Texas' Career-Focused Pathways are Closing Achievement Gaps

TEXAS SUCCESS CENTER

TEXAS SUCCESS CENTER

Dedicated to social and economic mobility, we support community college reform strategies that will empower Texans to rise out of poverty and achieve better life outcomes.

Why Pathways? An innovative response to educational needs

Far **too few Texans have the skills and credentials** they need for a good career and employers need skilled workforce to build thriving businesses and a strong Texas economy.

- At 45%, we are far from our state's higher education goal to have 60% of young Texans holding a postsecondary credential by 2030.
- One in five 8th graders earn any credential 6 years after HS. (even lower for low-income students and male students).
- While most good careers require some post-secondary credentials, over half of all new Texas CC students are not college ready (58%)
- Misalignments across secondary and post-secondary institutions has persisted resulting in increased excess time and credits.
- **All Texas community colleges are committed to scaling the essential practices of Texas Pathways** systemic reform strategies that are improving student success statewide.

What is Pathways? Systemic whole college career-focused reform

The Texas Pathways strategy is designed to strengthen support for students to **choose and complete a program that leads to a good job and further education**.

- The strategy is grounded in solving systemic educational problems caused by incoherent and misaligned structures that result in far too few Texans prepared for meaningful careers.
- With pathways, colleges are transforming how students experience the institution through major changes to academic programs, advising, instruction, business processes, and information systems.
- Reforms aim to guide students from selection of high school degree programs or from unemployment and under-employment to the attainment of high-quality credentials and high-demand careers with living wages.
- Implementing and scaling the essential practices of the model has resulted in significant improvements in early key performance indicators.

On what is the model based?

What is the Theory of Change?

TEXAS STUDENT SUCCESS INITIATIVES

Texas Success Center

New Mathways Project

AACC Pathways Project

Achieving the Dream

Pathways to Prosperity

DE Accountability Measures

HB5

Student Success Points

AVID

Reverse Transfer

Board of Trustees Institute

Texas Completes

The Texas Network

Texas Common Application

New College Readiness Assessment

Gulf Coast Partners Achieving Student Success

Completion by Design

4x4 High School Degree Program

Texas Postsecondary and Career Counseling Initiative (HB18)

Developmental Education Demonstration Project

Intensive Bridge Programs

State Appropriations for DE

Texas College Access Network

Student Success By the Numbers

Pathways Project

Mandatory Degree Plan

Developmental Education Initiative

Field of Study

TX CC Developmental Education Initiative

State Appropriations for ABE Alignment

GenTx

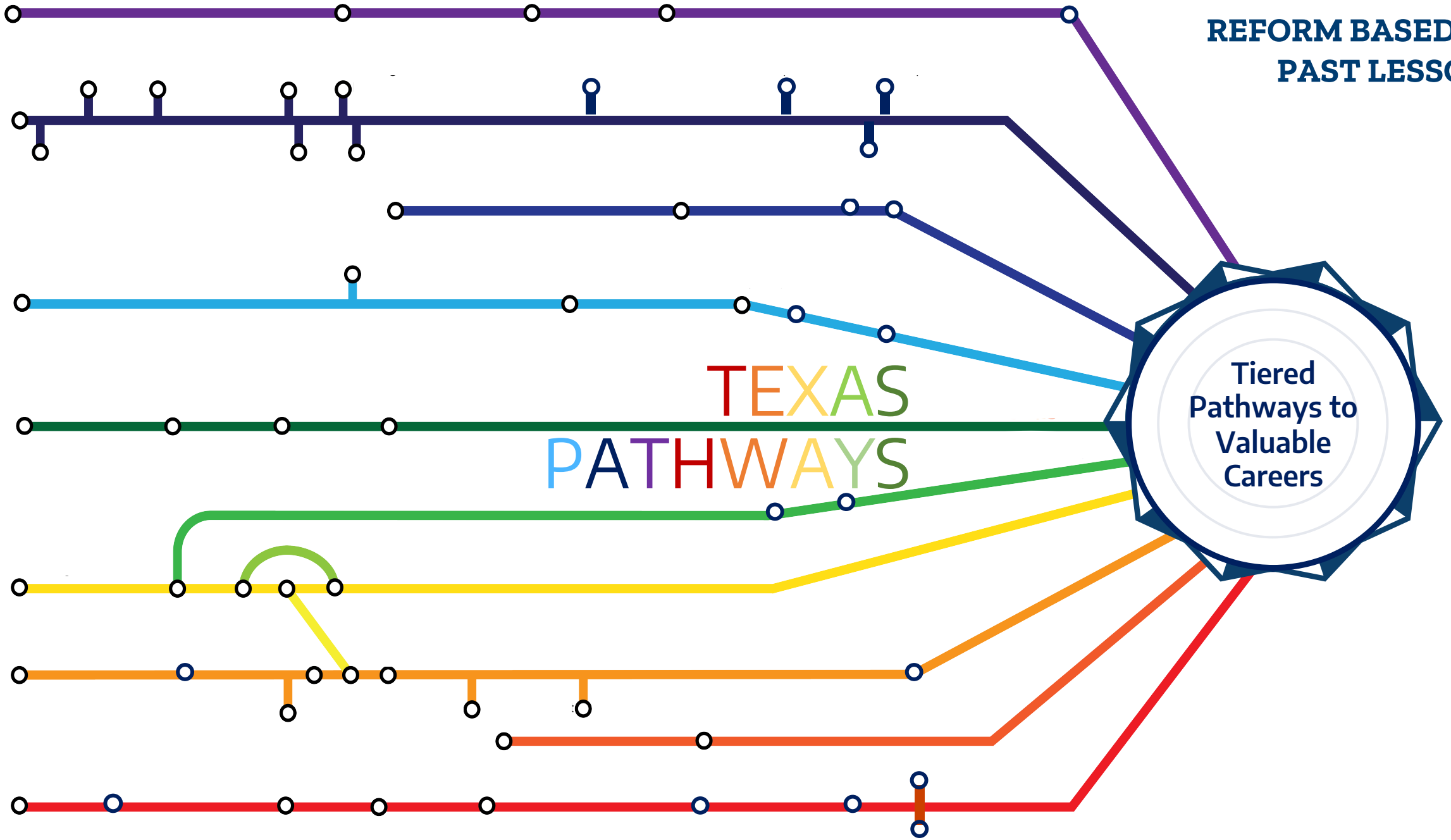
Accelerated Dev. Ed.

Texas Course Redesign Project

Common Core

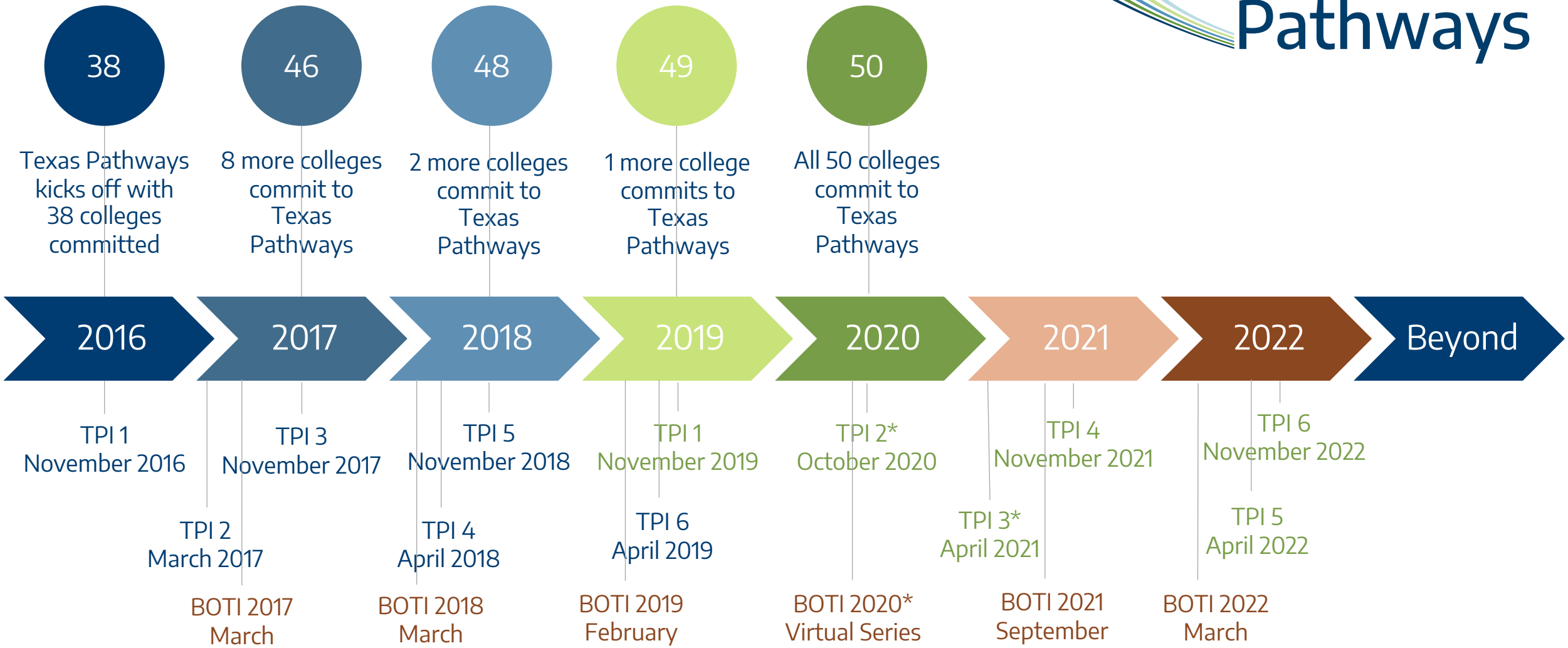
GradTx

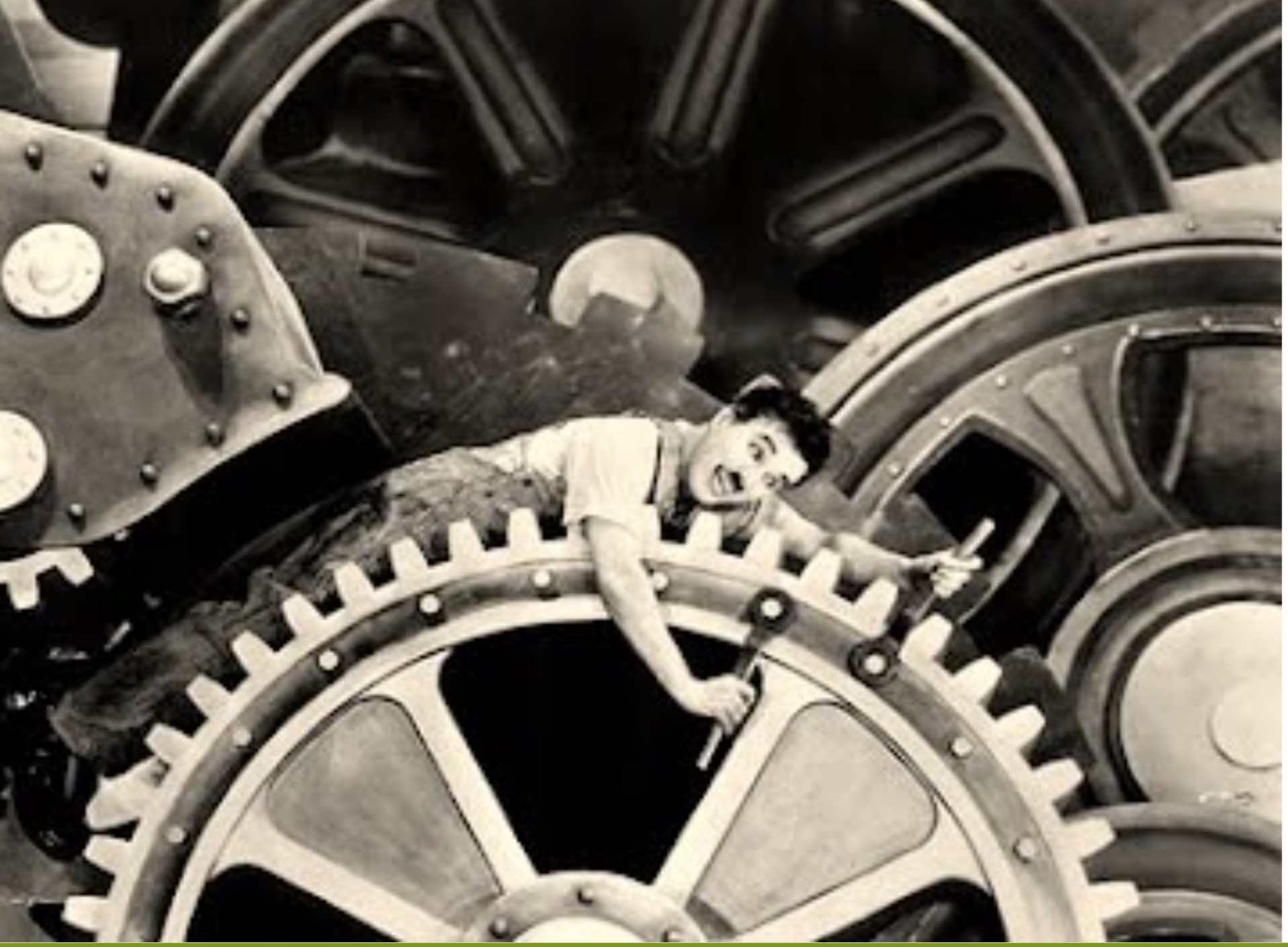
Early College High Schools


REFORM BASED ON PAST LESSONS
TEXAS PATHWAYS
Tiered Pathways to Valuable Careers

Texas Pathways

Timeline





REFORM BASED ON ORGANIZATIONAL SCIENCE:

Improving student outcomes requires systemic reform.

Random series of initiatives toward discrete practices will not get the results we are after.

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REFORM BASED ON BEHAVIORAL SCIENCE:

Defaults, active choice, and nudges improve decision-making

People handle complex decisions better if they are helped to think through manageable sets of options.

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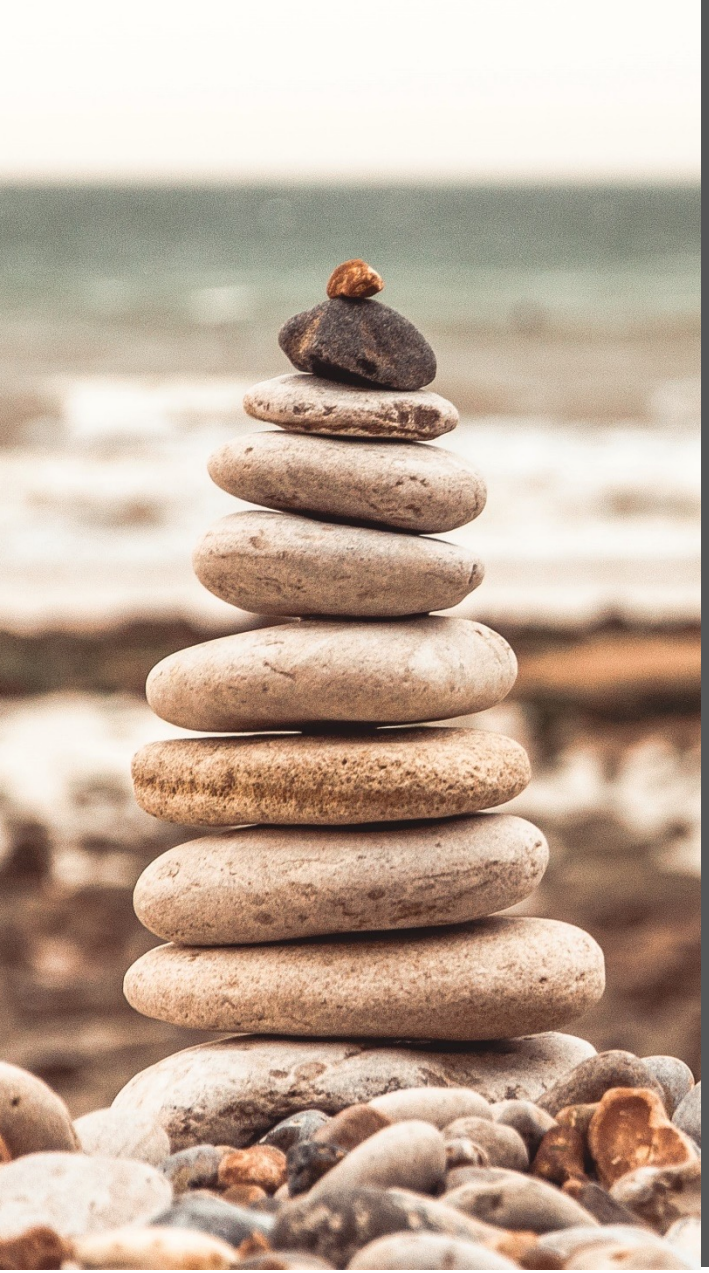
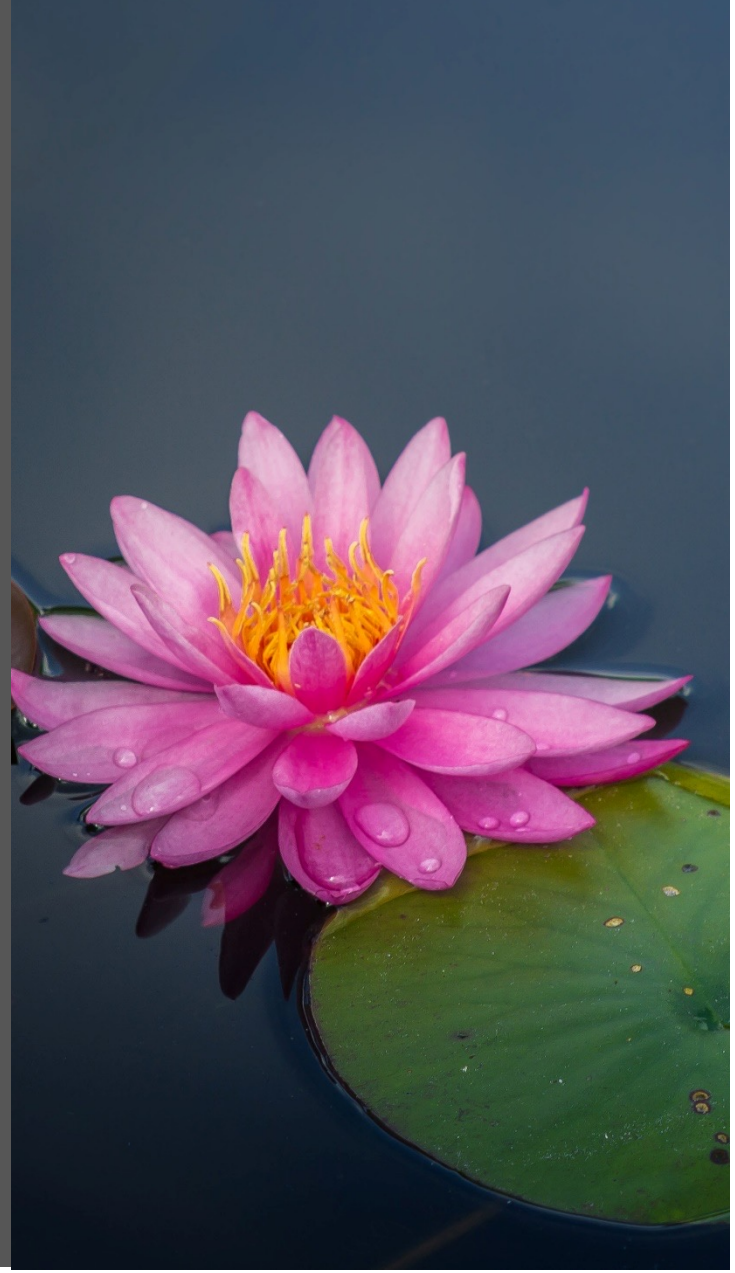


Students need Maslow if they are going to Bloom



REFORM BASED ON COGNITIVE SCIENCE:

Students benefit from clear big picture learning goals.

Securing basic needs enables higher-order learning.

Source: The Hope Center for College, Community and Justice at Temple University

Texas Community College Students' Basic Needs

Understanding the connection between student finances and student success is essential to supporting the 21st century student.

While **56%** of students **USED PERSONAL SAVINGS** and

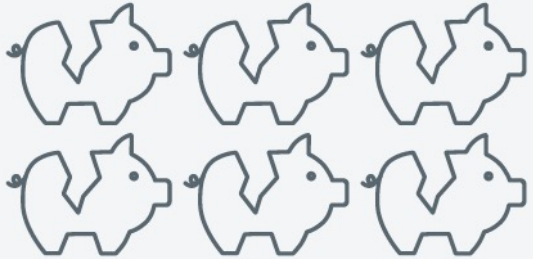
62% **USED CURRENT WAGES TO PAY FOR SCHOOL,**

ONLY 7% ARE ABLE TO SOLELY RELY ON THIS SELF-HELP.

63% of students would have **TROUBLE GETTING $500 IN CASH OR CREDIT** in an emergency.

13% of students **WOULD NOT BE ABLE TO GET THAT AMOUNT FROM ANY RESOURCE.**

66% of students **WORRY ABOUT HAVING ENOUGH MONEY** to pay for school.



28% of students **RAN OUT OF MONEY 6 OR MORE TIMES** in the past year.

Source: 2022 Trellis Report on Texas Community College Students' Financial Wellness

Texas Community College Students' Basic Needs

52% of students **REPORTED BEING HOUSING INSECURE.**

22% of students had **VERY LOW FOOD SECURITY.**

47% of students indicated **EXPERIENCING GENERALIZED ANXIETY DISORDER.**

74% of students **PAY THEIR CREDIT CARD ON TIME EACH MONTH,**

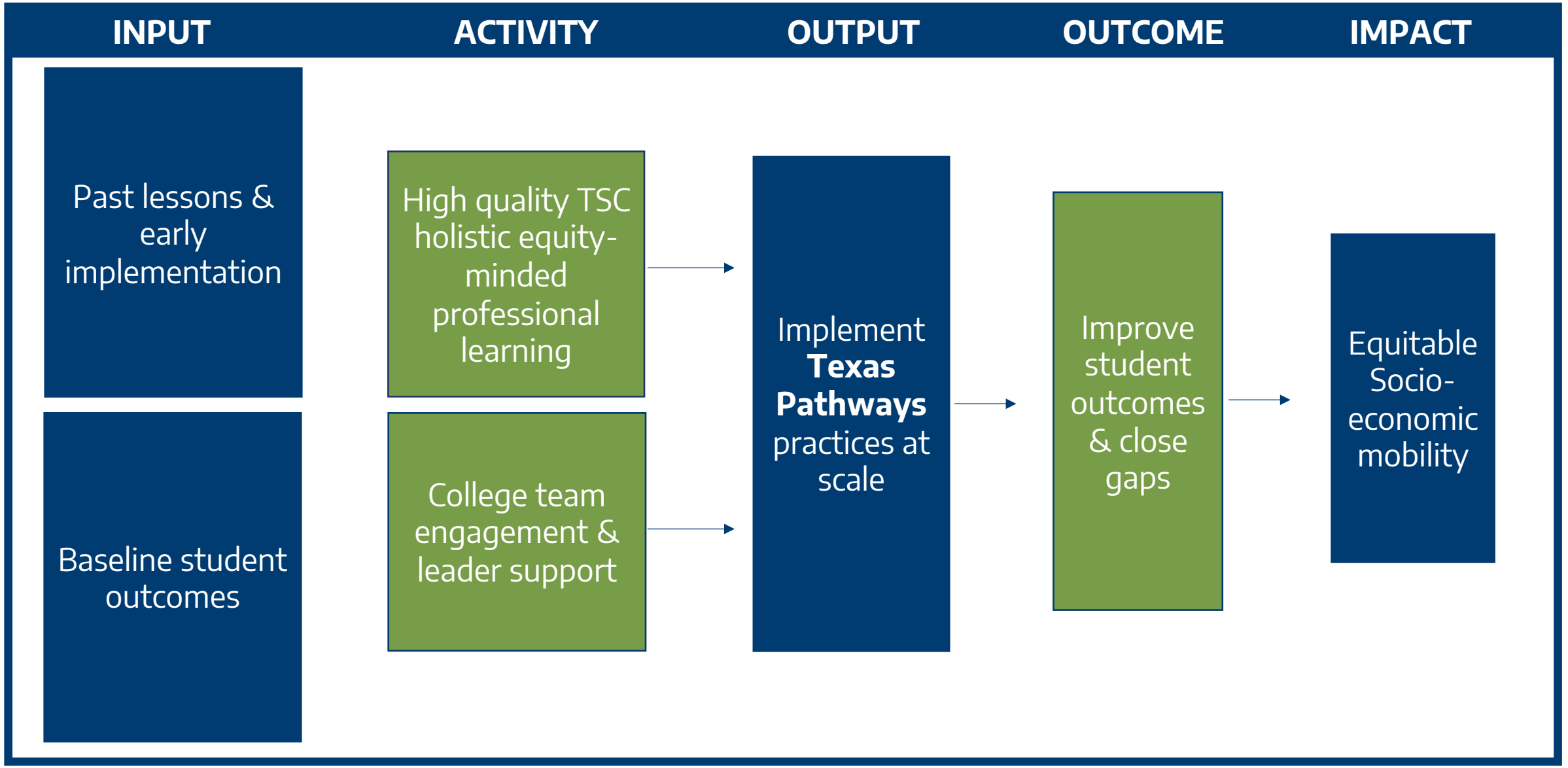
but **ONLY 31%** **PAY THE FULL BALANCE.**

65% of students **WOULD USE FINANCIAL SUPPORT SERVICES IF OFFERED BY THEIR SCHOOL.**

21% of students **DON'T KNOW WHERE TO FIND FINANCIAL ADVICE.**

Source: 2022 Trellis Report on Texas Community College Students' Financial Wellness

THEORY OF CHANGE



PATHWAYS FRAMEWORK

Systemic whole-college reform helping students reach their goals

Learners From Multiple Entry Points

Connect

Enter

Progress

Succeed

Enter Careers, Earn More Credentials, & Transfer to 4-Year Institutions

Texas Pathways

Four Pillars of Essential Practices

1. Map Paths to Student End Goals

- Multiple entry points
- Default program maps
- Completion, further education, employment
- Guides through transitions and transfer

2. Help Students Choose and Enter a Program Path

- College readiness in 1st year
- Career exploration
- Early contextualization
- Accelerated remediation for most poorly prepared

3. Keep students on paths

- Strong, inescapable advising
- Clarity for education and career choices
- Predictable schedules
- Early intervention
- Academic and non-academic support

4. Ensure students are learning

- Program learning outcomes aligned with careers and further education
- Internships and apprenticeships
- Active culturally competent teaching practices

EVOLVING THE REFORM BASED ON ECONOMIC NEED

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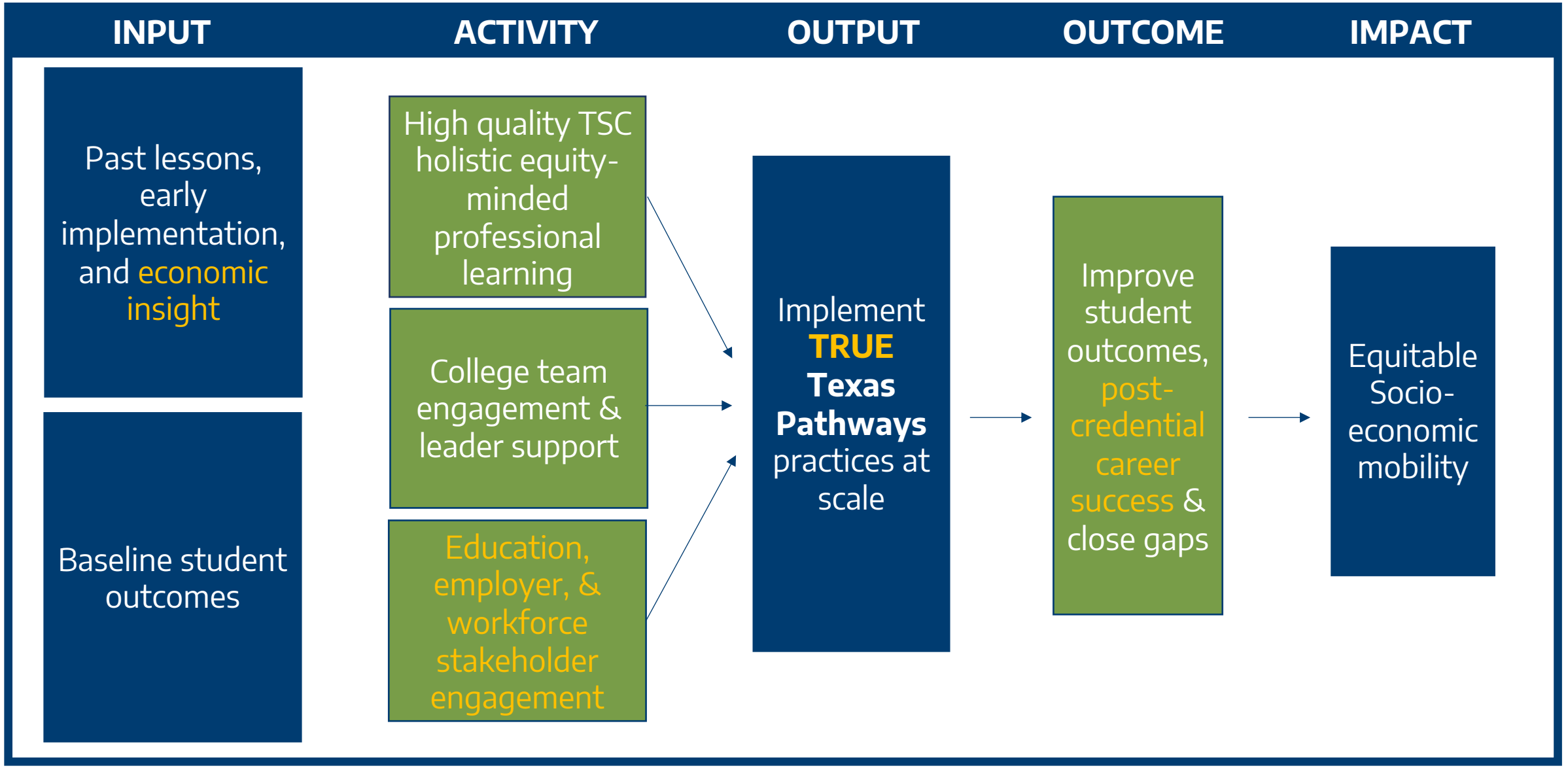
Why TRUE Pathways? An innovative response to a pandemic crisis

COVID-19 delivers a **devastating blow to the Texas economy,** forcing businesses across our state to shift, suspend, and in many cases close operations.

- Millions of Texans lost their jobs with a record number of **more than 4 million filing initial claims for unemployment insurance** at its height. Many of these workers **lack skills to effectively transition back to work**.
- Workers with **only a high school diploma reached an unemployment rate of 19 percent** in April 2020 that declined but remains significantly higher than the rate for credentialed workers. The incumbent workforce will also continue to face new skills requirements.
- The pandemic's impact began with **deep employment reductions** in several industry sectors. It has now transitioned into the **sever lack of skilled workforce** with most businesses urgently in need of new applicants to fill large numbers of unfilled jobs.
- Significant shifts in **businesses have resulted in a serious mismatch between workforce needs and unemployed and underemployed worker skills**.
- A pre-pandemic national skills gap conflated with crisis related workplace transformations yield **new skills alignment challenges for many Texans, including the incumbent workforce.**
- Community college leaders, understanding the plight of our workforce, employers and economy, form a compact to offer solutions to meet the challenge, **a TRUE solution for Building a Talent Strong Texas.**

THEORY OF CHANGE



TACC Business Advisory Council Goals

Goal 1: Advise on changes in the economy and job market. Highlight areas of future job growth and advise on skills most critical to business and industry.

Goal 2: Champion Texas Reskilling and Upskilling through Education (TRUE). Provide support, strategic guidance, and advocacy in establishing and advancing the components of the TRUE Initiative.

Goal 3: Inform legislative strategies. Provide strategic guidance in advancing the components of the TACC legislative agenda in support of a stronger Texas economy.

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Short-Term Credential Goals

Goal 1: Industry Validation

- Engage business in targeted cross-sector partnerships

Goal 2: Accelerated Employment Training

- Expand to maximize value through upskilling and reskilling opportunities

Goal 3: Sustainability

- Lay the foundation for statewide talent pipelines that improve completion and employment outcomes

The TRUE Workforce Initiative Phase I

January – August 2021

Central - Austin Community College
Central - McLennan Community College
East - Paris Junior College
East - Northeast Texas Community College
North - Dallas College
North - Tarrant County Community College
South - Alamo Colleges
South - Del Mar College
Southeast - Brazosport College
Southeast - San Jacinto College
West - Amarillo College
West - Midland College

1. Identify high-priority credentials and foundational career specific skills
2. Design and implement high-quality short-term and micro-credentials aligned with regional demand
3. Create program maps to credentials, including opportunities for careers, further education, and related wages

Regional Workforce & Education Partnership Meetings

March – April 2022

Texas Community Colleges are committed to **hearing directly from business and industry.**

Through these regional convenings, we hope that together we will better meet the needs of Texas employers by advancing and enhancing our work to **close talent gaps**, **build stronger and more transparent career pathways, and improve student outcomes**.

Over 400 leaders from businesses, community colleges, workforce solutions, and chambers met regionally, discussed regional economic conditions with leading state economists, heard from key employer CEOs, and discussed the urgent workforce and educational collaborations and solutions needed.

Employer Input: A Statewide Tour:

Common Themes

Long-term Unfilled Positions

Threatened Productivity

Lack of Skilled Applicants

Workplace Skills

Colleges' Challenges in Delivering Needed Training

Greatest need is for short-term credentials that can be completed in 6 months or less

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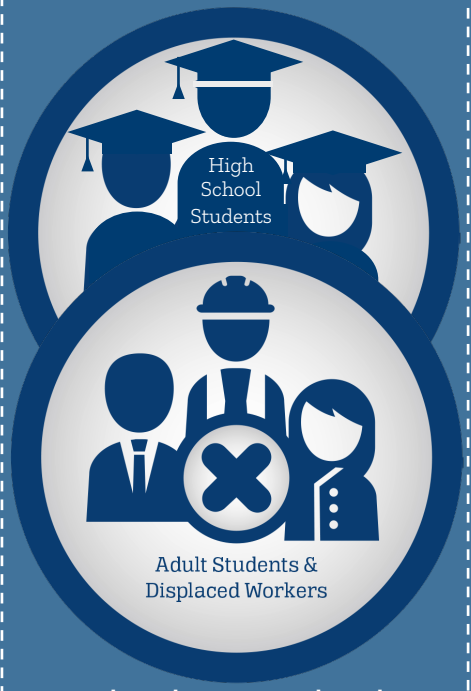
PATHWAYS FRAMEWORK

Learners From Multiple Entry Points

Connect



Easily shop and select career-focused pathways that include industry-based certificates within the metamajor

Enter

Onboard with a clear initial completion plan which could span less than 6 months

Progress

Gain skills and work-related experiences in all targeted programs

Succeed

Complete credentials in high-demand occupations aligned with further education without the loss of time or credit

Enter Good Careers with Living Wages & Further Education Plan

Systemic whole-college reform helping students reach their goals

Profile: Statewide

Key Occupation: Cardiovascular Technologists and Technicians*

Texas Association of Community Colleges

4,197
Job Postings
Dec 1, 2019 - Nov 30, 2020

$52,560
Median Salary
Based on BLS data for Texas

16%
Projected Growth
Estimated growth in employment, 2020-2030

85%
Entry Level
Percent of job postings calling for 0-2 years of experience

10%
BA+ Level
Percent of job postings calling for a BA or higher

23% (Low)
Automation Risk
Based on Osborn and Frey's methodology

Top 5 Specialized Skills

1. Cardiopulmonary Resuscitation
2. Patient Care
3. Electrocardiogram
4. Cardiology
5. Catherization Laboratory (Cath Lab)

Top 5 Certifications

1. First Aid CPR AED
2. Basic Life Saving (BLS)
3. Advanced Cardiac Life Support Certification
4. Basic Cardiac Life Support Certification
5. American Registry of Radiologic Technologists Certification

Top 5 Employers

1. Hospital Corporation of America
2. Christus Health
3. Baylor Scott & White Health
4. Texas Health Resources
5. Houston Methodist

This occupation is important to the following industries:

Health Care and Social Assistance
Professional, Scientific, and Technical Services
Other Services (except Public Administration)

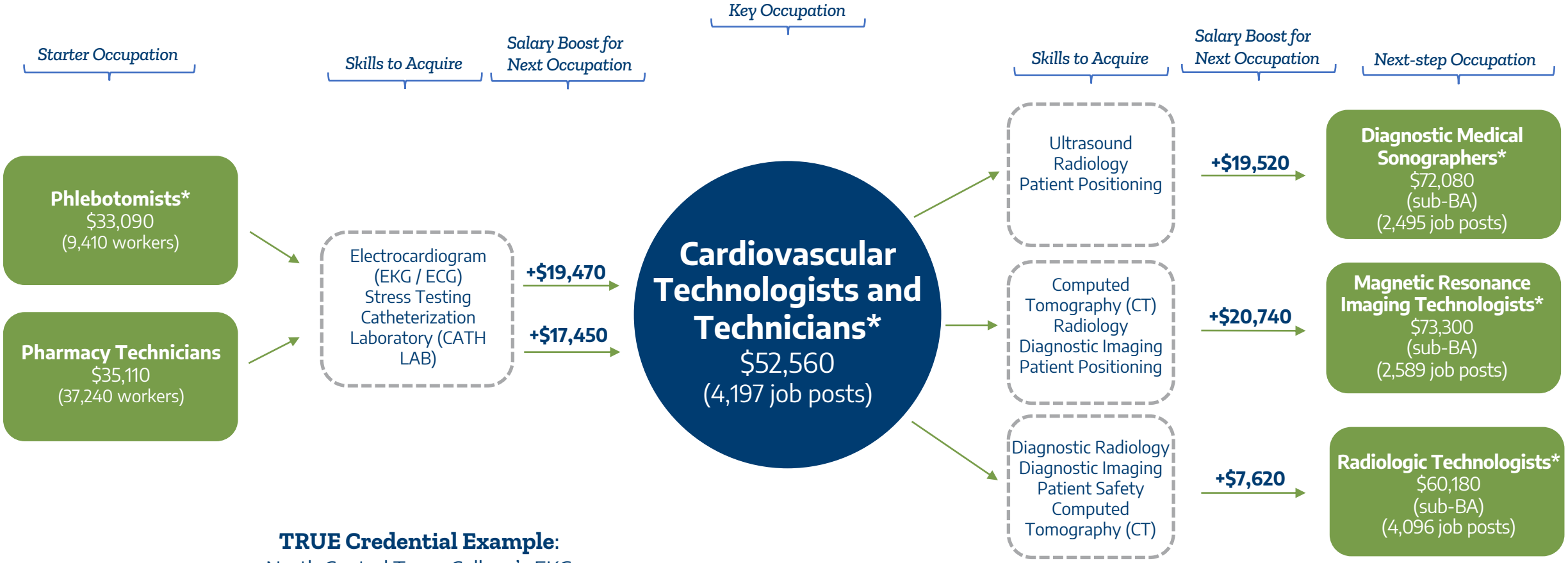
*License typically required

Source: Burning Glass Technologies. 2021.

TRUE Pathways Map

Industry Area of Study: Health Sciences

Texas Association of Community Colleges



TRUE Credential Example:
North Central Texas College's EKG Technician Certification can be completed in 15 weeks

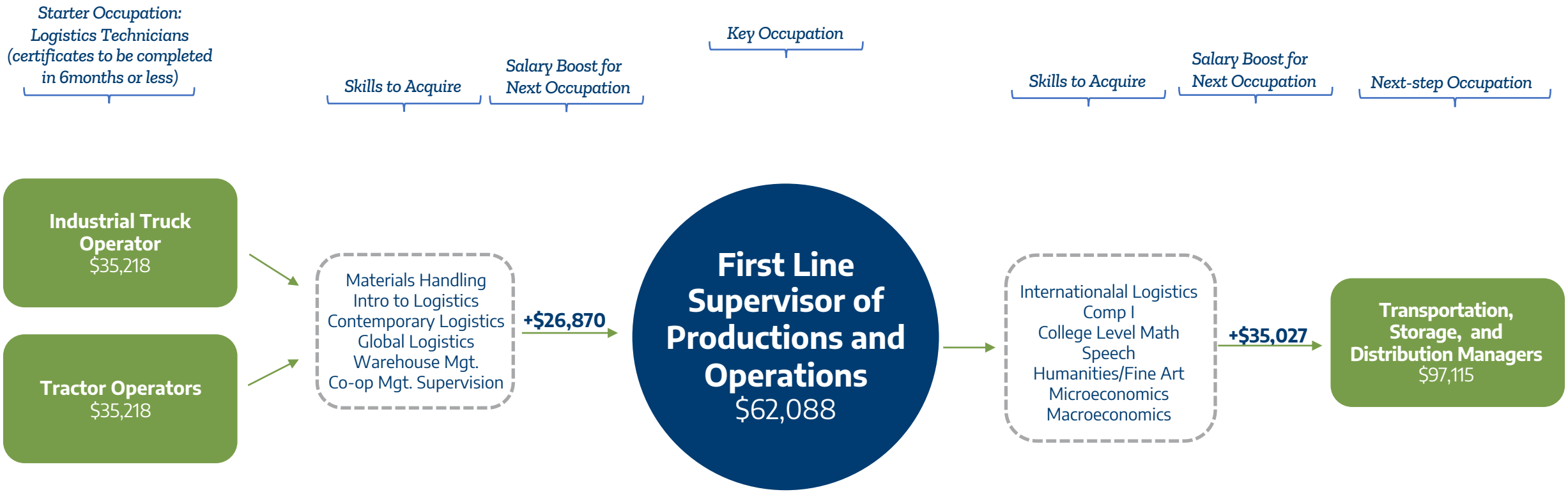
*License typically required

Source: Burning Glass Technologies. 2021.

TRUE Pathways Map: Dallas College

Industry Area of Study: Transportation

Texas Association of Community Colleges



Level 1 Certificate
an additional 6 courses

AAS Logistics and Manufacturing Technology
an additional 7 courses

Source: Burning Glass Technologies. 2021.

Are Texas community colleges implementing and scaling essential practices of the systemic reform model?

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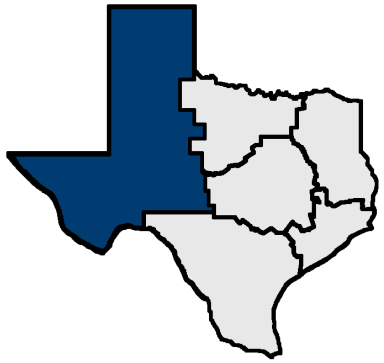
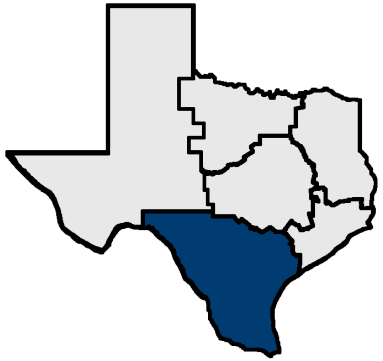
Texas Community Colleges are Committed to Texas Pathways



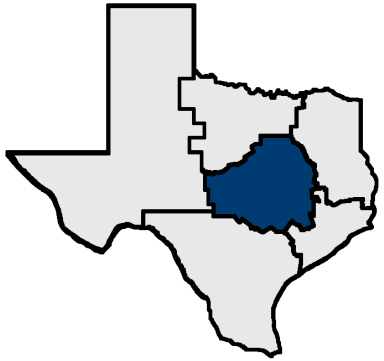
West

Amarillo
Clarendon
El Paso
Frank Phillips
Howard
Midland
Odessa
South Plains
Western Texas



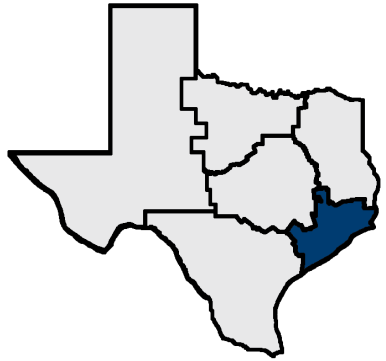
South

Alamo
Coastal Bend
Del Mar
Laredo
South Texas
Southwest Texas
Texas Southmost
Victoria



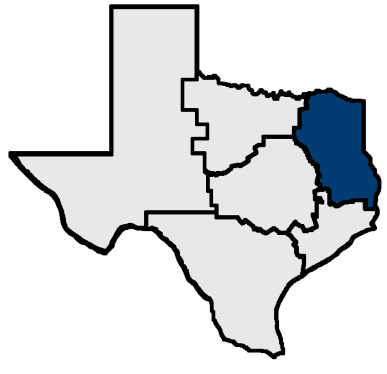
Central

Austin
Blinn
Central Texas
Hill
McLennan
Navarro
Temple



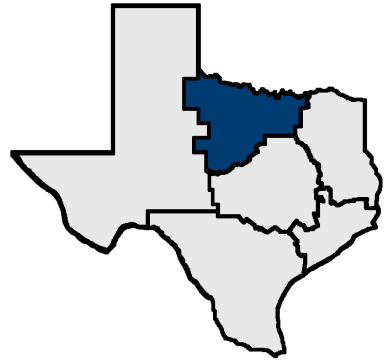
Southeast

Alvin
Brazosport
College of the Mainland
Galveston
Houston
Lee
Lone Star
San Jacinto
Wharton



East

Angelina
Kilgore
Northeast Texas
Panola
Paris
Texarkana
Trinity Valley
Tyler



North

Cisco
Collin
Dallas
Grayson
North Central
Ranger
Tarrant County
Weatherford
Vernon

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2021 Scale of Adoption at a Glance

- The **Scale of Adoption Assessment (SOAA)** tool is developed by the Community College Research Center and modified by the Texas Success Center to evaluate Texas Pathways.

- The SOAA is administered every 18-24 months.
  - 48 SOAAs were distributed to colleges in Spring 2021.
  - 44 completed SOAAs were submitted 2021.
  - 38 validation phone interviews were conducted in 2021.

- The SOAA summary slides include data from the validated responses aggregated by Texas Pathways cadre.
  - 21 of 25 colleges in cadre 1+ and cadre 1 participated in validation calls.
  - 17 of 25 colleges in cadre 2 and cadre 3 participated in validation calls.

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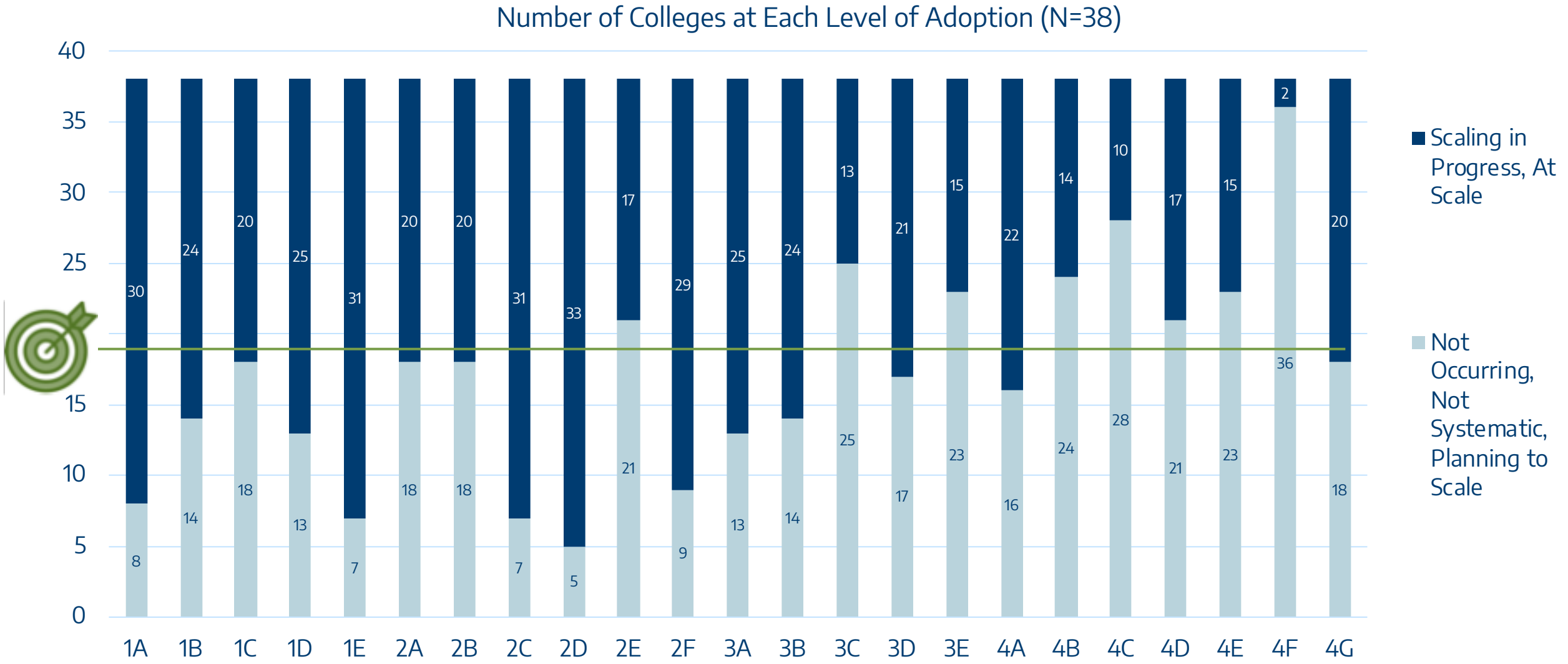
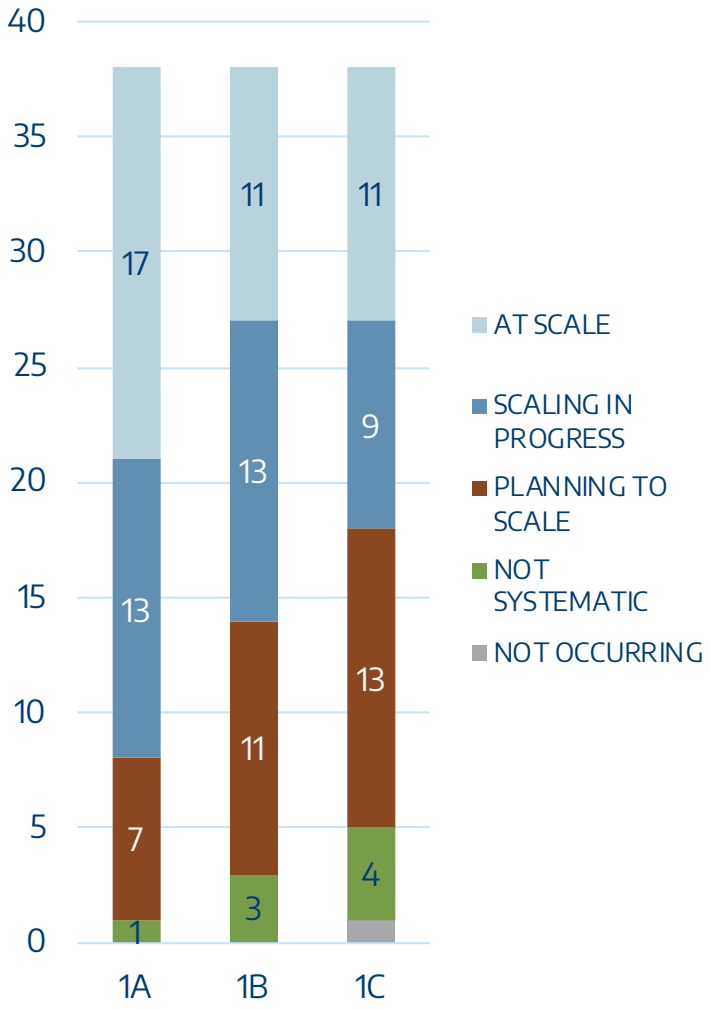
2021 Scale of Adoption Assessment

Texas community colleges are meeting or exceeding collective goals in 15 of 23 measures



Pillar 1: Mapping Pathways to Student End Goals

Themes



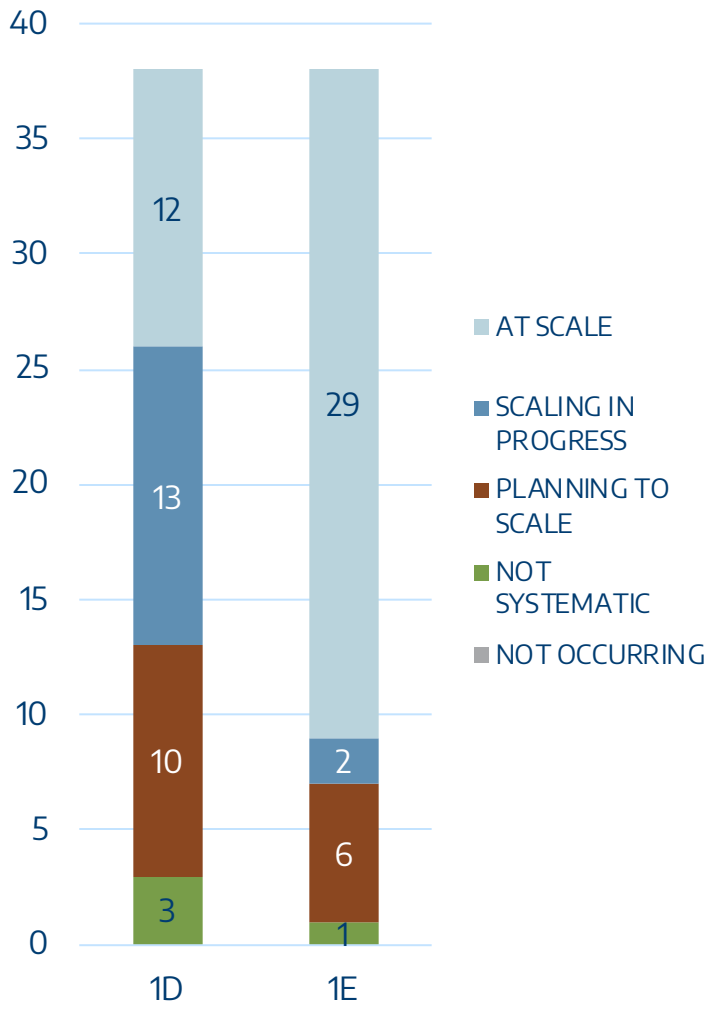
79% of colleges at scale and scaling

Practice 1A	Practice 1B	Practice 1C
Programs are organized and marketed in broad career-focused academic and communities or "meta-majors."	Every program is well designed to guide and prepare students to enter employment and further education in fields of importance to the college's service area.	Detailed information is provided on the college's website on the employment and further education opportunities targeted by each program.
• College marketing by meta-majors • Faculty mentors embedded in meta-majors • Students connected with career exploration in meta-major cohorts	• College programs aligned with high school endorsements and university programs • Connections with local industries to inform program planning • Career and future education advising for all students	• Websites designed to show meta-majors • Program pages include employment information and further education opportunities • Equity-informed website design: clear language, culturally aware

Pillar 1: Mapping Pathways to Student End Goals

Themes

82% of colleges at scale and scaling

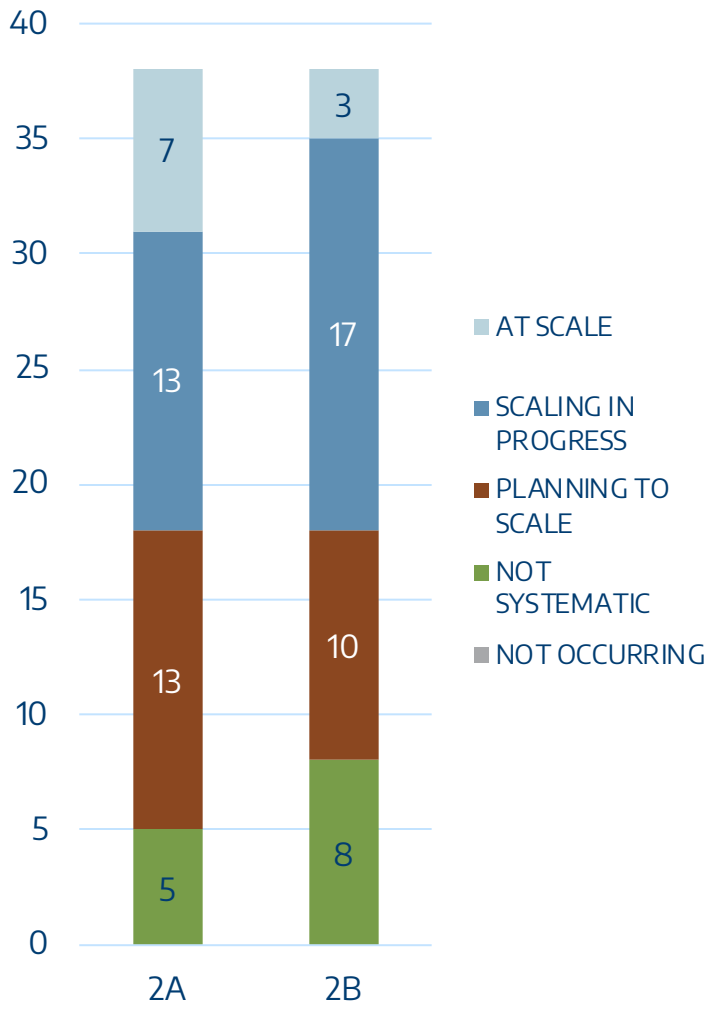


Practice 1D	Practice 1E
Programs are clearly mapped out for students. Students know which courses they should take and in what sequence. Courses critical for success in each program and other key progress milestones are clearly identified. All this information is easily accessible on the college's website.	Required math courses are appropriately aligned with the student's field of study.

• Evolved program maps include:
  • semester-by-semester sequences
  • Program-relevant courses
  • Appropriate math courses
  • Critical courses
  • Milestone courses
  • University partnerships
  • Career information
• Program maps are accessible
	• Math courses are aligned for academic and workforce pathways
	• Math supports are differentiated by pathway

Pillar 2: Helping Students Choose and Enter a Path

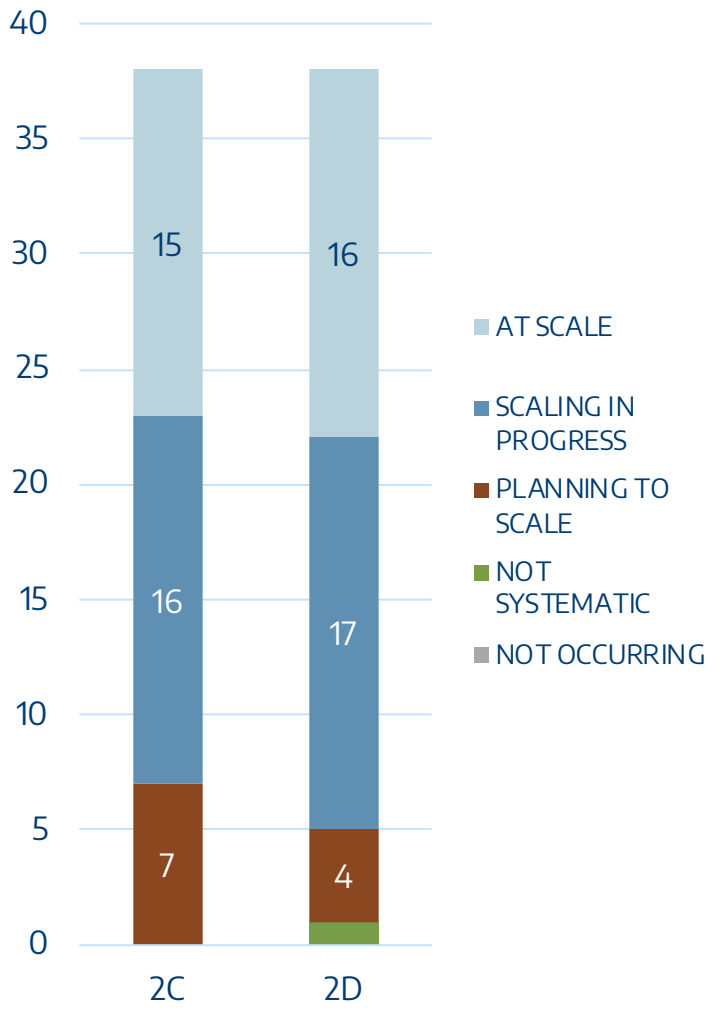
Themes



Practice 2A	Practice 2B
Every new student is helped to explore career/college options, choose a program of study, and develop a full program plan as soon as possible.	Special supports are provided to help academically underprepared students to succeed in the "gateway" courses for the college's major program areas.
• Meta-major aligned orientation is required – in person or virtually • Career exploration is available before and during admission & registration processes • The Learning Framework course reinforces meta-major and career exploration • Program planning is completed at the start of the experience.	• Bilingual team members to communicate with students and families • Easy access to supports for special populations: students from foster care, students experiencing housing/food insecurity, students of color • Proactive advising software • Faculty and advisor teams

Pillar 2: Helping Students Choose and Enter a Path

Themes



Practice 2C	Practice 2D
Special supports are provided to help academically underprepared students to succeed in the **program-relevant "gateway" math courses** by the end of their first year.	Special supports are provided to help academically underprepared students to succeed in the **"gateway" English courses** by the end of their first year.

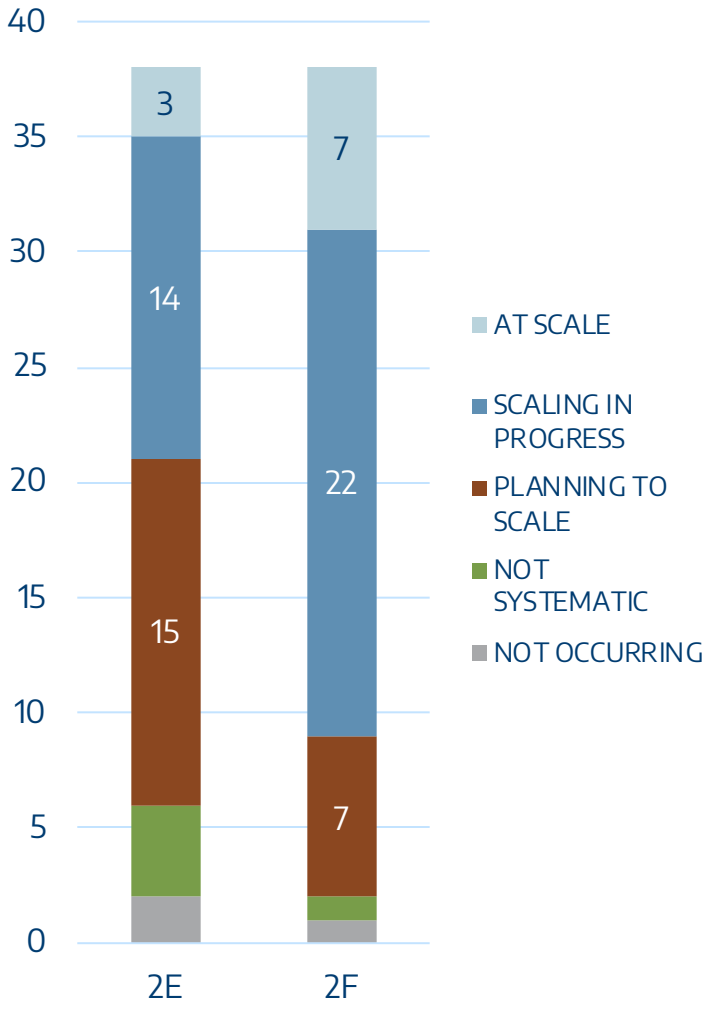
HB 2223 required that 75% of dev-ed education students be enrolled in corequisite support and most colleges met that goal.

- Corequisite courses by math pathway
- Student-centered support models
- Dev credit and NCBO support courses
- Wraparound supports with academics and advising

- Multiple course pairings with Composition I, Government, History, and Psychology
- Dev credit and NCBO support
- Writing-specific supports

Pillar 2: Helping Students Choose and Enter a Path

Themes



76% of colleges at scale and scaling

Practice 2E	Practice 2F
Intensive support is provided to help very poorly prepared students to succeed in college-level courses as soon as possible.	The college works with high schools and other feeders to motivate and prepare students to enter college-level coursework in a program of study when they enroll in college.

• Program pathways from Adult Ed to credit-bearing college programs with wrap-around supports
• CE micro-credentials embedded in credit-bearing college programs
• Credit articulation systems
	• Colleges reach back to middle and high school with:
	  • Visits to K-12 schools
	  • On-campus events for K-12 students
	  • Bilingual college and career advising services
	• Academic and workforce dual credit opportunities are aligned with high school endorsements and meta-majors

High School to College Pathways: Kilgore College

Students in dual credit workforce courses at two target high schools receive clear pathways, dedicated advising, and financial aid support to assist transition from high school to Kilgore College to complete a credential that will provide a living wage.

- With the support of philanthropy, Kilgore College employs a success coach dedicated to working with workforce dual credit students in two high schools with high enrollments of African American and Hispanic students.
- Programs are clearly mapped out for students and include connections to high school endorsements and dual credit courses. Students know which courses they should take and in what sequence. Courses critical for success in each program and other key progress milestones are clearly identified. All this information is easily accessible on the college's website.
- Every new college student is helped to explore career/college options, choose a program of study and develop a full-program plan as soon as possible. Advisors monitor which program every student is in and how far along the student is toward completing program requirements. Students can easily see how far they have come and what they need to do to complete their program.

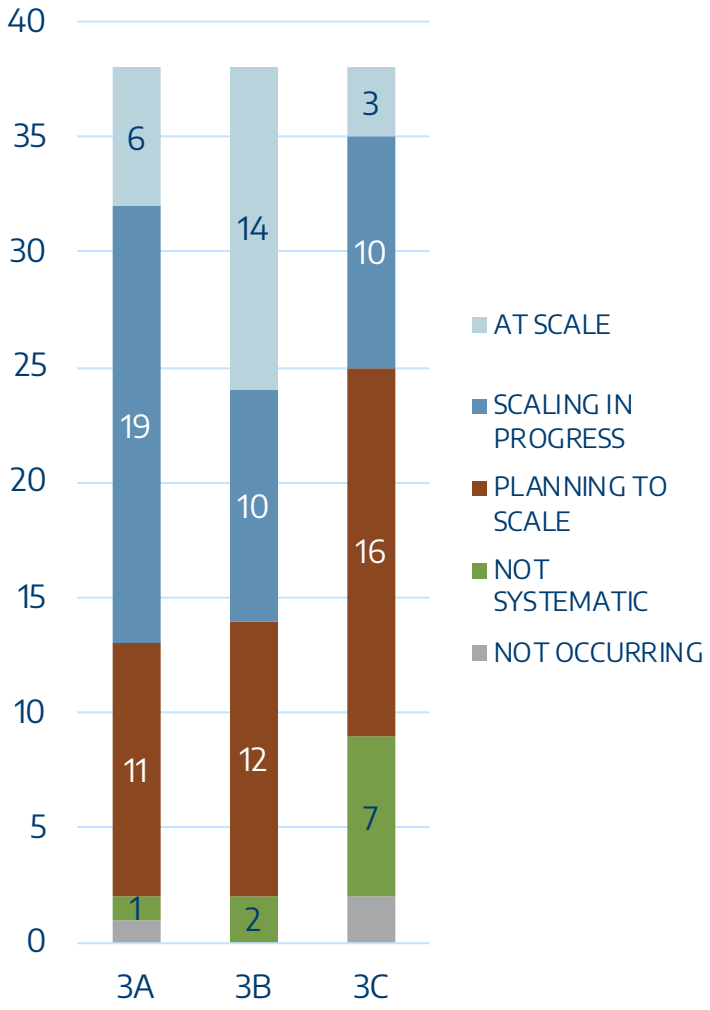
High School to College Pathways: Paris Junior College

All students will be enrolled in programs that are well designed to prepare them to enter employment and further education in fields of importance to the college's service area and every new students will be helped to explore career/college options, choose a program of study, and develop a full-program plan in their first semester.

- With the support of philanthropy, the college works with high schools to motivate and prepare students to enter college-level coursework in a program of study.
- Dual credit students are taking courses that will not count towards their degree. Out of the 27 students enrolled summer 2020, 26 of them had exceeded the 60 hours already due to taking dual credit hours that were not needed for the degree.
- Paris Junior College has fully implemented guided pathways at scale, including program maps with marketable skills and wage info. However, dual credit student have taken courses that will not apply towards their degree. Approximately 35% of enrollment is dual credit and historically too few high school students have kept on their path. The college will require all high school students to select a program map tied to their endorsement.

Pillar 3: Keeping Students on a Path

Themes

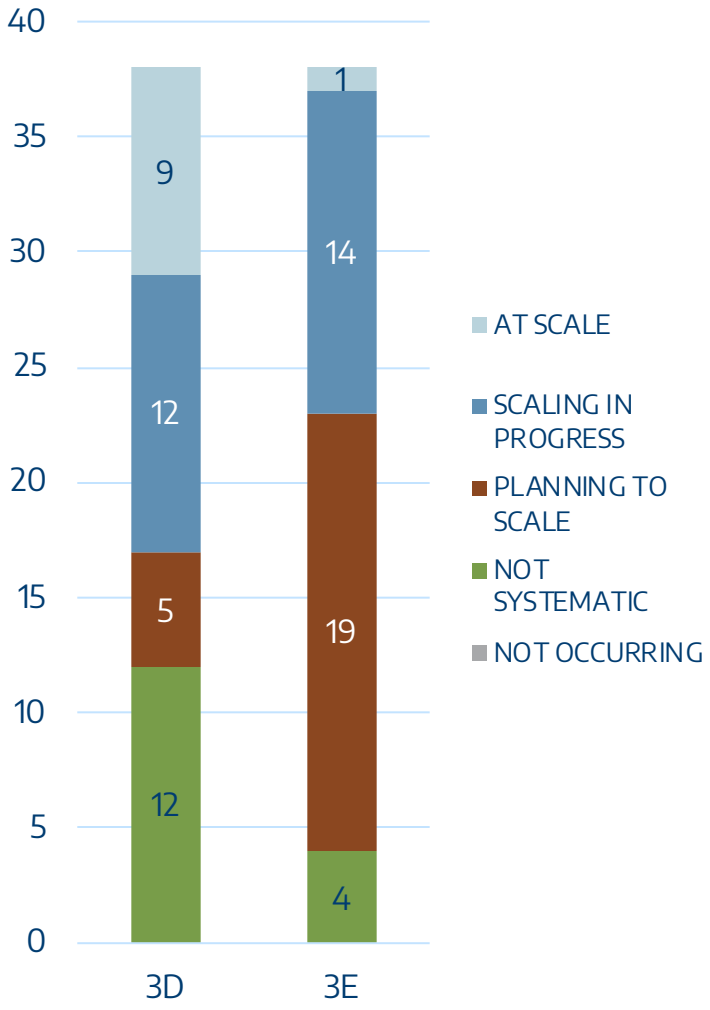


66% of colleges at scale and scaling

Practice 3A	Practice 3B	Practice 3C
Advisors monitor which program every student is in and how far along the student is toward completing the program requirements.	Students can easily see how far they have come and what they need to do to complete their program.	Advisors and students are alerted when students are at risk of falling off their program plans and have policies and supports in place to intervene in ways that help students get back on track.
• Caseload management • Advising coordination • Advisor professional development	• Online program planning software • Systematizing use of student planning	• Proactive advising • Alert coordination • Targeted outreach • Addressing student basic needs

Pillar 3: Keeping Students on a Path

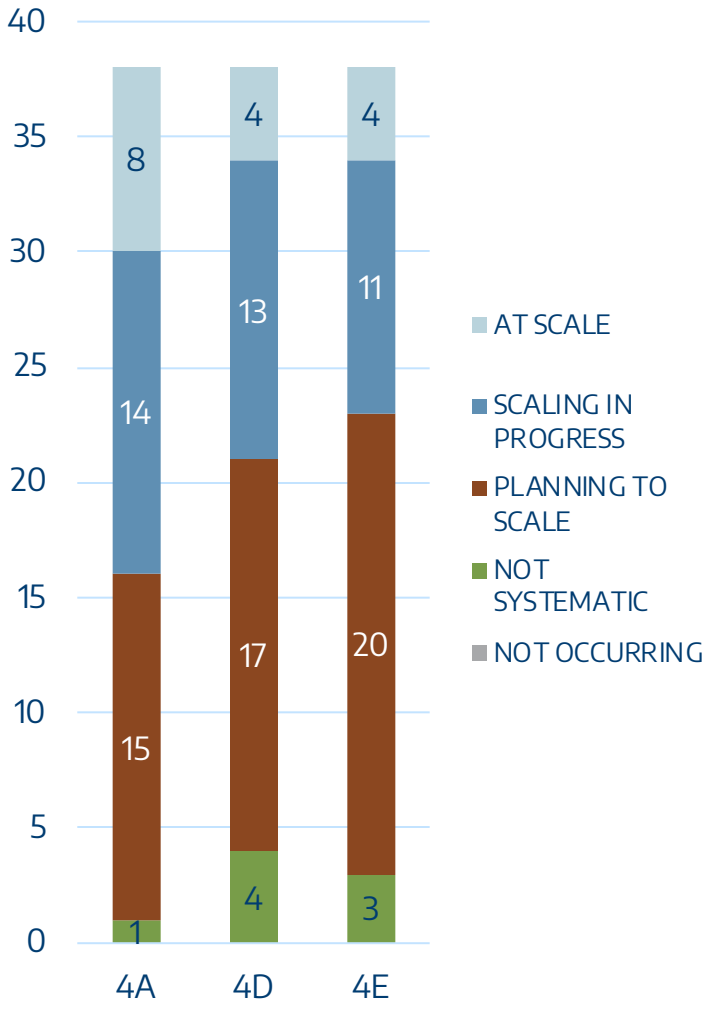
Themes



Practice 3D	Practice 3E
Assistance is provided to students who are unlikely to be accepted into limited-access programs, such as nursing or culinary arts, to redirect them to another more viable path to credentials and a career.	The college schedules courses to ensure students can take the courses they need when they need them, can plan their lives around school from one term to the next, and can complete their programs in as short a time as possible.
• Career and program advising • Meta-majors and coordinated program plans	• Student-informed schedule options • Utilizing technology to support proactive scheduling

Pillar 4: Ensuring Students are Learning

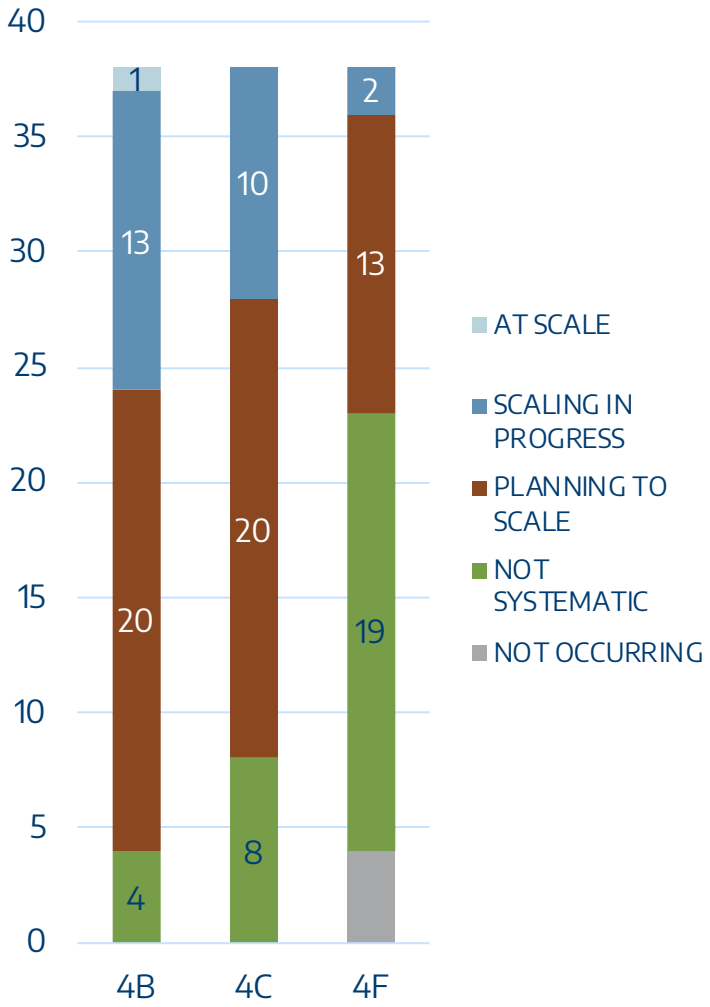
Themes



Practice 4A	Practice 4D	Practice 4E
Program learning outcomes (PLOs) are aligned with the requirements for success in the further education and employment outcomes targeted by each program.	Faculty/programs assess whether students are mastering learning outcomes and building skills across each program, in both arts and sciences and career/technical programs.	Results of learning outcomes assessments are used to improve teaching and learning through program review, professional development, and other intentional campus efforts.
• Interdisciplinary teams develop PLOs • PLOs define what students need to know and be able to do for future education and employment	• Extensive processes for program review (PLOs) and discipline assessment (SLOs) • Program planning based on those assessments.	• Systematized data-informed teaching and learning support

Pillar 4: Ensuring Students are Learning

Themes

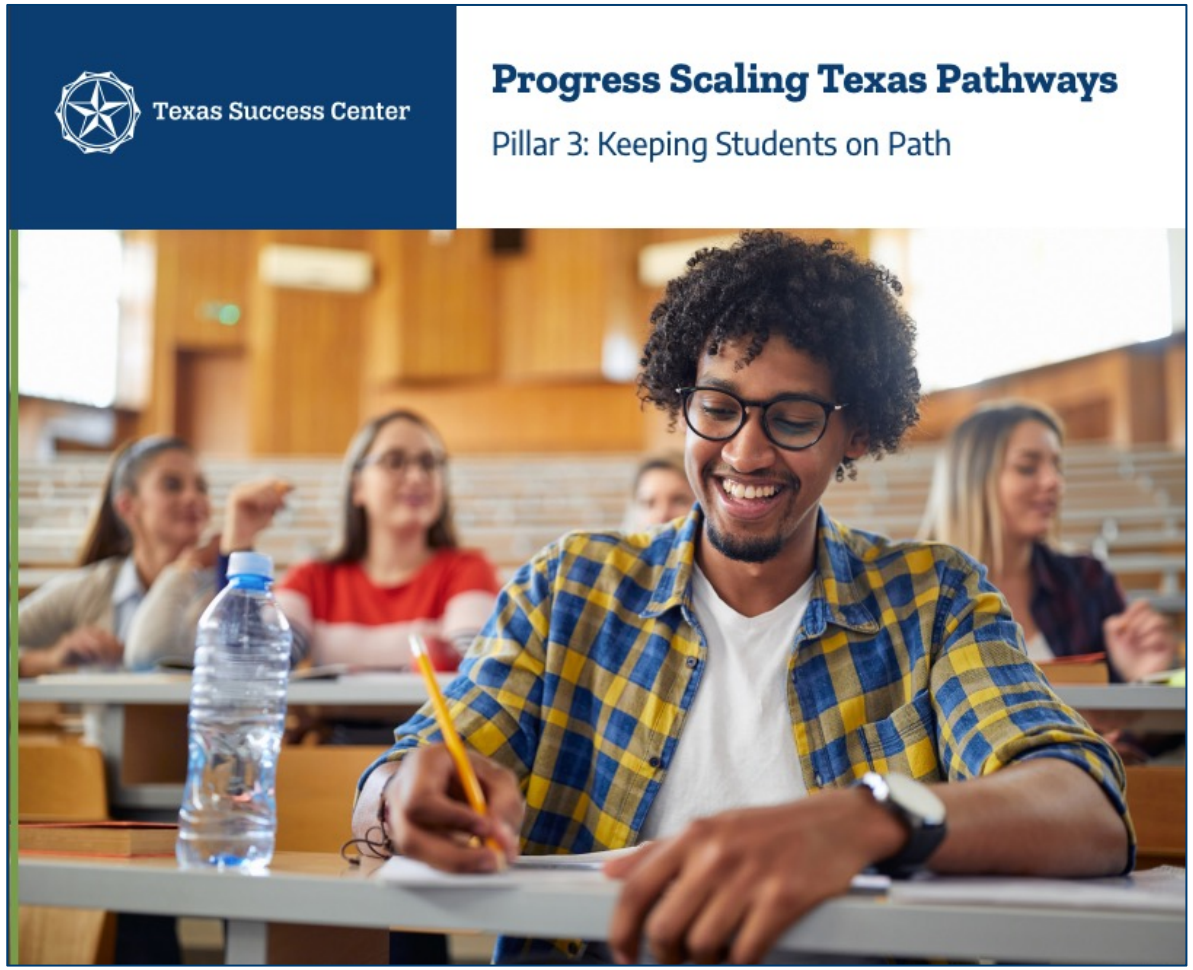


79% of colleges at scale and scaling

Practice 4B	Practice 4C	Practice 4F
Instruction across programs engages students in active and applied learning, encouraging them to think critically, solve meaningful problems, and work and communicate effectively with others.	Students have ample opportunity to apply and deepen knowledge and skills through projects, internships, co-ops, clinical placements, group projects outside of class, service learning, study abroad and other active learning activities that program faculty intentionally embed into coursework.	The college helps students document their learning for employers and universities through portfolios and other means beyond transcripts.
• High-impact practices for active and applied learning in all classrooms	• Growing internships, project-based learning, clinical placement, co-ops, service learning, and other active learning activities • Systematized access to these opportunities	• Transcripting experiences, micro-credentials, and skills

Progress Scaling Texas Pathways

Pillar 3: Keeping Students on Path



- Overview of progress by practice
- Implementation examples
- Recommendations for continued scaling

Texas Success Center

Are reforms impacting student success?

Are we closing achievement gaps?

Texas Success Center

Impact of Texas Pathways Strategy

More Students Are Meeting Early Momentum Milestones

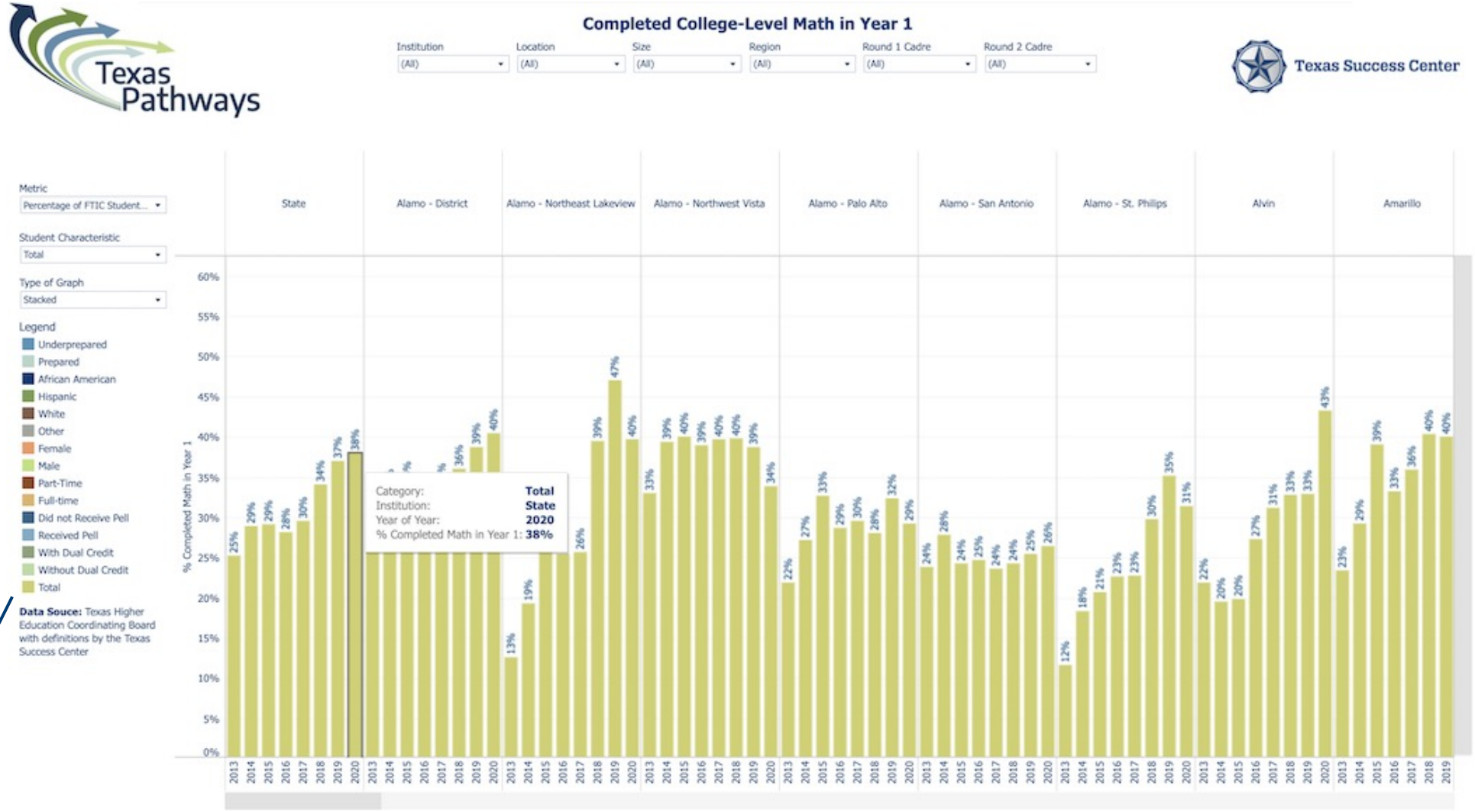
Percent of FTIC Students Attaining EMMs and Change from 2015-2020

	Early Momentum Metric	2015 %	2018 %	2020 %	Percentage Change 2015-2020	Percentage Point Difference 2015 - 2020
Enter	Earned 6+ credits in Term 1	58%	64%	65%	12%	+7%***
	Completed Math in Year 1	29%	34%	38%	30%	+9%***
	Completed Reading in Year 1	54%	59%	58%	8%	+4%***
	Completed Writing in Year 1	46%	53%	53%	15%	+7%***
	Completed All Subjects in Year 1	20%	25%	28%	39%	+8%***
Progress	Persisted from Term 1 to 2	76%	76%	72%	-5%	-4%***
	Earned 15+ credits in Year 1	44%	48%	50%	13%	+6%***
	Earned 30+ credits in Year 1	8%	9%	11%	40%	+3%***

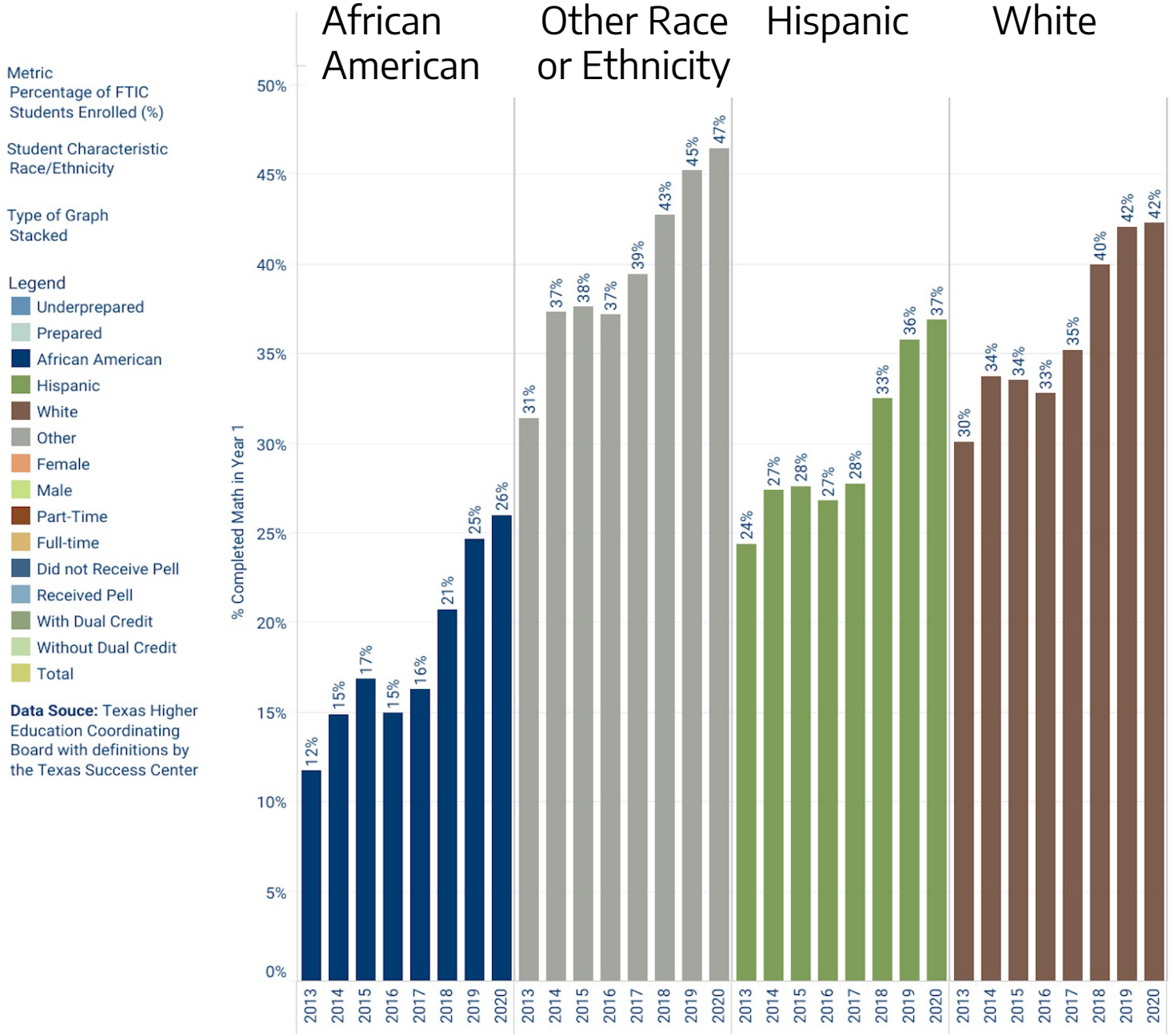
Note. *** $p < .001$, $N = 50$ community college districts

Key Performance Indicator Dashboards

Legend
- Underprepared
- Prepared
- African American
- Hispanic
- White
- Other
- Female
- Male
- Part-Time
- Full-time
- Did not Receive Pell
- Received Pell
- With Dual Credit
- Without Dual Credit
- Total



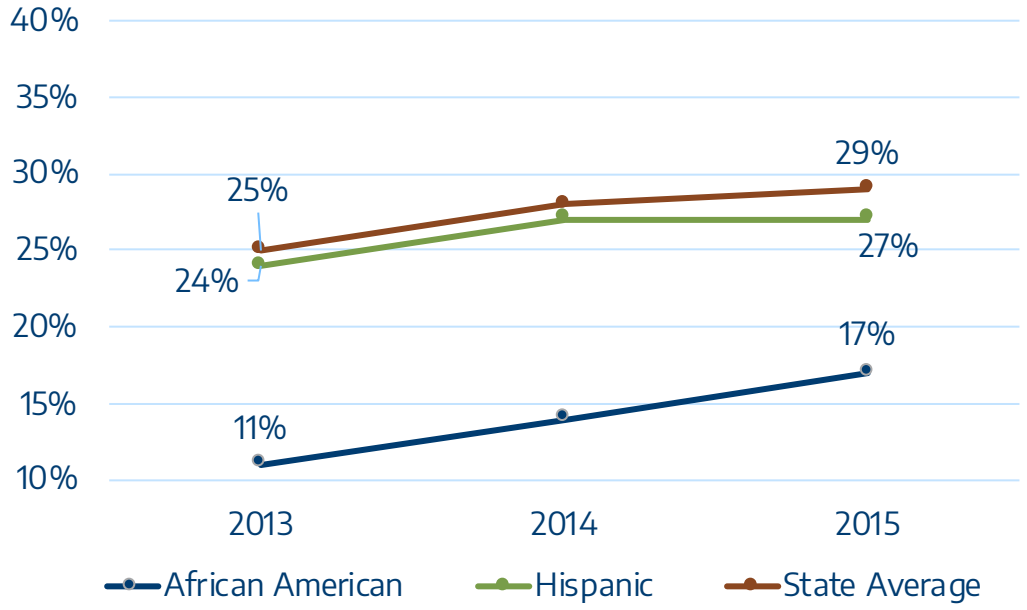
More students are **completing college math** in the first year.



Closing the Gaps in College Math

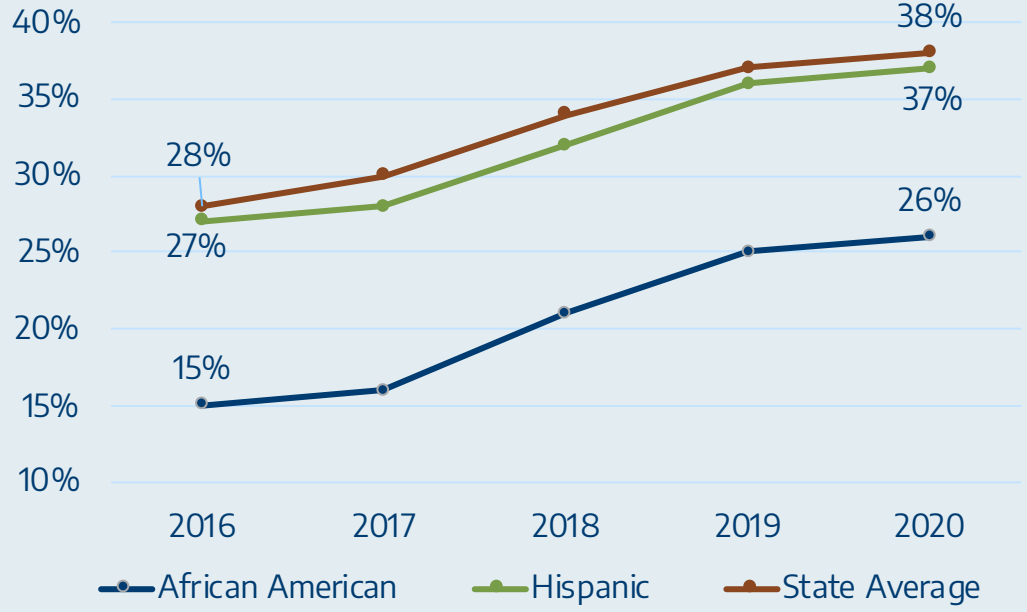
Growth rates in completion of math in the first year have accelerated for African American and Hispanic students since Texas Pathways.

Before Texas Pathways



	African American	Hispanic	State Average
Annual Change	2.7% per year	1.8% per year	2.2% per year
Percentage Point Change	55%	13%	16%

Since Texas Pathways



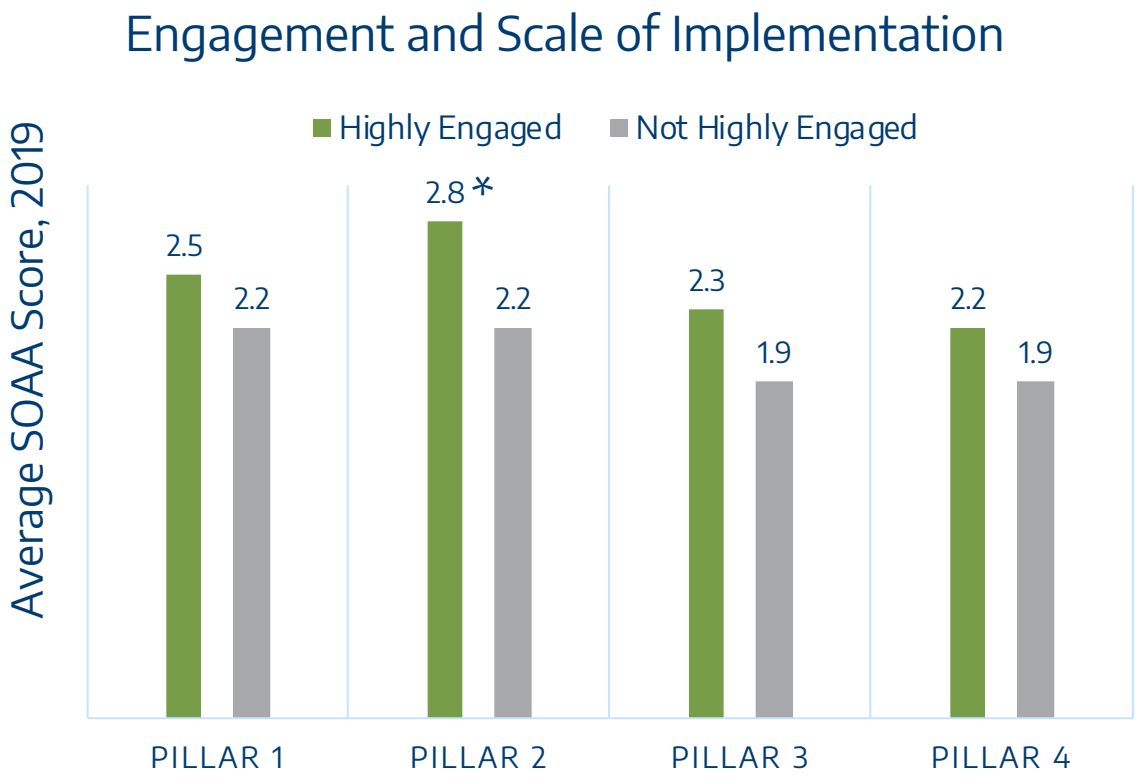
	African American	Hispanic	State Average
Annual Change	3.4% per year	3.3% per year	3.1% per year
Percentage Point Change	73%	37%	36%

Are colleges who are making the most progress in scaling pathways seeing greater improvements in student success?

Texas Success Center

Engagement and Implementation

Colleges that were classified as **highly engaged** had higher **Pillar 2 scores**



Note. * indicates significant difference at p<.05

Attendance and KPIs

Institute **attendance** was a strong predictor of growth in **reading and math**

100% Attendance

63% of students complete reading

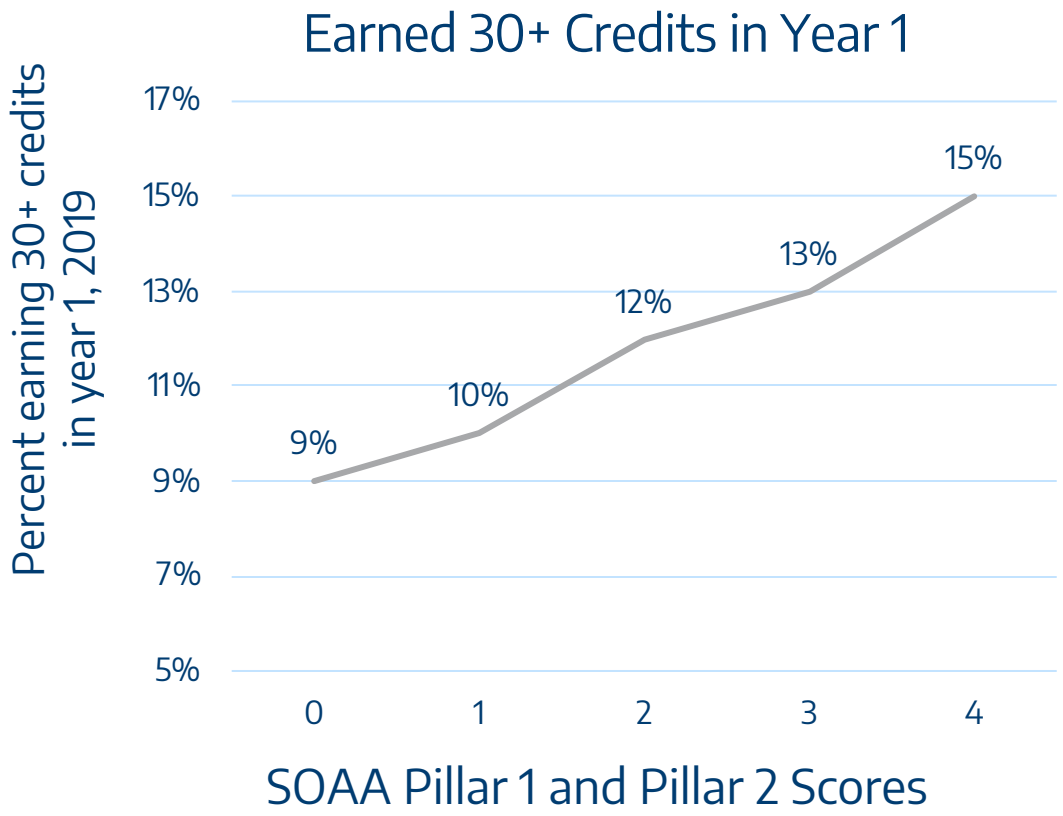
40% Attendance

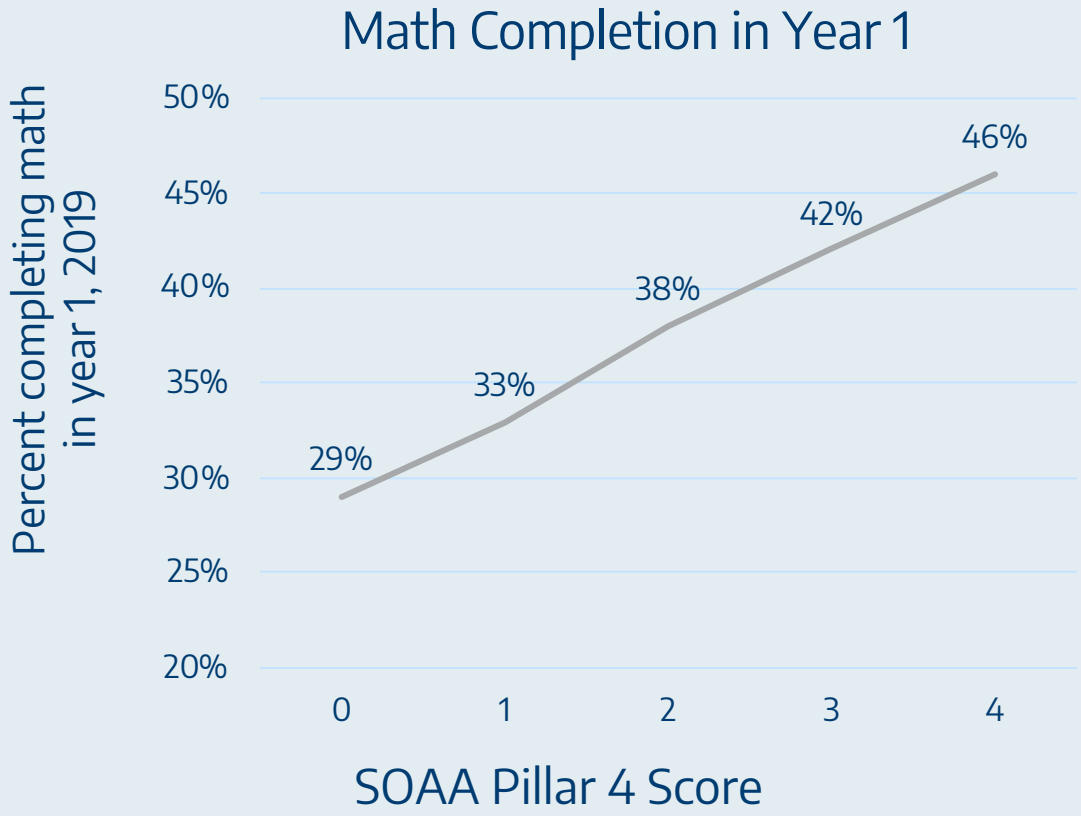
49% of students complete reading

Implementation and KPIs

Scaling **program maps and onboarding practices** associated with higher levels of **30+ credit attainment** in the first year.

Scaling **teaching and learning practices** associated with higher levels of **math completions** in the first year.





Note. These percentages are estimates from a linear model where the 2019 KPI was predicted with the 2015 KPI, percentage of institute attendance, and demographic variables (percent part time, African American, White, Hispanic, Male, prepared for college and an indicator of being in Cadre 1).

Thank You!

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