For data to be trusted, policies and protocols must be in place to ensure consistent collection of reliable, valid and complete career readiness data. States can establish universal definitions and automated processes to collect and interpret data and work with practitioners and the public to foster an understanding of data elements to build trust in the data. In Texas, state leaders have developed statewide programs of study and automated identification of Career Technical Education (CTE) learners that have made data collection and reporting more efficient and accurate.

How Texas Addressed Its Data Challenges

In 2015, the Texas Legislature adopted H.B. 2628, which established statewide programs of study. Prior to this, each local district could develop its own programs of study and course sequences. This situation led to inconsistent data collection, as districts could have different course requirements for the same program of study. Additionally, the state relied on districts to self-report the number of CTE concentrators based on their locally developed programs of study. Because districts decided which courses counted toward concentration or completion of a program of study, learners could complete a course in one district that counted toward one program of study, but that same course would not count in another district.
Texas’ new statewide programs of study address this inconsistency by creating a uniform framework that all districts receiving Strengthening Career and Technical Education for the 21st Century Act (Perkins V) funding must use to monitor participation in CTE. To develop these programs of study, several state agencies, including the Texas Education Agency, Texas Workforce Commission, Texas Workforce Investment Council, and Texas Higher Education Coordinating Board, worked together to leverage labor market information and set benchmarks for in-demand, high-wage and high-skill occupations. Related occupations that satisfy the criteria were then grouped together, and a set of course sequences with accompanying course codes was developed to form a program of study.

Because of these changes, every school district now has the same grouping of available aligned courses for each program of study. Each school district has flexibility to offer some or all of the courses within the grouping for each program of study, resulting in consistency across the state. Texas also allows school districts to use regional labor market data and local wisdom to justify regional programs of study that they could offer in addition to the statewide programs of study. These approved regional programs of study will count toward coding students as concentrators or completers.

Another challenge in Texas was that local school districts would self-identify learners who achieved CTE concentrator or completer status. To solve this problem, Texas developed an automated coding system to analyze learner course completion records submitted by the district and assign the learner a code based on the number of CTE courses completed. This process allows Texas to compare what courses secondary learners across the state are completing and how they are progressing through the statewide programs of study.

Data Validation and Training of Local Leaders

For the system to work as designed, Texas had to ensure that local leaders understood the new data elements and reporting requirements. Otherwise, districts would run the risk of having inaccurate data, which could affect state reporting and meeting federal reporting requirements. Texas already meets with local leaders twice a year at state conferences to present information on setting up local data collection systems and understanding the data elements and reporting expectations. Texas plans to offer professional development for district CTE administrators to understand the state’s new data systems.

### Texas Coding System

<table>
<thead>
<tr>
<th>CODE</th>
<th>LABEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Not a CTE Learner</td>
<td>Did not complete a high school CTE course.</td>
</tr>
<tr>
<td>5</td>
<td>CTE Participant</td>
<td>Completed one CTE course.</td>
</tr>
<tr>
<td>6</td>
<td>CTE Explorer</td>
<td>Completed two or more CTE courses not within the same program of study and is not a participant, concentrator or completer.</td>
</tr>
<tr>
<td>6</td>
<td>CTE Concentrator</td>
<td>Completed two or more CTE courses for at least two credits within a specific program of study and is not a completer.</td>
</tr>
<tr>
<td>7</td>
<td>CTE Completer</td>
<td>Completed three or more CTE courses for four or more credits, including an advanced-level course, within a specific program of study.</td>
</tr>
</tbody>
</table>
It is important for local leaders to understand the data because Texas relies on them to validate it. After the state automatically codes the data, it returns the data to the district to confirm or raise any flags. In some instances, the state’s coding will also indicate errors. For example, a student may be recorded as having taken the same course multiple times. This validation helps not only to ensure accuracy but also to identify any problems in the district’s data system that need to be addressed.

Consistent and valid data is also important because Texas chose the percentage of learners who complete a CTE program of study as one of its secondary program quality indicators in its Perkins V plan. Therefore, it is even more important that local leaders understand how to collect, report and validate the data to ensure that Texas meets its program completer goals.

**Using the Data to Complete the Comprehensive Local Needs Assessment**

With the implementation of Perkins V, Texas shared the data in time to help local districts complete the required Comprehensive Local Needs Assessment (CLNA). The CLNA requires local recipients of Perkins V funds to review the performance of CTE concentrators, progress toward implementing CTE programs of study, and progress toward closing access and equity gaps, among other areas of focus.

In addition to sharing data for the CLNA – which must be updated every two years – the state plans to share the automated completion data with districts annually along with a supplemental report that local leaders can use to compare the performance of CTE learners to the rest of their learner population. This data will be disaggregated by race, ethnicity, gender, special populations, program of study and Career Cluster.

**Conclusion**

Texas’ automated learner identification system, which builds upon the state’s new statewide CTE programs of study framework, allows the state to consistently collect reliable and accurate data on CTE participants, concentrators and completers. This system eliminated self-reporting and inconsistent course sequences for CTE programs of study and ushered in a system in which local and state-level stakeholders are beginning to better understand and trust the data to support both state and local needs.

**NOTES**

3. For more information on how states are leveraging labor market information, see Advance CTE. (2020). Aligning to Opportunity: State approaches to setting high skill, high wage and in demand. Retrieved from https://careertech.org/resource/aligning-opportunity.
5. R. Merritt, personal communication, October 26, 2020