PATHWAYS IN TECHNOLOGY EARLY COLLEGE

# Pathways in Technology Early College High School Roadmap to Opening

# **Overview of the Pathways in Technology Early College High** School Roadmap to Opening

The Pathways in Technology Early College High School (P-TECH) Roadmap to Opening serves as a companion guide to the P-TECH Blueprint. The Roadmap to Opening prioritizes a set of actions for P-TECH leadership teams to take during the onboarding and planning phases of the P-TECH. Each action aligns to a P-TECH Blueprint design element, an outcomes-based measures (OBMs), and/or a required artifact.

The Roadmap to Opening does not address all design elements and OBMs required in the P-TECH Blueprint. Rather, the actions listed herein create an effective foundation for the rigorous process of developing a successful P-TECH. District/campus, IHE Business/Industry (B/I) partners are expected to complete each of the activities with support from their TEA technical assistance provider.

The Roadmap to Opening is designed for use by the entire P-TECH leadership team, with a particular focus on campus- and district-level staff with decision-making authority. The Roadmap to Opening details actions necessary to support:

- Regularly convened leadership teams
- P-TECH staffing
- Recruitment and enrollment of targeted populations of cohorts
- Academic infrastructure effectiveness
- Strong partnership development
- Work-based learning development
- P-TECH students meeting access, achievement, and attainment OBMs
- Implementation of all P-TECH design elements with fidelity to the P-TECH Blueprint
- Annual curation of P-TECH artifacts





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### **P-TECH Blueprint**

Benchmark 1: School Design

Benchmark 2: Partnerships

Benchmark 3: Target Population

Benchmark 4: Academic Infrastructure

Benchmark 5: Student Supports

Benchmark 6: Work-based Learning

P-TECH Artifacts P-TECH OBMs

### P-TECH Resources

P-TECH Blueprint CCRSM Website TEA CCRSM Website P-TECH Designation P-TECH Learning Community

# June, July, and August (Onboarding)

### Actions

### **Blueprint Deep Dive**

Develop an operational understanding of the Blueprint design elements, OBMs, and artifacts as well as the CCRSM P-TECH resources.

- Explore the following via technical assistance provider-facilitated discussions with the leadership team (District/campus and IHE partner):
  - P-TECH key design elements
  - o P-TECH artifacts
  - o P-TECH OBMs
  - P-TECH resources (pg. 1)

□ Analyze the systems, policies, and practices that currently exist to support implementing the Blueprint with fidelity and students meeting OBMs and determine those that need to be developed (1.6)

# June, July, and August (Onboarding) Continued

### Actions

### **Benchmark 1: School Design**

Build school capacity and identify members and roles of P-TECH leadership team to lay a strong foundation for a successful P-TECH.

- □ Identify existing staff to fulfill P-TECH leader role or post/hire the position. The P-TECH leader must have autonomy for course and instructor scheduling, staff and faculty hiring and budget development (1.8)
- Onboard P-TECH leader to the P-TECH Blueprint and district vision for the P-TECH (1.8)
- □ Identify members of the leadership team to include leaders from the district, campus, IHE, and Business/Industry (B/I) who have decision-making authority to execute change (1.7, 1.8)
- □ Identify potential members of the P-TECH Advisory Board (1.11)
- □ Connect P-TECH leader with the IHE liaison and B/I liaison(s) who have decision-making authority and will interact directly and frequently with the P-TECH leader (1.8)
- □ Discuss P-TECH artifact posting and identify process to upload web artifacts periodically as required in the P-TECH Blueprint (p. 16 18)

# June, July, and August (Onboarding) Continued

### Actions

### Benchmark 4: Academic Infrastructure

Plan for student success beginning with the end in mind.

- Explore how the P-TECH academic plan, targeted postsecondary certificates, and industry-based certifications connect with the local economic needs (4.1)
- Discuss and capture initial crosswalk concepts that ensure alignment of high school requirements with industry-based certifications and college-level courses for postsecondary attainment (4.2) Consider:
  - Degree plans, postsecondary certificates, industry-based certifications, and/or college credentials to offer (2.4, 4.2)
  - o Career Technical Education (CTE) goals, including if students will graduate as a CTE concentrator or completer
  - Requirements and needs of local B/I partner(s)
  - Location and modality of the college courses (virtual, hybrid, face-to-face, at the college, at the PTECH) (2.6, 4.5)
  - How the college courses' contact hours fit into the high school master schedule (1.4)
  - Staffing for college courses (2.7, 4.5)
  - Facilitators for online courses (2.7, 4.5)
  - Funding for courses, textbooks, and supplies (2.3)
  - Need for specialized facilities and equipment for workforce education course manual (WECM) postsecondary attainment (4.2)
  - Work-based learning opportunities at each grade level aligned to academic coursework (4.2)

# June, July, and August (Onboarding) Continued

### Actions

### **Benchmark 6: Work-based Learning**

Discuss plan for student enrichment, extracurricular, and work-based learning.

- Initiate conversations with District CTE, Texas Workforce Solutions, regional Education Service Center, and identified and potential B/I partner(s) to explore Career and Technical Student Organizations, competitions, and special initiatives aligned to each program of study being planned (6.4)
- □ Initiate conversations with identified and potential B/I partner(s) around the development of a work-based learning continuum of offerings (2.17)
- Explore options for virtual work-based learning experiences via online platforms and/or B/I partner(s) (6.1)

# **September and October**

### Actions

### **Benchmark 1: School Design**

Determine leadership team meeting cadence and develop strategic priorities.

- Identify roles and responsibilities each member will play in the design, governance, operations, accountability, curriculum development, professional development, outreach, sustainability, and continuous monitoring and improvement of the P-TECH (1.6)
- □ Determine cadence and types of regularly scheduled internal (district/campus) and external (district/campus/IHE/business/industry) leadership and advisory team meetings (1.6)
- Educate new leadership team members and key stakeholders to the P-TECH Blueprint, design elements, and OBMs (1.6)
- Develop short-term and long-term strategic priorities for the P-TECH along with a work-flow plan to achieve programmatic goals in alignment with district/campus continuous improvement planning (1.6)
- □ Finalize P-TECH model and location (1.2)

### Actions

### **Benchmark 2: Partnerships**

Engage in MOU/ILA development and/or revision conversations with the IHE.

- Deconstruct the district's current MOU/ILA to ensure P-TECH design elements are addressed, and/or begin initial discussions with IHE to develop an MOU/ILA that meets the P-TECH Blueprint requirements, including: (BM2):
  - Goals of higher education partnership (2.1)
  - Roles and responsibilities for ensuring quality and rigor of the dual credit program (2.2)
  - Sources of funding (2.3)
  - Academic plan (2.4)
  - Transcription of credit (2.5)
  - Course delivery and scheduling (2.6)
  - Staffing plan (2.7)
  - Instructional materials and textbooks (2.8)
  - Access to higher education resources (2.9)
  - Transportation (2.10)
  - Collaborative outreach efforts (2.11)
  - Student participation (2.12)
  - Academic supports (2.13)
  - Data sharing and data analysis (2.14; 2.15)

### Engage in B/I partner agreement discussions.

□ Identify the existing B/I partnerships and continue outreach to secure B/I partner(s) that will provide work-based learning opportunities for each program of study offered in the P-TECH and for each grade level (BM 2)

### Actions

### **Benchmark 2: Partnerships**

Engage in B/I partner agreement discussions.

- **□** Engage in discussions with each B/I partner(s) regarding:
  - Vision of the partnership (2.16)
  - Roles and responsibilities for work-based learning (2.16)
  - Work-based learning continuum of offerings (6.1)
    - Work-based learning experiences aligned to academic coursework and industry-based certifications (2.17)
    - Grade-level appropriate work-based learning offerings (2.18, 6.2)
    - Mentorship plan to include support for Career and Technical Student Organizations, competitions, and special initiatives that promote skills attainment (2.19)
  - Access to B/I resources (2.20)
  - Transportation roles and costs (2.21)
  - Student priority interview for qualified positions (2.22)
  - Partnership monitoring and feedback for continuous improvement (2.23, 4.8)

# September and October Continued

### Actions

### Benchmark 4: Academic Infrastructure

Draft crosswalks with IHE for postsecondary opportunities.

- □ Backwards map student pathways in the new P-TECH academic program to solidify postsecondary options of certificates and/or associate degree, and industry-based certifications (4.2, 4.3)
- Explore options for course sequence and portfolio approach to earning college credits (4.3/4.4)
- Document when students need to be "TSIA met" for the course sequence to inform TSIA preparation and testing plans (4.7)

# September and October Continued

### Actions

### **Benchmark 6: Work-based Learning**

Draft initial plans for student enrichment, extracurricular, and work-based learning.

- □ Identify the following for each proposed pathway (6.4):
  - o Career and Technical Student Organizations (CTSO), competitions, and special initiatives
  - o Staff to sponsor enrichment and extracurricular
  - o Equipment needed and funding for enrichment and extracurricular activities
- □ Schedule frequent work-based learning mapping sessions with B/I partner(s) to develop a continuum of offerings: career awareness, career exploration, career preparation, career training (6.1, 6.2)

Create initial draft of 9<sup>th</sup> grade work-based learning calendar of opportunities (6.1, 6.2)

- o Scaffold employability skills and technical skills to age-appropriate opportunities
- Develop a continuum of work-based learning experiences aligned to each pathway's academic courses and B/I expectations
- $\circ$   $\;$  Include CTSOs, competitions, and special initiatives
- Wrap in mentorship opportunities with B/I partner(s)

□ Finalize options for virtual work-based learning experiences (if applicable) (6.2)

# **November and December**

# Actions

	nchmark 1: School Design ablish academic processes and staff capacity for program implementation.					
Lea	dership team actions for strategic priorities:					
	Review MOU/ILA and gather feedback (2.1- 2.15)					
	Finalize college and career pathway(s), industry-based certifications, Level 1 or 2 certificates, and/or an associate degree opportunity for students while engaging in work-based learning at every grade level (4.2)					
	<ul> <li>Construct a plan for:</li> <li>End-of-Course (EOC) assessment (4.6)</li> <li>Academic preparation classes for accepted students (5.3, 5.6)</li> <li>Academic intervention for students who do not pass EOC assessments (4.6)</li> </ul>					
	Develop a master schedule and staffing plan for PTECH, which includes highly qualified P-TECH teachers and counseling/advising staff (1.8)					
	Initiate a 4-year sustainability plan (staffing, equipment, tuition/textbooks, and transportation, etc.) (1.6, 1.10)					
	Continue researching additional B/I partnerships that align to P-TECH priorities					
	Convene an Advisory Board meeting to develop short-term and long-term strategic priorities for the P-TECH along with a work-flow plan to achieve programmatic goals (1.11)					
	<ul> <li>Solicit Advisory Board feedback on P-TECH planning to date (2.23, 4.8):</li> <li>Degree plans, certificates, industry-based certifications (4.2, 4.3)</li> <li>Resource acquisition (1.11)</li> <li>Curriculum development (4.2, 4.3)</li> <li>Work-based learning continuum: career exploration, career preparation, and career training (6.1)</li> <li>Work-based learning offerings (6.2)</li> <li>CTSOs (6.4)</li> <li>Competitions (6.4)</li> <li>Special initiatives (6.4)</li> <li>Partnership monitoring components of B/I agreement(s) (2.23)</li> </ul>					

□ Engage Advisory Board to research externship opportunities (1.8)

# November and December Continued

### Actions

### **Benchmark 2: Partnerships**

Complete documentation required for TEA P-TECH Program Application.

- □ Revisit Planning application and update narratives for upcoming TEA Program Application Cycle
- □ Obtain/Complete IHE Assurance pages for TEA Program Application Cycle (2.1-2.15)
- □ Obtain/Complete B/I Assurances Pages for TEA Program Application Cycle (2.16-2.23)

# **November and December Continued**

### Actions

# Benchmark 3: Target Population Formulate actions for student recruitment and stakeholder engagement. Ingage B/I partner(s) in recruitment activities, such as (3.2): Invite B/I partner(s) to recruitment and outreach events Develop B/I recruitment flyers

With input from key stakeholders develop:

- □ Student recruitment enrollment policies and practices which target subpopulations historically underrepresented in college courses (3.1-3.4, Access OBM) including:
  - Open access admission policy (3.1)
  - Open access enrollment application (3.2)
  - Timeline of annual recruiting events (3.3)
  - Lottery system that supports mirroring district demographics for students in the targeted subpopulations (3.4)
  - Communication plan for targeted audiences (3.3)
- Regular activities to educate students, counselors, principals, parents, school board and community members about the P-TECH (3.3)
- Enrollment materials for distribution at feeder middle schools and other appropriate locations in the community (3.1, 3.3):
  - o Brochures and marketing materials in English and Spanish and/or other relevant languages
  - Social media outreach

# November and December Continued

### Actions

### **Benchmark 6: Work-based Learning**

Develop plans for student enrichment, extracurricular, and work-based learning for grades 9-12.

Develop a work-based learning calendar for grades 10-12 in each pathway (6.1, 6.2)

- $\circ$  Scaffold employability skills and technical skills to age-appropriate opportunities
- Develop a continuum of work-based learning experiences aligned to each pathway's academic courses and B/I expectations
- o Include CTSOs, competitions, and special initiatives
- Wrap in mentorship opportunities with B/I partner(s)

# **January and February**

### Actions

### **Benchmark 1: School Design**

Construct school systems, academic and data tracking plans for the P-TECH.

Begin the process of becoming a TSI assessment site to provide TSI testing opportunities throughout the year (1.5)

Leadership team meeting actions for P-TECH Blueprint requirements:

- □ Finalize P-TECH sustainability plan (1.6, 1.10)
- □ Plan next steps for maintaining and growing existing B/I partnerships
- Gather last round of feedback and post a fully executed MOU/ILA on website (2.1- 2.15)
- Finalize B/I Agreement(s) for each pathway, and post fully executed agreement(s) on website (2.16-2.23)
- Explore externship opportunities with IHE partner, B/I partner(s), education service center, Texas Workforce Solutions, non-profits, and local chambers (1.8)
- □ Strategize a plan to collect data reflective of the OBMs
- □ Create P-TECH budget for the next school year
- □ Review the developed course of study to ensure the course of study:
  - Provides a detailed and relevant course sequence to the post-secondary opportunities
  - Includes alignment to the high school and college courses provided to the PTECH students (4.3, 2.4)
- Establish an annual professional development plan (i.e., calendar of events/activities) for high school and dual credit teachers/staff that is:
  - o Focused on research-based instructional strategies for increasing rigor and college- and career- readiness
  - Based on needs assessment of student data (1.9)

# **January and February Continued**

### Actions

### **Benchmark 3: Target Populations**

Recruit and enroll subpopulations that are historically underrepresented in college.

□ Launch student and parent outreach events for recruitment and enrollment of target populations

### Actions

### Benchmark 5: Student support

Provide a variety of students supports so students can be successful in the PTECH program.

Develop and implement wrap-arounds strategies and services such as:

□ Student needs assessments (5.3)

- □ Connection to mental and behavioral resources (5.5)
- □ Monitoring and follow up of student supports and needs (5.3)

Collaborate with the IHE to personalize the learning environment for students to:

- Establish a process to provide an academic bridge across two educational systems (5.1)
- Develop a robust college and career advising system to support students' academic progress that includes (5.2):
  - $\circ \quad \text{Identification of key advising staff}$
  - o Create a student advising process and formulate campus advising schedule

Develop additional student supports that address:

- Advisory and/or college readiness support and skill building instruction built into the instructional sequence for all students (5.4)
- Enrichment Opportunities (5.6; 5.7)

### Actions

nchmark 6: Work-based Learning velop systems, tools, and processes to support rigorous work-based learning opportunities (6.5).					
Engage B/I partner(s) in developing career readiness opportunities for bridge program (5.1)					
<ul> <li>Audit work-based learning plans for alignment to <i>the Tri-Agency Framework for Work-Based Learning (6.5):</i></li> <li>Ensure work-based learning opportunities are aligned to regional labor market demand</li> <li>Ensure work-based learning opportunities offer complex and industry-relevant tasks that build career skills and knowledge</li> <li>Ensure students and employers have a clear understanding of skills that will be gained through work-based learning</li> <li>Ensure work-based learning supports and accelerates academic progress</li> <li>Embed opportunities to build professional networks within work-based learning</li> <li>Establish systems, tools, and processes to monitor and measure work-based learning experiences and inform continuous improvement</li> </ul>					
<ul> <li>Develop systems to build school capacity for work-based learning (B6)</li> <li>Ensure a high level of engagement with local workforce boards and employers</li> <li>Create an environment where strong collaboration exists between core academics, career and technical education, and the work-based learning coordinator</li> <li>Ensure dedicated staffing roles to support work-based learning efforts</li> </ul>					

• Create a school culture which is supportive of work-based learning with buy-in from teachers, school counselors, and administrators

# March, April, and May

### Actions

	nchmark 1: School Design	
De	sign academic and staffing actions to meet P-TECH Blueprint requirements.	
Lea	adership team meeting academic actions for P-TECH Blueprint requirements:	
	Finalize course sequence offerings of high school and IHE crosswalks (4.3)	
	Finalize assessments measuring student progress to ensure they are on track to meet OBMs	
	Decide the logistics on how student data tracking will take place (4.8)	
	Map out student interventions, including tutoring and/or Saturday school for identified students in need of academic supports (5.3)	
	Develop a plan to support direct-to-college student enrollment following graduation (4.10)	
	Complete Master Schedule	
Lea	adership team meeting staffing actions for P-TECH Blueprint requirements:	
	Develop teacher qualification process and staffing plan for teachers, counselors, administration, support staff, and IHE instructors (2.7)	
	Finalize the annual professional development plan for PTECH staff/teachers and IHE partners (1.9)	
	Develop a mentor/induction program for newly hired PTECH staff (1.9)	
	Construct a family engagement plan (5.6)	
Ad	visory Board actions for strategic priorities:	
	<ul> <li>Convene Advisory Board to provide feedback and input on the P-TECH program plans to date:</li> <li>Externship plans for teachers, counselors, and administrators (1.9)</li> <li>Work-based learning opportunities' audit results to TEA's Work-based Learning Framework (BM 6)</li> <li>Exposure to local community businesses for potential career options and internship possibilities (5.6)</li> <li>Securing additional B/I partnerships (BM 2)</li> </ul>	
	Develop system and process for B/I partner(s) to provide feedback on the value of work-based learning (6.5)	
	<ul> <li>Develop system and process for students to (6.3):</li> <li>Reflect on their work-based learning experiences</li> </ul>	

- o Demonstrate their learning portfolio
- $\circ$   $\;$  Understand the connection between work-based learning and academics

### Actions

### **Benchmark 3: Target Population**

Recruit and enroll subpopulations that are historically underrepresented in college.

- □ Continue student/parent outreach for recruitment and enrollment of target populations
- □ Notify students of acceptance into the program

### Actions

## Benchmark 4: Academic Infrastructure

Streamline assessments to determine college readiness so students can begin college courses and meet OBMs.

Establish and finalize:

- □ Student assessment timeline
- □ Yearly testing plan
- Calendar of testing dates- specifically list dates, times, and location that the assessments will be administered (TSI, ACT, SAT) (4.7)
- Outcome-based measure data tracking process for students

### Actions

### **Benchmark 5: Student Supports**

The P-TECH will provide wrap around strategies and services to strengthen academic, technical, and individual support for students to be successful.

Develop a student bridge program (5.1) which provides:

- TSIA preparation and TSIA testing
- o Opportunities to strengthen skills necessary for high school and college/career readiness
- $\circ$   $\,$  Academic interventions for those who do not pass the TSI

Hold family and student orientation to outline:

- o P-TECH program expectations
- Enrichment opportunities and supports for students (5.4, 5.6, 5.7)
- Engagement opportunity for families (5.6)

### Actions

### Benchmark 6: Work-Based Learning

Continuous improvement cycle for work-based learning.

- Continue outreach for additional strategic partnerships to support work-based learning offerings (6.2)
- **C** Revise work-based learning plan(s) based on audit and feedback from Advisory Board (6.5)

# **P-TECH Artifacts**

This timeline outlines recommended dates for publishing artifacts as designated by the P-TECH Blueprint. As indicated by the timeline, some artifacts are required to be updated regularly throughout the school year. Unless otherwise indicated, all artifacts must be published prior to the first day of serving students.

	Design Elements	Artifacts	Fall	Spring	Summer
	Leadership Team Strategic Priorities	P-TECH/IHE leadership meeting agendas	•	•	•
1.6		School board and board of regents' presentations	•	•	
		Document(s) outlining the strategic priorities for the current academic year and/or long-term priorities of the P-TECH partnership	•		
1.7	Leadership Team Key Roles	Description of each member and role in committee	•		
1.8	P-TECH Staff	P-TECH leader/IHE liaison meeting agendas and relevant materials	•	•	•
	P-TECH Staff Professional Development	Mentor Induction Program Plans		•	
1.9		Annual training or professional development plan with P-TECH and IHE faculty		•	
	Advisory Board	Meeting agenda and minutes, with action items and decision logs	•	•	•
1.11		A list of strategic partners with each member's organization, title, and role in providing work- based learning for students by grade level	•		
2.1	Goal of Higher Education Partners	Memorandum of Understanding with Institution of Higher Education	Post online when fully executed		
2.11	Roles and Responsibilities	Executed agreement with the B/I partner(s)	Post online when fully executed		
2.2	Documenting Enrollment Procedures	Written admission policy, and enrollment application	•		
3.2		Written recruitment plan and recruitment materials	•		
3.3	Stakeholder Engagement	Brochures and Marketing in Spanish, English and/or other relevant language(s)	•		
5.5		Written communication plan for targeting identified audiences	•		
3.4	Lottery System	Written lottery procedures (district-level or campus-level)	•		

	Design Elements	Artifacts	Fall	Spring	Summer
4.1	Regional Need	Documentation detailing courses of student examples that outline student pathways from high school to associate degrees, certificates, or industry-based certifications and beyond		•	
		Current dated regional high-demand occupation list		•	
4.3	Course Sequence	Crosswalk aligning high school and college courses, grade 9-12, which enables a student to earn an associate degree our up to 60 college credit hours toward a baccalaureate degree		•	
		Master Schedule			•
	College Readiness	Calendar of TSI scheduled test administration dates, sign-up process, and intervention expectations			•
4.7		Aggregate reports of TSI exam performance	Post online when cohorts begin testing and update TSI data regularly		
		Testing calendar and schedule to SAT, ACT, or other college readiness assessments			•
5.1	Bridge Programs	Bridge program curriculum and schedule		•	
5.2	Advising	Schedule of regularly scheduling advising events		•	
5.3	Student Intervention	Tutoring schedules			•
5.4	Classroom Supports	Advisory/study skills curriculum material		•	
5.6	Enrichment Opportunities	Calendar of enrichment opportunities and family outreach events			•

	Design Elements	Artifacts	Fall	Spring	Summer
6.1	Work Based Learning Continuum	Documentation of appropriate work-based learning experiences for students at all grade levels	•	•	
6.2	Work Based Learning Offerings	Aggregate data describing student participation in work-based learning experiences	Post online when cohorts begin and update regularly		
6.3	Student Participation	Samples of student artifacts such as writings, portfolios, presentations, and links to digital content	•	•	