefit of learning support small on average; biggest benefit is starting students in college-level courses
- For math, biggest effect is guiding students into math pathway aligned with students' program of interest
- Co-req students perform well in subsequent courses in math and English sequences, but not more likely to earn more credits or graduate in three years
- 5) System-wide scale implementation of corequisite and math pathways facilitated by broader whole-college redesign of program pathways, intake and advising on through TBR's "momentum" reforms (which follow the Guided Pathways model)

* These findings apply to students near the ACT "cut-off," not to students who score much lower.

TN Coreq Evaluation Implications

- 1) It's not so much that learning support helps students, but starting them in a pre-college, pre-requisite sequence hurts them
- One reason for poor performance by community college students in math is the practice of putting all or most students into an algebra pathway
- More work is needed to understand if coreq is effective for very poorly prepared students (although TBR found weak correlation between ACT scores and success in co-req)
- 4) Reason so few colleges have failed to implement math pathways at scale is that they have not implemented changes in intake and advising to help students explore options from the start and choose an initial program direction (and develop a plan) early on
- Co-req by itself is unlikely to improve overall student success (which is not surprising, given that we're talking about 2 courses here); rather broader changes are needed to programs, instruction and on-going support