

# Workforce-Aligned Instruction

Pathways Research Collaborative

CONNECT VIRTUAL

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LONESTAR**RP3**

# Research Collaborative



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# Context

- Texas Legislative Session Timeline
  - Interim Charges released March 2026
  - Pre-filing of bills begins November 9, 2026
  - 90<sup>th</sup> Texas Legislative Session begins January 12, 2027
- Research Collaboratives Timeline
  - White Papers submitted to LONESTAR**P3** August 2026
  - Translation Products produced September 2026
  - Public release at Success Summit December 2026



# Overview of Research

*Workforce-Aligned Instruction*



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## Research Question(s) and Relevance

- **How well do Texas Industry-Based Certifications prepare students to enter the workforce?**
- How do district leaders decide which IBCs to offer to students? Do district leaders offer IBCs that are not on the TEA approved list?
- What certifications are employers looking for, and how well are those certifications represented among IBCs offered by districts? Are employers looking for certifications that are not on the IBC list or that are considered to be other types of awards/work skills, such as community college certificates, language skills, soft skills, or occupational skills awards?
- How well do IBCs- whether TEA approved or district offered- align with CTE coursetaking, whether measured by number of courses (Giani et al. method) or some other method?
- How well do IBCs- whether TEA approved or district offered- align with industry needs, as measured by occupational projections (using crosswalks to connect IBCs to occupational codes)?



# Why are these questions important to Texas?

These research questions are vital because they intersect education, workforce development, and economic mobility. It helps Texas determine whether its investment in Industry-Based Certifications (IBCs) is truly:

- Preparing students for high-demand, well-paying jobs;
- Aligning with regional workforce needs;
- And creating equitable pathways to success for all students.

Answering these questions will help Texas move toward a more coherent, data-driven, and workforce-aligned education system.



# Initial Findings: Qualitative Early Insights

- Participant engagement includes EDCs, Employers, Service Centers, ISDs, and Regional Industry Groups
- Student advising, soft skills, financial literacy, IBC awareness/options, attention to bilingualism as a workforce asset needs to occur earlier in student life (some degree of parallel finding in both regions),
- CTE counseling is a challenge
- More industry needed in RGV to keep workers from leaving;
- Relationships and Collaboration/Innovation/Leadership are the core strengths Hidalgo County is leveraging — for example, Pipeline to Aerospace is centered in Cameron County, while Pipeline to Semiconductors, Chips, and Robotics is the strategic focus in Hidalgo County.



# Initial Findings: Quantitative Early Insights

1. Throughout most of the state, IBCs aligned with CTE coursework appear to be increasing. Rising from 72% in 2021 to 82% in 2024. Broken down, by region, nearly half have shown alignment rate increases over 10%.
2. Using the TEA Ethnicity Code, students identifying as Black and Pacific Islander had the largest gains in alignment rates between the 2020 and 2024.
3. Across the 4-year period, IBCs corresponding to Transportation, Distribution and Logistics have the highest rates of aligned IBCs.
4. Using the LonestarP3 Data Council's industry alignment crosswalk, our team has identified students that are education aligned (having an IBC corresponding with a relevant CTE course taken during high school) and workforce aligned (completing a CTE course that aligns with workforce demand).



## Quantitative Early Insights (continued)

5. At the State-Level this full-alignment measure has increased from just 6% of CTE course takers in 2021 to over 20% of CTE course takers in 2024.

6. However, in 2024 there were still 13 Education Service Center regions that fell below the state average on fully aligned students.

7. Early exploratory regressions indicate that students in urban counties are less likely to achieve education, workforce, or full alignment after controlling for school year, campus, and the proportion of economically disadvantaged students in a given school.

### Next Steps:

- Deep data dive on El Paso and RGV
- Model demographic and socioeconomic predictors of alignment
- Identify county level skills gaps



# Texas Policy Landscape

*Preparation for the 90<sup>th</sup> Legislative Session*



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# 2026 Texas Interim Legislative Charges

## Teacher Workforce

- Monitoring of HB 2 (89R) – *public school finance*
- Recruitment and Retention
- Compensation Investments

## Student Outcomes

- Improving Middle School Outcomes
- Investment in Special Education
- Student Enrollment and High-Quality Education
- School Choice
- Monitoring of HB 6 (89R) – *mental health services*

## Postsecondary Education

- Postsecondary Affordability and Financial Barriers
- Increasing Credential Completion
- Community College Funding
- Aligning Advising Initiatives
- Workforce Readiness and System Alignment

## Early Childhood Education

- Monitoring HB 4903 (Quad-Agency Child Care Initiative and Commission)



# Relevant Interim Charges to Workforce-Aligned Instruction

- State of Higher Education (House Committee on Higher Education)
  - Study the current state of higher education in Texas. Examine enrollment trends, **workforce demands**, and postsecondary outcomes, as well as progress toward the state's Building a Talent Strong Texas strategic plan.
- ◇ Workforce Development (House Subcommittee on Workforce)
  - Study workforce development and labor market conditions in Texas, including **skills gaps**, workforce participation, **training and education**, and **alignment between workforce programs and employer demand**. Identify challenges and best practices to maintain the competitiveness of regional labor markets and strengthen workforce readiness



# Implications of Research for Policy

Preliminary quantitative relevance

1. **Districts are providing IBCs that are not on the TEA-approved list**, or are providing other credentials (such as Occupational Skills Awards) that are not eligible within the state accountability system.
2. **Alignment between workforce programs and employer demand** — The statewide jump from 72% (2021) to 82% (2024) suggests the system is moving in the direction the charge prioritizes and offers a quantitative baseline the committee can monitor going forward.
3. **Regional labor markets and regional competitiveness** — Nearly half of regions posted alignment gains above 12 points, but the variation across regions is itself the story — it identifies where regional CTE-to-IBC pipelines are strengthening and where they are lagging, which is exactly the kind of evidence needed to target state investment.
4. **Skills gaps and sector-level readiness** — IBCs in Transportation, Distribution & Logistics show the highest alignment rates over the four-year window, which both reflects and reinforces one of Texas's fastest-growing labor demand areas.



# Implications for Policy (cont. Qual)

## **State of Higher Education (House Committee on Higher Education)**

- Need to strengthen early college and career advising pipelines to improve postsecondary enrollment alignment with workforce demand.
- Opportunity to integrate soft skills and financial literacy into pre-college and first-year postsecondary experiences to improve persistence and completion outcomes.
- Importance of embedding IBC awareness and pathway clarity earlier to ensure students make informed postsecondary choices aligned with credentials of value.
- Need to better align K–12 CTE pathways with higher education programs (degree and non-degree) to reduce fragmentation and improve stickability
- Opportunity to formalize bilingualism as a recognized postsecondary credential or workforce skill, particularly in border regions.
- Highlight need to expand capacity for CTE advising and guided pathways within institutions of higher education, especially for first-generation and underserved students.
- Reinforces importance of regional higher education–industry partnerships to support Talent Strong Texas goals tied to employment outcomes.
- Suggests need to differentiate regional strategies in higher education planning based on local economic conditions and industry presence.

## **Workforce Development (House Subcommittee on Workforce)**

- Need to start workforce preparation earlier (middle school or earlier) to improve long-term workforce participation and readiness.
- Highlights CTE counseling shortages as a barrier to effective workforce alignment, suggesting investment in specialized advising roles.
- Demonstrates importance of stronger, sustained collaboration between employers, schools, and workforce entities to align training with real labor market demand.
- Indicates need to leverage bilingualism as a competitive workforce asset through formal recognition and employer engagement.
- Points to regional industry gaps (e.g., RGV) as a constraint on retaining talent, reinforcing need to align workforce policy with economic development strategies.
- Suggests scaling sector-based pipeline models (e.g., aerospace, semiconductors) as best practices for workforce alignment.
- Identifies need to increase employer engagement earlier in the talent pipeline, not just at the hiring stage.
- Emphasizes importance of place-based workforce strategies that reflect regional industry strengths and limitations.
- Supports development of policies that connect workforce training investments with regional innovation and leadership ecosystems.

# Implications of our work for Texas policy

## Pathways research collaborative

- Our research evaluates whether Texas is: Expanding credential attainment before students leave K–12, and Creating alternative pathways aligned with the *Talent Strong Texas* goal of increasing credentialed Texans.

This directly informs whether Texas is making meaningful progress toward its statewide attainment goals.

## Multiple data sources

- TEA, THECB, and TWC data is used to track: College enrollment, Credential attainment, Workforce outcomes (wages, employment)
- This directly answers the charge to examine postsecondary outcomes, showing whether IBCs lead to continued education, or Serve as a terminal credential that still yields economic value



## How does research speak to the recently released interim charges (continued)

Examines alignment between training and employer demand. We analyze:

- IBCs offered by districts vs. certifications employers want
  - Whether certifications correspond to local labor market demand
  - Employer perspectives in RGV and El Paso workforce regions
  - This directly fulfills the charge to assess alignment between workforce programs and employer needs.
- Identifies structural challenges and policy barriers
  - Constraints from the TEA-approved IBC list (i.e. IBCs Tiers, For-Profits, OSHA)
  - This directly responds to the charge to identify challenges and best practices, offering actionable insights such as: Revising approved certification lists
  - Aligning incentives with workforce outcomes



How might our advocacy partners integrate findings from your work in their fact sheets, talking points, or testimony?

- **Highlights the place-based realities of workforce alignment**, including how language, demographics, and local labor markets shape what is actually possible for students and employers.
- **Shows that the new IBC tier system does not reflect on-the-ground workforce needs**, especially in regions where employers like data centers and SpaceX require credentials that fall outside the state's current tier structure.
- **Underscores the growing influence of private and for-profit higher-education partners** in shaping postsecondary readiness and credential pathways for students.



# Refinements to Research to Inform Policy

- Elaborate on opportunities to expand or attune your research in ways that could promote evidence-based recommendations for the legislature given their priorities suggested in the interim charges

For this slide, reflect on: If you had additional time and resources, what follow-up studies (that leverage your initial design) may provide more insights relevant to the issues expressed in the interim charges? How does your work provide an accelerant or a head start to provide relevant findings?

1. Linking alignment to long-term labor-market outcomes.
2. Turn the data into a regional targeting tool.
3. Identify the programs driving the gains.
4. With more time and help, this research can go beyond just showing patterns. It can figure out cause and effect from outcomes, test better ways to help students, and find the best solutions for different parts of Texas, giving leaders strong proof to make smart decisions about jobs and education.



# Implications of Research for Practitioners

- Elaborate on research findings from your collaborative that speak to education leaders and school systems
- Superintendents:
  - Use findings to prioritize early college and career readiness strategies in district planning
  - Align district resources toward CTE advising capacity and industry partnerships
- Principals:
  - Lead campus-level implementation of integrated academic + CTE pathways
  - Ensure school schedules and staffing support coherent student pathway progression
- Counselors:
  - Shift from reactive scheduling to proactive pathway advising beginning in middle school
  - Use alignment insights to guide students toward high-value credentials and courses
- School Boards:
  - Advocate for policies and funding that support:
    - Career advising infrastructure
    - Industry partnerships
    - regional workforce alignment initiatives
  - Use data to monitor student outcomes beyond graduation (college and workforce readiness)



# Thank You

## Pathways Research Collaborative

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