CTE PROGRAM DESIGN SELF-ASSESSMENT: ALIGNING TO THE EVIDENCE

Annenberg Institute BROWN UNIVERSITY

RESULTS FOR AMERICA

This tool helps district and state leaders evaluate how their CTE programs align with the strongest available evidence. It organizes the evidence into six key domains, identifies research-backed practices, and provides questions for reflection and planning. It draws directly from the EdResearch for Action brief, "Evidence-Based Approaches to Designing Effective Career and Technical Education Programs."

What It Does: The Self-Assessment is designed to help programs identify gaps and set a roadmap toward higher-quality, more equitable CTE programs. If used regularly and paired with good data on outcomes, it can help ensure that CTE programs aren't just well-intentioned, but actually well-designed and effective.

What It Doesn't Do: The Self-Assessment evaluates whether a CTE program's design aligns with research-based quality standards, but it does not measure actual student outcomes or how well things are implemented in practice. A program may be well-designed on paper yet still fall short in practice if key elements are not carried out effectively.

How To Use This Tool: For each domain, rate your current practice on a scale from weak alignment to strong alignment, using the 'look fors' to guide your reflection.

Evidence-aligned practice	Weak alignment looks like…	Partial alignment looks like…	Strong alignment looks like…
Pathway Structure and Access	Most students only have access to stand-alone electives (e.g., Intro to Business, one computer class). Completing at least 3 courses in a pathway is not recognized, incentivized, or tracked. Core academic and CTE courses are scheduled separately with little integration.	Some sequenced pathways exist but not for all fields. Completing at least 3 courses in a pathway is recognized, but not incentivized or tracked systematically. There is limited integration of core academic and technical coursework; it depends on individual teachers.	Multi-course pathways are available in high-wage, high-demand fields. The benefits of completing at least 3 courses in a pathway are communicated and incentivized. Core academic and CTE courses are intentionally integrated (e.g., math in construction, science in health sciences).

Evidence-aligned practice	Weak alignment looks like…	Partial alignment looks like…	Strong alignment looks like…
Work-Based Learning (WBL)	WBL is limited to job shadows, career days, or short-term placements with no learning goals. Participation is ad hoc, inequitable, or dependent on individual schools. Employers have minimal roles beyond site visits.	Some structured internships or apprenticeships exist but are limited to specific schools or industries. Learning goals exist but are not consistently applied or monitored. Employer partners occasionally co-design opportunities, but this is not systematic.	All pathways include sustained, structured WBL (e.g., internships, apprenticeships). Clear learning objectives and mentoring are built into every placement. Employer partners co-develop WBL experiences, assess student learning, and provide feedback to schools.
Partnerships with Employers and Colleges	Employers and colleges are engaged only through advisory boards with minimal influence on curriculum.	Employers and colleges provide equipment updates or occasional input on curriculum but are not deeply integrated.	Employers and colleges co-develop curriculum, provide internships/ apprenticeships, and help assess program quality.
Teacher Expertise and Recruitment	Many CTE teachers teach "out of field" without industry experience. Rigid certification rules prevent hiring industry professionals.	Some teachers bring industry experience, but certification barriers limit hiring more industry professionals.	The district/state prioritizes hiring teachers with industry experience and subject-matter expertise. Flexible certification pathways allow industry professionals to enter teaching, supported by training in pedagogy.
Student Exploration and Advising*	Students are placed into CTE courses without exploration or advising. No systematic advising on career interests, labor market returns, or college transitions. Information for families is limited, technical, and English-only.	Some schools offer some exploratory opportunities, but they are not structured or widespread. Advising exists but varies by counselor workload; career guidance may be generic. Outreach efforts exist but may not be multilingual or equity-focused.	All students have structured opportunities (e.g., 9th-grade rotations) to explore multiple CTE fields before specializing. Career advising tools are embedded in course planning Families receive clear, accessible, multilingual information about CTE pathways.

Evidence-aligned practice	Weak alignment looks like…	Partial alignment looks like…	Strong alignment looks like…
Equity and Access*	There is no disaggregation of participation/outcomes by race, gender, income, or disability to understand if low-income students and students of color are overrepresented in low-wage CTE fields. Master schedules block CTE access for certain student groups (e.g., students retaking courses, English learners).	There is some disaggregation of participation/outcomes, but data not used systematically to guide decisions. Some efforts are made to align scheduling, but conflicts still exist for certain groups (e.g., students retaking courses, English learners).	Participation and outcomes are systematically tracked. Data is monitored for inequities (on demographics, achievement, special education status, language learner status, etc.) and scheduling/admissions policies are adjusted accordingly. Master schedules are designed so that CTE courses do not conflict with core requirements, advanced coursework, or credit recovery.

* *The practices in the "Student Exploration and Advising" and "Equity and Access" domains provide promising examples of how schools can broaden access to high-value pathways. However, these approaches are largely based on descriptive evidence and case studies rather than causal research. Leaders should apply them with care, evaluate impact in their own context, and share lessons learned to build the field's knowledge base.*

Reflection Questions:

1. Program Structure & Coherence
   - Do most students have access to sequenced, multi-course pathways rather than only one-off electives?
   - Does our program clearly recognize and incentivize taking three or more courses in a pathway?
   - Are pathways designed to connect academic and technical coursework, or do they operate in silos?

2. Work-Based Learning (WBL)
   - Do students have access to sustained WBL placements with clear learning goals and mentoring?
   - Are WBL opportunities equitably available to students across schools and demographics?
   - Are employers meaningfully involved in shaping the WBL curriculum and expectations?

3. Partnerships with Employers & Colleges
   - Are employer partners engaged beyond advisory boards (e.g., co-developing curriculum, providing internships, updating equipment)?
   - Do we track whether partnerships are producing measurable benefits for students (credentials, jobs, college persistence)?

4. Teacher Expertise
   - Do we prioritize recruiting teachers with direct industry experience?
   - Are there flexible certification routes that allow industry professionals to enter teaching while still receiving pedagogical support?

5. Student Exploration and Advising
   - Do 9th graders have structured opportunities to explore multiple CTE areas before choosing a pathway?
   - Are career advising tools embedded in course selection?
   - Do families receive clear, accessible, multilingual information about CTE opportunities and potential earnings?

6. Equity & Access
   - Do we disaggregate enrollment and completion data by race, gender, income, and disability status?
   - How often do scheduling conflicts prevent students from enrolling in CTE? Which groups of students are most affected?
   - Do we provide flexible, high-quality credit recovery (summer, after school, online) so students can catch up without losing CTE access?
   - Are high-wage, high-growth pathways (e.g., health sciences, IT, STEM) accessible to all student groups?

Discussion Questions:

1. Where are we most aligned with the evidence? What structures, mindsets, or resources have enabled that success? How might we extend or replicate those practices elsewhere?

2. Where are we least aligned with the evidence? What barriers (e.g., capacity, policy, scheduling, beliefs) are currently preventing stronger alignment? Which of those could we realistically address in the short term?

3. How can we strengthen partnerships (employers, colleges) to expand high-quality opportunities?

4. What is one policy or practice we could change this year to expand equitable access to high-value CTE pathways?