Overview

The fourth pillar of the Texas Pathways strategy outlines the essential practices that support student learning in coursework and across program plans. Upon program completion, students should be equipped with the knowledge and skills required for success in employment and further education in a given field. To ensure students are learning, Texas community colleges are defining program learning outcomes and supporting teaching strategies to create engaging courses across programs. In this brief, we report the scale of implementation of the Pillar 4 practices, examples of college practices, and recommendations for continued progress.
Introduction

Texas community colleges are ensuring students are learning by defining and assessing program learning outcomes (PLOs) that describe what students need to know and be able to do upon completion of a program to succeed in further education or in an aligned career. When at scale, PLO assessment informs program design and targeted professional development to ensure faculty are equipped with the tools necessary to support student success.

Improvements in teaching and learning include advances in andragogy (methods and practices for teaching adult learners) that support culturally-relevant, active, and applied learning early and frequently throughout a student’s experience. To scale and systematize these practices, colleges are investing in ongoing professional development opportunities that extend to full- and part-time faculty and support staff.

Colleges are also embedding experiential learning in programs so students can apply course material to on-the-job experiences. This practice is at scale in most workforce programs and colleges are trying to scale up opportunities in academic programs.

This research brief provides insights into Pillar 4 essential practices. Examples of implementation are provided for each practice to highlight the various ways colleges are ensuring students are learning.

Pillar 4: Essential Practices

4A. Program learning outcomes are aligned with the requirements for success in the further education and employment outcomes targeted by each program.

4B. Instruction across programs (especially in program introductory courses) engages students in active and applied learning, encouraging them to think critically, solve meaningful problems, and work and communicate effectively with others.

4C. 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.

4D. Faculty/programs assess whether students are mastering learning outcomes and building skills across each program, in both arts and sciences and career/technical programs.

4E. Results of learning outcomes assessments are used to improve teaching and learning through program review, professional development, and other intentional campus efforts.

4F. The college helps students document their learning for employers and universities through portfolios and other means beyond transcripts.

4G. The college assesses effectiveness of educational practice (e.g., using CCSSE or SENSE, etc.) and uses the results to create targeted professional development.
In Spring 2021, Texas community colleges self-assessed their progress scaling the essential practices of the Texas Pathways strategy by completing the Scale of Adoption Assessment (SOAA). Researchers followed up with a series of validation interviews to calibrate responses across the state. The SOAA process revealed that colleges are making significant progress scaling the Pillar 4 essential practices (Figure 1).

The Texas Success Center goal of having at least half of colleges “at scale” or “scaling” was met for practices 4A and 4G. To be “at scale,” colleges must serve at least 80% of first-time-in-college (FTIC) students with the practice. “Scaling in progress” requires the practice to reach 50% of FTIC students. At least half of the colleges have systematized ways to define program learning outcomes that align with the requirements for success in further education or employment (4A) and are assessing the effectiveness of educational practices (4G). The Texas Success Center will use the knowledge gained from the SOAA to provide targeted support to help more colleges provide active and applied learning across all programs for all students (4B), assess PLOs to ensure learning and plan professional development (4C and 4D), and help students demonstrate their skills and accomplishments beyond transcripts (4E).
Practice 4A: Program learning outcomes (PLOs) are aligned with the requirements for success in the further education and employment outcomes targeted by each program.

Program learning outcomes. As colleges are organizing programs into meta-majors and mapping programs to student end goals, they are revisiting or redefining the outcomes associated with successful program completion. Some colleges include PLOs on program maps and share PLOs with faculty and advisors. For most colleges, utilizing PLOs in meaningful ways with students remains an area of opportunity. While not reported as PLOs in this report, all colleges comply with the state’s required core objectives in the foundational component areas.

- At Alvin Community College, all academic programs have PLOs that are developed through faculty collaboration in individual departments. PLOs are assessed every semester, and every year a summary report goes out to all faculty members. The report is analyzed and used to make action plans for next academic year. PLO outcomes and data is shared with college committee to inform any changes to student learning outcomes (SLOs) at the course-level that would influence PLOs.
- Blinn College defined Program and Student Learning Outcomes that outline expected levels of student achievement.
- Central Texas College uses TaskStream to evaluate and update their program learning outcomes. For example, analysis of course content versus four-year partner requirements in TaskStream indicated that math courses were focusing too much on calculator work. As a result, Central Texas College adjusted math courses to reduce dependency on calculators to better prepare students for success at Texas A&M.
- Coastal Bend College aligned PLOs with the requirements for success in further education and/or employment. The Career/Technical area defines PLOs based on a SkillScan assessment. All PLOs are organized in a matrix and available in a handbook for faculty and program leads.
- All programs at Houston Community College have PLOs that include Marketable Skills. PLOs are posted on program webpages.
- PLOs and SLOs for new degree programs at Navarro College are created with input from experts in the field. College advisory committees review program completion data and PLO/SLO results to ensure programs are aligned with further education and employment goals.
Paris Junior College has defined PLOs, SLOs, and core competencies for each program. The department members determined PLOs and the college uses them to do curriculum mapping and program improvement.

Ranger College set up cross-divisional meetings to develop PLOs for each program.

San Jacinto College ensures all programs have appropriate learning outcomes for the discipline and/or industry. Each academic program has two discipline-specific outcomes, and the college collects and analyzes data on six state-mandated general education outcomes (three outcomes per year) from all core curriculum courses.

At Texarkana College, PLOs are communicated to faculty and staff on pathways documents and program webpages. The college is considering additional ways to communicate PLOs to students, perhaps on syllabi, in the future.

Tyler Junior College works with department chairs to determine PLOs. For each program, certificate, or degree, departments must answer the question: What should a graduate of this program be able to do? The resulting PLOs are collected to inform faculty members.

Victoria College is in the process of redesigning its academic program PLOs. The Office of Institutional Effectiveness, Research, and Assessment is working with faculty to better define and assess PLOs.

Practice 4B: Instruction across programs (especially in program introductory courses) engages students in active and applied learning, encouraging them to think critically, solve meaningful problems, and work and communicate effectively with others.

All colleges noted the importance of active and applied learning across workforce and academic programs. Many noted examples of individuals or groups of faculty engaged in these practices. Most colleges do not have a way to systematically monitor the use of active and applied learning in all classrooms. Several colleges leveraged quality enhancement plans (QEPs) and faculty review processes to enhance active and applied learning. Creating action plans for implementing more active learning at scale is an area of opportunity.

![Figure 3. Number of Colleges at Each Level of Implementation (Practice 4B)](image-url)
Several colleges have implemented High-Impact Practices (HIPs) at their college. The Association of American Colleges and Universities (AAC&U) defines HIPs as active learning practices that promote deep learning through student engagement. The following practices are recognized HIPs:

- First Year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing Intensive Courses
- Collaborative Assignments and Projects
- Undergraduate Research
- Diversity/Global Learning
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects

- At Cisco College, the college is leveraging the QEP focused on online learning to take effective teaching practices into all classrooms.
- Active teaching is evaluated annually at Kilgore College and all new hires are required to do a teaching demonstration so hiring committees can see what active learning techniques faculty will use.
- To ensure online instruction includes engaging practices, Lee College faculty are required to complete the college’s Teaching Online Certification.
- A faculty committee at Navarro College developed a long list of active and applied learning activities as a resource for all faculty to use.
- At Trinity Valley Community College, critical thinking, applied learning, problem solving, collaborative learning, and communication are part of the LEAP Texas assessment process for academic courses.
- The current QEP at Vernon College is title “Inquiry-Based Learning” and aims to identify and utilize active learning andragogy in all classes. For example, the college recently invested in technology to provide clinical software for simulations and virtual science labs.
Practice 4C: 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.

All colleges recognize the importance of experiential learning for student development. All noted that workforce programs are built to include experiential learning within on-campus labs and workshops, and with community partners as apprenticeships or internships. Colleges noted the difficulty in scaling experiential learning for academic programs. To support the practice in academic programs, several colleges include experiences in the Learning Framework course. Others continue to work with community partners to develop ways to systematize experiential learning for all students.

- Through AlamoEXPERIENCE at Alamo Colleges, students participate in experiential learning opportunities to engage with employers, develop their skills, and establish connections for their future careers.

- Many students at Coastal Bend College have opportunities to apply and deepen knowledge and skills through projects, co-ops, clinical placements, service learning, and other active learning activities that program faculty intentionally embed into coursework.

- Every AAS degree plan at Navarro College requires a capstone, internship, co-op, or clinical experience for successful completion. The Pathways Committee is working to implement more project-based and experiential learning into the academic program curriculum.

- North Central Texas College places emphasis on internships, co-ops, and clinical placements to ensure students gain adequate knowledge and skills to be successful in the workforce.

- At San Jacinto College, Career Services holds several industry-specific career fairs called “Employer Meet-Ups.” In academic year 2018-19, 121 employers connected with 708 students. Additionally, advisors review student resumes and local companies participate in on-campus recruiting events to provide career-ready students the opportunity to enter the job market with guidance from the college.

- At Temple College, all program plans include a course in the meta-major in the first semester. The goal is to have all students take this course as soon as possible to get a program-aligned experience early in the program.

- Tyler College incorporates internships, project-based learning, clinical placement, co-ops, service learning, and other active learning activities into all programs.

Figure 4. Number of Colleges at Each Level of Implementation (Practice 4C)
Practice 4D: Faculty/programs assess whether students are mastering learning outcomes and building skills across each program, in both arts and sciences and career/technical programs.

Most colleges with defined PLOs have also systematized PLO assessment processes. Assessment cycles range from one to five years and involve different college stakeholders. Colleges without well-defined PLOs are working to first define relevant outcomes and then to develop assessment processes.

- **Alvin Community College** assesses PLOs on an annual basis. The college plans to review and edit PLO assessment plans as needed and close the loop on reporting data results back to departments for improvements.

- **Austin Community College** uses a three-year cycle to review PLOs. In the first year, programs prepare for the review. During the second year, the programs monitor outcomes. In the third year, the formal program review occurs. Faculty review their own programs and programs in other disciplines.

- Learning outcomes assessments are key to the program review process at **Coastal Bend College**. The resulting Action Plans for Improvement are implemented, and the learning outcomes are reassessed to determine the effectiveness of the changes.

- **College of the Mainland** created three PLOs for each program and an evaluation plan to examine each over a three-year period. The evaluation includes cross-disciplinary faculty and includes action plans to improve outcomes.

- At **Del Mar College**, every program is expected to have five PLOs for annual assessment. Every five years, each program does a review that assesses those PLOs to create action plans for improvement.

- The program review process at **Navarro College** requires that all programs assess student mastery of learning outcomes and skills across programs for both arts/sciences and CTE programs.

- The learning management system at **San Jacinto College** generates program-level reports that inform program improvement plans. The college tracks outcomes data relevant for improvement, program action plans, results of action plans, and steps for continuous improvement.

- **South Texas College** shares PLO data with college faculty within each discipline, every biennium. Students and external stakeholders can learn about SLOs and PLOs on the South Texas College website.

- At **Weatherford College**, department chairs and assistant chairs from across disciplines meet to review required PLOs and ensure that skills are being taught across disciplines.

![Figure 4. Number of Colleges at Each Level of Implementation (Practice 4D)](image-url)
Practice 4E: Results of learning outcomes assessments are used to improve teaching and learning through program review, professional development, and other intentional campus efforts.

Some colleges use data to improve teaching and learning through program review and professional development efforts. Practices involving the use of course-level SLO data for improvement are scaled to reach more faculty than practices using program-level PLO data. Professional development occurs through faculty champions and in formal teaching and learning centers. Many colleges have invested in professional development opportunities to support faculty to implement high-impact and equity-minded practices.

**Faculty Teaching & Learning Champions**

- **At Alvin Community College**, both PLO outcomes and core objectives are assessed. To examine core objectives, Alvin collects course artifacts and data and shares each using similar processes to their PLO reviews. Faculty then engage in professional development based on feedback from these reviews.

- **Amarillo College** invested in faculty professional development by providing financial incentives, supporting course redesign, and hiring an instructional designer to support faculty. The college uses a cohort model for faculty engagement - members work on professional learning throughout the year, earn points for completion, and receive a stipend for deliverables they create based on their learning. The college focuses on pedagogy and provides funding for faculty to attend conferences for content support. The college collects data on the faculty member to compare pre-deliverable and post-deliverable student outcomes.

- **At Blinn College**, Curriculum Resource Teams review outcome assessment data and faculty propose assignments to address any identified areas of opportunity.

- **Galveston College** uses a faculty observation instrument across disciplines to measure student engagement and the complexity of instructional tools. The data collected is used for action research and self-reflection with faculty. The college adapted the protocol from the Math & Science, Classroom Observation Protocol system developed and tested in high school classrooms by TAMU. The college also created the Achieving Student Success and Equity Taskforce composed of faculty, student services staff, and administrators to look at student success data from an equity mindset. Data is disaggregated and task force examines student success in different subgroups to propose policy, changes, and interventions.

- **As part of the Gateways to Completion project**, faculty at **Houston Community College** used student survey results to examine data and make plans to implement high-impact practices in five gateway courses. The next phase of the work includes training for peer faculty to scale to more gateway sections.
• **Howard College** leveraged a Title V grant to purchase [Blackboard Outcomes](https://www.blackboard.com) to make it easier for faculty to evaluate outcomes and utilize results to make improvements to the learning experience.

• The new continuous improvement plan at **Lee College** relies on data and faculty engagement to improve outcomes. Faculty choose from one of seven teaching principles from *How Learning Works*. Then, faculty review their own disaggregated student data to create an action plan for improvement. Next, faculty choose to be observed in a face-to-face class or online where both a peer faculty member, a student, and an administrator will observe teaching to provide feedback on the principle chosen by the faculty member. Afterwards, there is an informal review of the observations and faculty can ask for course design support.

• The faculty teaching and learning committee at **Navarro College** examines data from the top 10 challenging courses and the top 10 enrolled courses to highlight areas for improvement. An instructional designer offers support for course redesign with input from faculty who see the data reports from the committee.

• The goal of the Teaching and Learning Committee at **North Central Texas College** is to emphasize effective teaching. Faculty can engage with guest speakers, books, and events focused on high-impact teaching practices.

• The Faculty Growth Initiative Committee at **Victoria College** produces professional development opportunities using the “12 Best Practices.” Additionally, the college surveyed faculty to identify the type of professional development sought and used the information to create appropriate offerings.

• Faculty at **Trinity Valley Community College** go through certification processes on a two-year rotation. The college examines engagement between faculty and students and student outcomes by course and instructor.

**Teaching and Learning Centers**

• The new program review process at **Amarillo College** links program review outcomes with the Center for Teaching and Learning to support the course redesign process.

• The Teaching and Learning Academy at **Austin Community College** serves 60 to 100 faculty in year-long professional development opportunities. As an academy member, faculty analyze disaggregated student survey data and learning outcomes data to develop an individualized professional development plan. Additionally, the district offers a Summer Institute on Service-Learning and hosts the Globalizing Education Faculty Learning Community initiative.

• **Dallas College** created the Center for Excellence in Teaching and Learning to provide a centralized space for faculty to access and build the capacity to engage with students through high-impact practices.

• Faculty Development sessions offered by **El Paso Community College** are targeted to address needs based on feedback from stakeholders, including the revamped [Master Teacher Program](https://www.epcc.edu). Emphasis has shifted to student engagement in online teaching and learning, and to mental health and student financial security.
The Center for Excellence in Teaching and Learning at San Jacinto College reviews PLO data to plan professional development at the request of Instructional Deans to meet faculty needs. The college also invites faculty, staff, and administrators to participate in “Framework Fridays” for broad engagement in planning.

**Equity-Minded Professional Development**

- **El Paso Community College** works with a consultant to offer opportunities for faculty to examine equity in mathematics and beyond. The college is now working with the third cohort of faculty working on equity in the classroom.

- **Lee College** hired a chief equity officer who produces regular professional development for all faculty and staff so that the college can meet its goal of producing equitable outcomes across student groups. Several committees are engaged in the [Racial Equity Leadership Academy (RELA)](https://www.coeche.org/rela) and the [National Alliance for Partnerships in Equity (NAPE)](https://www.napecollegeequity.org), where participants look at policies through an equity lens and are guiding the campus to restructure with an equity-mindset.

- **San Jacinto College** hosted “Equity Chats”—guided discussions on racial equity, implicit bias, micro-aggressions, and other equity topics—as part of their professional development. After the “Equity Chats,” the college hosted the [Chautauqua Lecture Series](https://www.chautauqualibraries.org) to provide in-depth information to questions that arose in the “Equity Chats,” cover national topics of interest, and explore resolutions that foster understanding, best practices, and prospective strategies for future discussions. All faculty are welcome to attend the series.

- Thanks to a grant from HEB, **Temple College** has a cohort of equity fellows who are participating in professional development to design equitable practices for the college. The work of these fellows will be shared with the rest of the college community.

**Practice 4F: The college helps students document their learning for employers and universities through portfolios and other means beyond transcripts.**

Several colleges are experimenting with methods to acknowledge the skills and experiences students acquired during their program. Most colleges noted that some programs, such as fine arts or digital marketing, collected student portfolios. While scaling this practice for all program types remains an opportunity for growth in most colleges, some interesting innovations are occurring in several colleges.

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**Figure 4. Number of Colleges at Each Level of Implementation (Practice 4F)**

- **At Scale** 4
- **Scaling in Progress** 2
- **Planning to Scale** 13
- **Not Systematic** 19
- **Not Occurring**
• **Alamo Colleges** created an experiential learning transcript using [Campus Labs](#) so that students can communicate the skills and experiences acquired in their programs.

• **Austin Community College** is participating in the [AAC&U Digital Learning and ePortfolio Institute](#). The faculty cohort is tasked with making recommendations on how to bring ePortfolios to scale for all programs.

• **Dallas College** incorporated [Greenlight](#) transcription services to provide students with a record of their acquired skills beyond course grades, such as presentation skills and public speaking skills.

• **Houston Community College** is using the portfolios created by the Studio Arts, Interior Design and Fashion Design programs as models to develop portfolios for other programs.

**Practice 4G:** The college assesses effectiveness of educational practice (e.g., using CCSSE or SENSE, etc.) and uses the results to create targeted professional development.

**CCSSE and SENSE.** The Center for Community College Student Engagement (CCCSE) administers two national surveys measuring student engagement at the start and during the community college experience. Many colleges participate in the survey, gaining institutional, state, and national perspectives on the student experience. Some colleges noted how they incorporated the survey results into their broader work.

• Between 2019 and 2021, 29 Texas community colleges participated in the [Community College Survey of Student Engagement](#) (CCSSE), measuring and receiving feedback in the areas of active and collaborative learning, student effort, academic challenge, student-faculty interaction, and support for learners.

• Between 2019 and 2021, 24 Texas community colleges participated in the [Survey of Entering Student Engagement (SENSE)](#), measuring and receiving feedback on both student behaviors in the earliest weeks of college and the institutional practices that affect students during this critical time.

• **Alamo Colleges** triangulate CCSSE data, SLO data, and the graduation report to assess the effectiveness of college practices.

• **Austin Community College** participates in CCSSE and SENSE on three-year cycles. The results are shared by newsletters and presentations, and the college is working to leverage the results more broadly.
• **Del Mar College** administers CCSSE regularly and the results are analyzed by the Office of Planning and Institutional Effectiveness. The analysis is used by the Student Learning Steering Committee to develop professional development.

• **Southwest Texas College** uses CCSSE to target areas for professional development. Two areas recently targeted are: (1) active and collaborative learning, and (2) student/faculty interactions. In response, the college developed several professional development events, such as: “Great Ideas for Teaching,” “Sharing Ideas for Active and Enthusiastic Learning,” and “Collaboration: Building Community in the Classroom.”

• **Tyler College** used CCSSE and SENSE survey results to inform creation of the college's new strategic plan, which in turn informs professional development at the college.

**Internal Surveys.** Some colleges use internal surveys to inform college operations and to design professional development.

• **Hill College** collected and used two full years of the *Revealing Institutional Strengths and Challenges (RISC)* survey to determine the student perception of student experiences at college. The college designed administrative units focused on Instructional and Student Services Administration to determine best practices to improve student experiences in and out of the classroom. Student Services Administration is developing online forms for student processes to reduce the amount of paperwork and streamline processes and transitioning to a new ERP platform for students to gain access to records and processes. Instructional Administration is developing professional development opportunities geared toward learning strategies to enhance student experience in the classroom and to improve student communication with faculty.

• **McLennan Community College** developed internal surveys and evaluation metrics to assess the college’s effectiveness; this data is used in decision making. For example, survey analysis led to the creation of a *Men of Color* program and informs the college’s Diversity/Equity/Inclusion and College Success teams.
Recommendations

Colleges are making significant progress in scaling the essential practices in Pillar 4. To continue this momentum to improve practices and scale efforts to serve all students, the Texas Success Center recommends colleges:

1. Prioritize program learning outcome processes for student success over compliance. Engage interdisciplinary teams to review program plans and identify three to five outcomes to be achieved over the course of the program. For academic programs, consult with university programs about what knowledge and skills a rising junior would need to succeed. For workforce programs, consult with employer advisory boards to determine the knowledge and skills a student would need to successfully enter the workforce in their field.

2. Once PLOs are established, determine the tools and metrics to be used to evaluate student progress towards PLO mastery. Consider milestones in the program plan that align with PLO progress and design assessments to occur at several places in the program plan.

3. Develop systematic ways to collect PLO data and reconvene the interdisciplinary teams to review the data and determine what changes to programs may be required to support student success. Use PLO data to plan targeted professional development within and across departments teaching within program plans.

4. Examine data to understand if racially minoritized and historically underserved students are gaining program-level knowledge and skills necessary for future success at rates similar to their peers. Use the analysis to examine and reform programmatic teaching and learning practices that may contribute to disparities.

5. Support and expect faculty to incorporate engaging, active, applied, and culturally-relevant teaching practices to better support students’ success in their programs. Invest in systematic teaching reviews with aligned professional development opportunities to allow faculty to grow these skills.

6. Experiment with ways to let students demonstrate their skills and accomplishments to transfer partner institutions and employers beyond the transcript. Scale successful options to reach more students.

7. Use the information provided in pillar briefs to network with peer colleges to learn more about processes that could support the scaling of Pillar 4 practices at your college.
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Texas Success Center

The Texas Success Center supports the Texas Association of Community Colleges members’ efforts to improve student success and directs Texas Pathways—a statewide strategy focused on building capacity for community colleges to design and implement structured academic and career pathways at scale, for all students. For more information, visit tacc.org/tsc.