# Pillar 1: Mapping Pathways to Student End Goals

1A. Programs are organized and marketed in broad career-focused academic and workforce communities or "meta-majors."

Colleges made significant progress scaling the use of meta-majors to organize programs based on student end goals. Meta-majors took on different titles based on the college, such as Pathways, Areas of Study, Communities, Schools Of, Institutes, Career Clusters, Career Pathways, and Divisions. Of the colleges that reported, 93% were scaling or at scale with the use of meta-majors (Figure 1).

Figure 1. Number of colleges at each level of scale in Practice 1A.
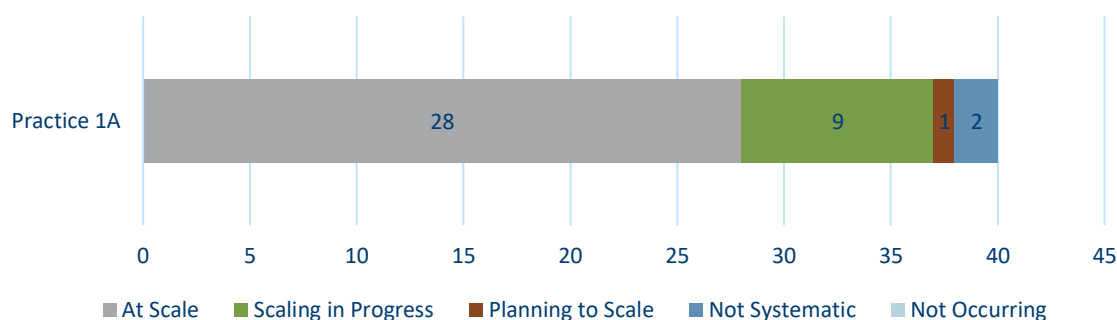
Meta-Majors for Student Guidance. Many colleges organized the student experience by meta-major, providing onboarding and advising support aligned with the student's meta-major choice. Colleges created meta-majors that allowed for some exploration of programs at the start of the student experience without loss of credit.

- Several colleges including **Alvin Community College**, **College of the Mainland**, and **Lamar State College Orange** organized college practices around their meta-majors. From the start of the onboarding experience, students are helped to select a meta-major using career assessments and then matched with a meta-major advisor to guide them through completion. These efforts at **Temple College** resulted in a new building designed around meta-majors so that when a student enters, they can see a front staff person and department chair for every program in one place.
- Several colleges, including **McLennan Community College**, **North Central Texas College**, and **Victoria College**, designed meta-majors to include a course sequence that applies to all programs until students opt for a specific certificate and/or degree option.
- Colleges like **Odessa College** and **Vernon College** reached out to their communities to gather feedback on the college. **Odessa College** named their meta-majors "Schools Of" so their offerings made sense to their community members. **Vernon College** used survey information to combine every program, credit and continuing education (CE), into cohesive pathways since students want to pick options based on their career interests and not the designation of the program.
- Colleges such as **Amarillo College**, **Panola College**, **San Jacinto College**, and **Texarkana College** used meta-major processes to improve the dual credit experience, aligning high school endorsements with college pathways to ensure students can select a program quickly.
- Meta-major processes helped colleges like **Angelina College, Del Mar College, Panola College**, and **Temple College** to break down of silos between student affairs and instruction as both sides gained a

clearer understanding of the intended student experience in each program through the process of creating meta-majors.

- Many colleges are intentionally building CE pathways within their meta-majors. **Austin Community College**, **Coastal Bend College**, **Dallas College**, **Del Mar College, McLennan Community College**, **Paris Junior College**, and **San Jacinto College** are working to align micro-credentials into their meta-majors by aligning courses and creating seamless student transitions from CE to credit programs.

Marketing. Most colleges market their offerings to prospective students, current students, families, and the community based on meta-majors.

- Several colleges like **Alvin Community College**, **Texas Southmost College**, **Tyler Junior College**, and **Victoria College** created branding for meta-majors that is standardized across print and media.
- **Amarillo Colleges** use "Communities" marketing for recruiting during the [Success 360](#) at the Civic Center where programs showcase themselves to high school students and at New Student Orientation (NSO) [Badger Beginnings](#) where students can talk to faculty in their Community. The college collects data about "Communities" to understand student choice and success.
- **Central Texas College** continuously updates the "[Explore Academic Programs](#)" webpage, organized by meta-majors called "Clusters." The webpage contains videos, career information, potential earnings, pathway maps including stackable degrees/certificates, certificate/degree maps laid out by semester, course information, contact information, and more. The college overhauled NSO to include interactive "Cluster" presentations where students can connect with faculty in their field of interest.
- **El Paso Community College** utilizes meta-major groups, called "Areas of Study," to review programs and plan student experience interventions. The "Areas of Study" webpage receives a considerable number of online clicks and views/website traffic.
- **Laredo College** provides "Career Pathways" guides on the website. The workforce development center meets with students who are undecided and provide a skills inventory assessment to connect students to "Career Pathways."
- At **Lee College**, all "Pathways" are clearly displayed on the college website. The college has developed opportunities for students to feel connected to their "Pathway" as each has its own color, lanyards, t-shirts, and a Pathways Fair to connect students and faculty to create a sense of belonging.
- At **Southwest Texas Junior College**, creating meta-majors called "Career and Academic Pathways" (CAPS), provided more information to train Success Coaches to support students effectively by pathway. Additionally, the college communicates opportunities such as scholarships, jobs, career fairs, employers that align with the CAPS to expand opportunities for students.
- **Tarrant County College** organized all programs into five meta-majors, called "Pathways." The program pages in the Catalog are linked to student-facing webpages and the CE catalog was updated to organize programs by Pathway.

Pillar 1: Mapping Pathways to Student End Goals

1B. Every program is well designed to guide and prepare students to enter employment and further education in fields of economic importance to the college's service area.

Colleges made significant progress scaling the development of programs aligned with student employment and further education goals. Of the colleges that reported, 90% were scaling or at scale with the use of well-designed programs (Figure 2).

Figure 2. Number of colleges at each level of scale in Practice 1B.
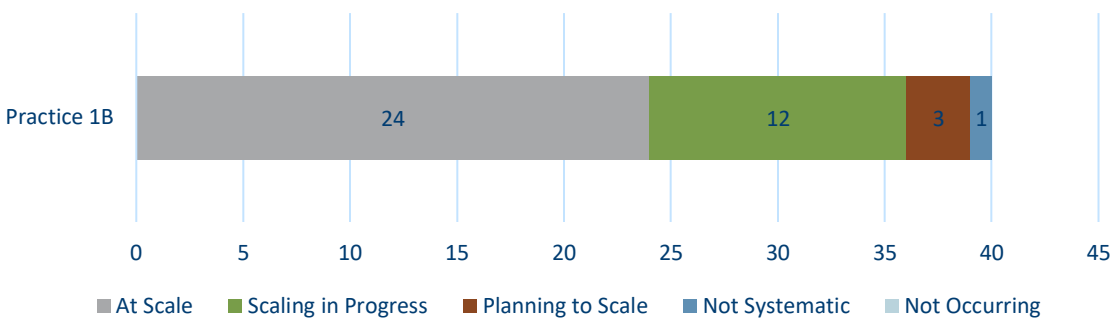
Program Map Development Processes. Most colleges have taken a team approach to building and refining program maps.

- At **Blinn** College, each program has curriculum resource team that recommends a set of courses that is approved by leadership to ensure alignment.
- **North Central Texas College** used a team approach to develop program maps, starting with a meeting of all the division chairs to review meta-majors, called "Pathways," and then to develop program maps that allowed students to make progress on the Pathway before specializing into a specific program.
- At **Panola College**, faculty discussions led to the development of program maps. Faculty involved universities to make sure students were prepared for transfer and all courses applied to the baccalaureate degree.
- **Paris Junior College** used faculty input to adjust program maps to strategically place restrictive courses to make the maps more accessible to the students and easier for students to commit to completion.
- **Odessa College** conducted expansive program reviews that included post-graduate outcomes to refine program maps.
- At **San Jacinto College**, program mapping has a very robust workflow from program lead to program team, on to the dean for approval, and to an advisor to make sure the core is complete and that the program is completed in 60 hours. Included in this process is alignment with articulation agreements to tie maps specifically from program to program.
- **Texas Southmost College** engages faculty through curriculum and instruction processes to design program maps. The maps provide information from dual credit through transfer and informs MOU conversations with transfer partners.

Transfer. Many colleges use meta-majors and program mapping to smooth transfer processes for students.

- Colleges are designing transfer guides to ensure students understand the pathway to a baccalaureate degree. At **Alamo Colleges**, all programs are organized and marketed by six broad academic categories, called "Institutes" that have Transfer Advising Guides (TAGs) to present all program requirements. **Lee College** researched their top transfer programs and made transfer plans available to students online. **Vernon College** also developed transfer guides to help students understand how their credits would transfer seamlessly. **Southwest Texas Junior College** added Field of Study information to academic program maps to ensure transfer of the course block.
- Many colleges like **Amarillo College, Paris Junior College, Ranger College, San Jacinto College,** and **Victoria College** have prioritized communications with four-year partners to ensure smooth transfer and applicability of credit. **Amarillo College** meets twice a year with West Texas A&M University. **Victoria College** designed a council with University of Houston Victoria to build program maps with courses that transferred and applied so students had a map for the full baccalaureate degree. **Ranger College** built AAT program to meet the specific needs of partner universities that allow students to complete their teaching degree in three years. **San Jacinto College** brought stakeholders from the University of Houston Clear Lake to understand and smooth out transfer processes.
- Several colleges, including **Alvin Community College**, **Howard College**, **Houston Community College, Lamar State College Orange, Ranger College, San Jacinto College, Tyler Junior College**, and **Wharton County Junior College**, ensure their program maps align with transfer partner institutions and that this information is available to students online.

Industry. Colleges have meaningful partnerships with local business and industry that inform program mapping to ensure that their programs are aligned with the needs of their service area.

- **Dallas College** has taken an intentional approach to consolidate programs and ensure they are aligned with fields of economic importance. **El Paso Community College** ensures their programs are well aligned and marketed. Career and Technical Education (CTE) and Health Professions program directors at **Howard College** evaluate programs to ensure that they are leading to jobs with sustainable wages and are based on industry needs in the service area. **Temple College** uses labor market data to ensure programs lead to in-demand jobs.
- Several colleges, such as **Alamo Colleges, Angelina College, Del Mar College, Houston Community College, Kilgore College, North Central Texas College**, and **Southwest Texas Junior College** added micro credentials and certificate programs based on local workforce needs. In some cases, colleges leveraged TRUE grants to stand up programs.
- **Coastal Bend College** leverages its Workforce Solutions and/or AEL partnership to bring students from all over the state into CE courses to better serve its rural population.
- Some colleges have created partnerships with industry to stand up new programs. **Grayson College** partnered with Texas Instruments to create a new Electrical Engineering Technology AAS degree and certificates to provide trained employees for TI semiconductor fabrication plants. The Continuing Studies department at **Tyler Junior College** department created new partnerships with local businesses (such as Brookshires) to provide specific training in their region.
- Many colleges, like **Vernon College** and **Wharton County Junior College**, conduct an annual review of employability and local demand for CE and CTE programs with individual advisory committees.

Pillar 1: Mapping Pathways to Student End Goals

1C. Detailed information is provided on the college's website on the employment and further education opportunities targeted by each program.

Colleges made significant progress redesigning website to include useful information for students intending to transfer and for students intending on entering the workforce. Of the colleges that reported, 78% were scaling or at scale with the use of employment and further education on the website (Figure 3).

Figure 3. Number of colleges at each level of scale in Practice 1C.
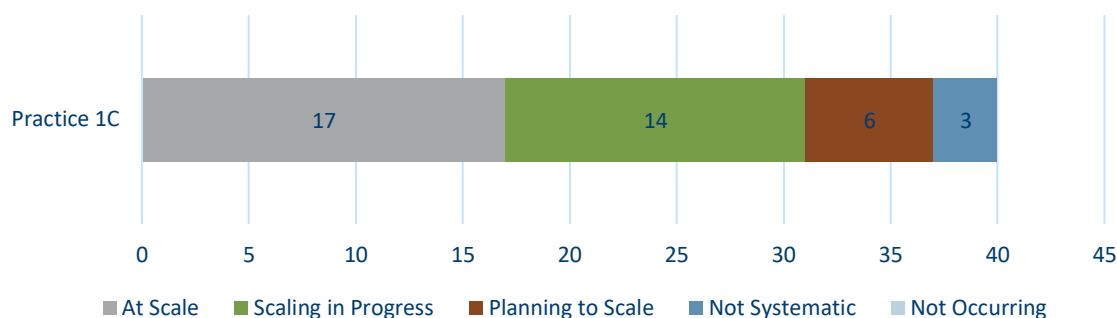
Website Redesign Progress. Most colleges have undertaken the process of redesigning their websites to align with guided pathways. Colleges are ensuring that students and the community have access to guided pathways information on the website. Many colleges redesigned websites to have pathways information front and center.

- **Central Texas College** continues to update the "Explore Programs" webpage which contains videos, career information, potential earnings, pathway maps including stackable degrees/certificates, certificate/degree maps laid out by semester, course information, contact information, and more**. Dallas College** has been intentional about ensuring pertinent information is provided on the website by pathway; this standard practice has received kudos form student and non-student consumers. Programs are marketed on the **Houston Community College** website on each program page, which displays areas of study, number employed by program, annual job openings, annual median salary, and Marketable Skills. The **Southwest Texas Junior College** website is organized by pathway, which includes a link to the students to success coach and visuals that enhance the students' sense of belonging. **Victoria College** redesigned the website to be by pathways so students can have easy access to program information and advisor information by pathway.
- The **North Central Texas College** website was overhauled by emphasizing Pathways on its landing page, improving navigation features, ensuring academic programs showed transfer information, and workforce programs showed career outlooks. **Odessa College** ensured that educational pathways were two clicks from the home page and that courses were listed in sequential order and paired for rigor and relevance. **Paris Junior College** placed programs on the main page of the college website. **Tarrant County College** redesigned the website around Pathways so that when a student comes to explore, they first choose a pathway, then look at the programs in that pathway. **Vernon College's** website is organized by Pathway so that all academic, CTE, and CE programs have information pertaining to the degree, length, location, when it is offered, and why a student should choose the path.

- Several colleges, such as **Lamar State College Orange, Laredo College, Texarkana College,** and **Tyler Junior College** noted that they changed their Catalogs to search by meta-major, pathways, or program.
- Some colleges are in the process of standing up new websites. **Temple College** invested in a new URL for the college website that will be designed with the student in mind. **Texas Southmost College** is rolling out a new website that will have consistency across programs with current information for students, advisors, and the community on program requirements. **Wharton County Junior College** hired a website designer that asked the public for feedback; the new website will include programs organized by meta-major.

Transfer Guides and Labor Market Information. Colleges have ensured that students have access to transfer and labor market information by program and meta-major.

- **Alamo Colleges** ensures TAGs are up to date on the website. **Alvin Community College** includes all articulation agreements, which students can search by pathway or by transfer partner. **Blinn College** ensured its robust transfer partnerships were reflected on the website that allows students to search by discipline or institution. Students at **Houston Community College** can access transfer information for Houston GPS from the website. All pathways and concentrations are clearly displayed on the **Lee College** website and include information about transfer and links to earning potentials.
- **Amarillo College** leveraged internal data teams to expand the Decision Analytics and Institutional Research (DAIR) Dashboard to include information on Labor Market Demand and Labor Market Outcomes by program.
- Many colleges are ensuring students have accurate information about earning potential by program. **Alvin Community College, Austin Community College, Grayson College, Houston Community College, Howard College, McLennan Community College, Tyler Junior College, Victoria College**, and **Weatherford College** have contracted with labor market information (LMI) providers to embed LMI on program and college webpages. These colleges ensure students have this information for transfer, CTE, and CE Programs.

Accessibility. Many colleges are focused on ensuring the website is accessible and user-friendly for students and families new to higher education.

- Several colleges, including **Dallas College, Temple College, Vernon College**, and **Victoria College** asked students in classrooms and in focus groups how to best design and present information on the website, with a particular focus on adult learners.
- During Pathways advising sessions at **Houston Community College**, students and parents are assisted in the use of the program maps and how to make sense of all the information.
- **Kilgore College** created a parent webpage to help parents learn how to use the website and how to look at careers.
- **McLennan Community College** uses diagrams and pictorial icons to help guide students and parents on our website and in our paperwork. The college is working on Spanish translations for Hispanic families and are in a yearlong training to help front counter personnel work with Spanish speakers.
- **Weatherford College** created a community-based website with links for disability services, how-to videos for dual credit students, instructional videos for current students, and an online application.

Pillar 1: Mapping Pathways to Student End Goals

1D. Programs are clearly mapped out with clear guidance for students on which courses to take and in what sequence. Critical courses for program success and other key progress milestones are clearly identified. All info is easily accessible on the website.

Colleges made significant progress redesigning and refining program maps to include important information to students. Of the colleges that reported, 95% were scaling or at scale with the use of informative program maps for academic and workforce programs (Figure 4).

Figure 4. Number of colleges at each level of scale in Practice 1D.
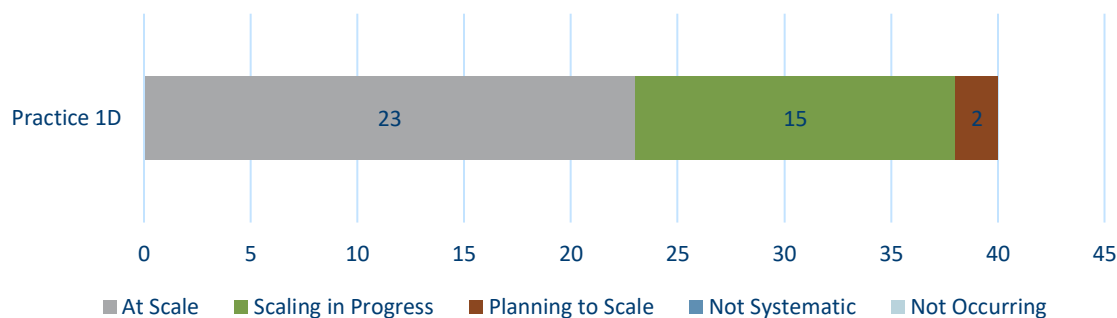
Program map components. Most colleges have mapped programs to align with student end goals and have created accessible program maps for student use.

- The **Alamo Colleges** TAGs list courses in sequence by term, detail the milestone courses and the courses with prerequisites or grade requirements.
- **Austin Community College** program maps include course sequences with wage data. Where available, pathways into credit courses are provided for CE programs.
- **Blinn College** ensured program maps include curricula aligned with industry recommendations to offer programs that lead to credentials in high-demand fields.
- **Coastal Bend College** program maps guide students with course sequencing needed to get their certificate or degree, including student and advisor notes, important touch points during the semesters. capstones, milestones, and other experiential learning opportunities.
- **Del Mar College** added Continuing Education Workforce Skills Awards to the website, targeting programs with the potential for stackable credentials into credit pathways.
- All program maps at **El Paso Community College** have been streamlined, edited, and redesigned with the end users, students, in mind. Courses critical for student progress, progress milestones, Marketable Skills, and "Things to Know" are clearly delineated for students. Program maps have been aligned and uploaded into Degree Works so students, faculty, and advisors can easily access and monitor their progression to degree completion.

- At **Grayson College**, all degrees and certificates have clear course sequences in the Student Planner and Catalog. All AAS degrees have the stackable credentials listed as sub awards for each area of study.
- On every program's homepage at **Houston Community College**, students see the Program Learning Outcomes, and click on the link to the Catalog, where they will find every award plan which includes the sequence of the learning/courses, including any pre-requisites and capstone courses.
- **Angelina College, Frank Phillips College**, and **Kilgore College** review program maps regularly to improve usability for students.
- At **Lee College**, all pathways and concentrations are clearly displayed on the college website with courses sequenced into three milestones. Stackable credentials, such as Level 1 and Level 2 certificates, are embedded in AAS degrees.
- All academic and workforce programs at **McLennan Community College** have a defined sequence of course that are available to all students, including dual credit students, on the website. Academic degrees include mapping of course sequencing required for baccalaureate degrees offered by 4-year partner institutions. Fully online degree course sequencing is aligned to the 4-year fully online degrees. Micro-credential options have been expanded to include credential/certificate sequences and stackability with certificate and degrees.
- The programs at **Frank Phillips College**, **Laredo College**, **Midland College**, **Odessa College**, **Tarrant County College**, **Tyler Junior College**, **Victoria College**, **Weatherford College**, and **Wharton County Junior College** are mapped with clear guidance for students on which courses to take and in what sequence.
- At **North Central Texas College**, academic pathways are clearly articulated, mapped, and accessible to students on the college website and used as guidelines during students' one-on-one meetings with their academic advisors to register for courses. All workforce programs are clearly mapped out on the college's website so students can easily visualize the pathway for moving from certificate to degree.

Next Steps for Program Maps. Program mapping is an ongoing and evolving process.
- **Alamo Colleges** is having conversations around strategic research based on faculty success rates to inform the improvement of TAGs.
- **Alvin Community College** continues to work with its partnering districts to create program maps for dual credit technical certificate programs; and AA in General Studies degrees with varied focuses and field of studies according to the student's desired major.
- **Amarillo College** is adopting EduNav software to replace the Student Planning program to help students see the sequence of their courses for the fastest time to completion.
- **Dallas College** is integrating technology to make pathways more accessible for students and to examine how to best align TRUE pathways in CE to Credit programs to clarify how a student can make progress along the pathway.
- **Houston Community College** has proposed to map specific articulated pathways from continuing education to associate degree program preparation or baccalaureate degree program preparation which will prepare students to build the skills, knowledge, and qualifications that they will need to enter an associate's degree program or bachelor's degree program.
- **Howard College** reworked program Pathways to accommodate the 8-week course model. The college is working on making the maps user-friendly.
- **Vernon College** is leveraging the implementation of Colleague to conduct research on course and program completion using additional planning and progress tools.

Pillar 1: Mapping Pathways to Student End Goals

1E. Required math courses are appropriately aligned with the student's meta-major or field of study.

Math pathways have been implemented at scale or nearly at scale at all colleges so that all students take the appropriate math aligned with their end goals. Of the colleges that reported, 100% were scaling or at scale with the use of informative program maps for academic and workforce programs (Figure 5).

Figure 5. Number of colleges at each level of scale in Practice 1E.
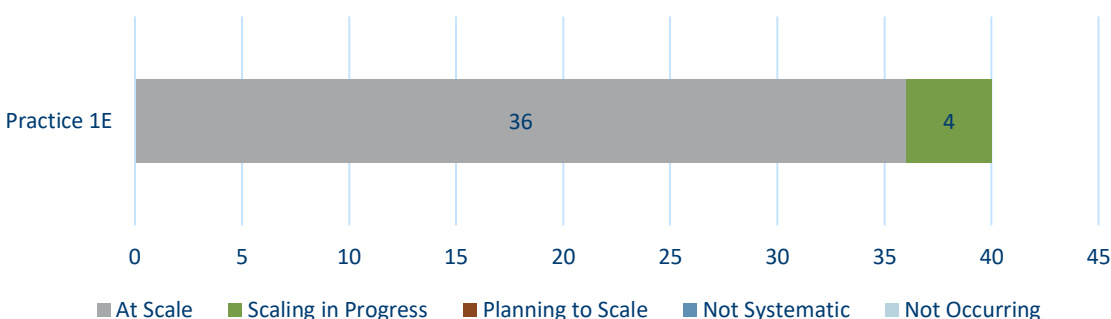
Processes. Colleges have undertaken several approaches to designing math pathways.

- Many colleges, including **Alamo Colleges, Austin Community College, Central Texas College, Houston Community College, McLennan Community College, Southwest Texas Junior College, Texas Southmost College,** and **Wharton County Junior College** leveraged partnerships with their transfer partners to align math pathways to ensure students were prepared to succeed and articulate credit. In some cases, this work required the community college partner to educate and inform the university partner on the importance of math pathways.
- Faculty at many colleges determine the correct math pathways for programs. Department chairs and faculty champions played an important role in designing math pathways at **Alvin Community College, Blinn College, Clarendon College, Coastal Bend College, Dallas College, Del Mar College, Howard College, Midland College, Temple College,** and **Vernon College**. These faculty champions often educate advisors and students on placement and the value of math pathways in the college and in partnering high schools.
- Some colleges worked with external partners to scale math pathways. **Lee College** was involved in a T.L.L. Temple Foundation grant to work on scaling math pathways alongside Texas Pathways. As part of this project, the college fought against the cultural expectation that everyone knows what College Algebra is and everyone thinks they need to take it. Their work started changing the narrative in high school and junior high, with a focus on educating parents and families.
- Other colleges, like **Temple College, Texarkana College**, and **Victoria College** worked with the Dana Center at the University of Texas at Austin on early implementation of math pathways and the design of corequisite math supports.

- **El Paso Community College** offered a "speed dating" session to have all programs talk to the math department. Program leads came away with a better understanding of what students could expect to learn in each type of math course.
- **Weatherford College** conducted in-depth training with advisors, administrators, faculty, and the math department to ensure everyone understood math pathways.

Alignment. Colleges are ensuring that math is aligned for all programs.
- All colleges have aligned math courses to programs and meta-majors to better prepare students for their end goals. **El Paso Community College, Grayson College, Howard College, Lee College, Lamar State College Orange, McLennan Community College, North Central Texas College, Ranger College, Paris Junior College**, and **Texas Southmost College** have ensured math is aligned with programs and that students have access to the information in advising sessions and online.
- Several colleges, including **Alvin Community College** and **Kilgore College**, offer four math pathways aligned with entry-level courses in Quantitative Reasoning (MATH 1332), Statistics (MATH 1342), Math for Business (MATH 1324), and College Algebra (MATH 1314). **Alvin Community College** decided to add a contact hour to MATH 1414 to STEM majors; transfer partners provided feedback that this change has resulted in well-prepared students.
- Some colleges, including **Laredo College, Odessa College**, and **Tarrant County College** aligned preparatory and corequisite support courses for STEM and non-STEM students.
- Several colleges have ensured that workforce programs include the appropriate technical math course. For example. the math component of all CTE programs at **Coastal Bend College** has been realigned designating a degree specific math and/or science class best suited for that program's end goal/career.
- Some colleges have aligned math with high school requirements. For example, at **Lee College**, high school endorsements are aligned to college pathways and indicate appropriate math courses for dual credit students. Workshops are being held to help both college and high school faculty and counselors to educate them on appropriate math course selection.

Outcomes. Colleges are collecting and analyzing data on math pathways.
- **North Central Texas College** noticed that students testing at a certain level in math had different outcomes in math courses at the college. The college dug deeper into the data and conducted follow-up research to see how different courses and options were working and used this information to make changes to better serve students in math.
- The Math R&D group at **San Jacinto College** is composed of math professors and department chairs from across the district to discuss current trends in math courses. The work of the group includes evaluating course offerings and math placement tests to ensure the students are placed in the appropriate course.
- At **Vernon College**, the math division is constantly reviewing data and student progress in math courses and makes appropriate changes as needed.
- As a result of consistent advising at **Western Texas College**, enrollment in Quantitative Reasoning has increased to 48% as more students now understand the appropriate math.
- Math alignment efforts at **Weatherford College** have helped fewer students to enroll in the wrong course.