The Office of Career, Adult, and Technical Education (OCTAE) provides technical assistance (TA) each year to state and local career and technical education (CTE) leaders through the TA to States initiative. The TA helps states meet accountability requirements under the *Strengthening Career and Technical Education for the 21st Century Act (Perkins V)* and supports state and local CTE providers in using data to improve student and program outcomes.

Between October 2020 and May 2021, researchers at RTI International (the “TA team”) explored the following TA topics with Illinois State Board of Education (ISBE) staff:

- How can ISBE use the data collected through its program quality review (PQR) portal to assess how well districts are meeting CTE program quality criteria?

- In light of changes to the methods of administration (MOA) program, what risk factors should ISBE consider when identifying districts for monitoring visits?

- How have states documented CTE data policies and definitions for local providers and the general public?

ISBE staff who participated in the TA project included **Marci Johnson**, State CTE Director, and **David Osborne**, Methods of Administration Coordinator.
To address Illinois’ questions, the TA team

- reviewed ISBE’s PQR portal to develop a strategy for analyzing and presenting PQR data;

- researched MOA monitoring and PQR practices in Iowa, Utah, Colorado, Oregon, and Texas, and

- gathered state documentation of CTE data policies and definitions in Alabama, Delaware, Florida, Maryland, Massachusetts, Minnesota, Oregon, Wisconsin, and Rhode Island.
**RECOMMENDATIONS**

- **Use the PQR Plan to prepare and review PQR Portal data with pilot sites.** The PQR plan, outlined in subsequent slides, provides a process for analyzing data on school and local education agency (LEA) performance on Illinois program quality components. It also provides sample tables for conducting additional analysis to assess variations in performance by school or district characteristic. Finally, it suggests topics to discuss with PQR pilot sites based on the analysis, such as identifying potential revisions to the PQR Portal or quality criteria and needs for additional support or training.

- **Review MOA monitoring and PQR practices summarized in this report.** Identify risk factors and other practices and processes that may assist ISBE in identifying schools or LEAs at risk of noncompliance for MOA-related factors.

- **Review and leverage examples of how states document CTE data policies and documentation for internal and external audiences.** Identify critical information for each audience, considering the degree of familiarity with data and the context in which policies and definitions are used.
• **Section 1: PQR Analysis Plan** outlines steps ISBE can take to analyze and review data collected from PQR pilot sites through the PQR Portal.

• **Section 2: Methods of Administration Monitoring** provides an overview and examples of MOA-related monitoring processes and risk factors.

• **Section 3: State documentation of CTE Policies and Concepts** provides an overview and examples of state approaches to documenting CTE policies and concepts for state and local CTE providers and stakeholders.
Section 1: Program Quality Review Plan
ISBE plans to use data gathered during the PQR pilot to answer two broad questions about the CTE program of study (POS) quality criteria that it has chosen:

1. How well are schools and LEAs meeting those criteria?

2. Are the criteria appropriate and achievable for all schools and LEAs?
The PQR plan outlines a three-step approach for analyzing and assessing the PQR process and quality criteria:

**Step 1**
Develop baseline data tables to characterize how well LEAs met district- and program-level quality criteria.

**Step 2**
Conduct cross-tabulations of data from the CTE portal and supplementary data to identify variations in how districts met quality criteria by CTE staff capacity, rurality, and other factors.

**Step 3**
Invite districts that participated in the PQR pilot to review and provide feedback on data tables from Steps 1 and 2 as well as their reflections on the pilot and PQR process.
Step 1

Develop baseline data tables to characterize how well LEAs met district- and program-level quality criteria.

**Data:** Responses and self-assessment scores gathered through the PQR portal (i.e., “PQR Portal data”)

**Approach***:
- Report summary statistics of district responses to the **SCHOOL-LEVEL LEA INFORMATION** questions.
- Report summary statistics for **POS INFORMATION** questions, in aggregate and broken out by career cluster.

*The TA team provided a set of sample table shells to ISBE in an Excel file accompanying this report, which include suggested tabulations for Steps 1 and 2.*
**PQR Analysis: Step 1—School-level/LEA Information**

*Develop summary statistics of responses to SCHOOL-LEVEL LEA INFORMATION questions.*

<table>
<thead>
<tr>
<th>Topics</th>
<th>Detailed research questions</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| Professional Learning Opportunities    | What professional development (PD) opportunities are being offered? Who is being offered those opportunities? | • # and % of staff of any type receiving each PD opportunity  
• Within PD opportunity, # and % of offerings by staff role |
| CTE Professional Capacity             | What is the average staff capacity at pilot sites?  
What is the breakdown of CTE staff by role?                                         | • Average number of CTE staff among pilot sites  
• Percent distribution of CTE staff by staff role |
| Career Guidance for All Students      | What CTE-related career guidance are schools offering their students?           | • # and % of sites responding “Yes” to questions under “Career Guidance for All Students” |
Present average self-assessment scores from the PROGRAM OF STUDY INFORMATION section, at the state level and broken out by career cluster

In the following example, self-assessment scores have been assigned numerical values, as follows:

- Not at all achieved = 1
- Minimally achieved = 2
- Moderately achieved = 3
- Substantially achieved = 4

<table>
<thead>
<tr>
<th>PQR self-assessment questions (sample)</th>
<th>Average rating: Agriculture cluster</th>
<th>Average rating: All programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program of study is aligned to local or state labor market demand identified through the local needs assessment process.</td>
<td>2.3</td>
<td>2.6</td>
</tr>
<tr>
<td>The curriculum is aligned to industry-validated technical competencies and skills identified by the advisory committee.</td>
<td>3.2</td>
<td>3.1</td>
</tr>
<tr>
<td>The instructors and relevant staff are aware and knowledgeable of the appropriate industry-related competencies and skills.</td>
<td>3.2</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Note: This example does not contain actual pilot site data.
Conduct cross-tabulations of data from the CTE portal and supplementary data to identify variations in how districts met quality criteria by CTE staff capacity, rurality, and other factors.

**Data:** PQR Portal data, ISBE administrative data, National Center for Education Statistics (for rural/urban comparison)

**Approach:** Cross-tabulate CTE portal data points and bring in supplemental data to explore/characterize any relationships between

- student performance and program quality criteria, and
- program quality criteria and district or school characteristics (e.g., enrollment, rurality/urbanicity)
Present average self-assessment scores by urbanicity/rurality of the LEA offering the program of study (see example table below).

<table>
<thead>
<tr>
<th>Employer-informed competencies and skills (sample)</th>
<th>All</th>
<th>Urban</th>
<th>Suburban</th>
<th>Town</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program of study is aligned to local or state labor market demand identified through the local needs assessment process.</td>
<td>2.6</td>
<td>4.0</td>
<td>2.4</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>The curriculum is aligned to industry-validated technical competencies and skills identified by the advisory committee.</td>
<td>3.1</td>
<td>1.2</td>
<td>3.2</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>The instructors and relevant staff are aware and knowledgeable of the appropriate industry-related competencies and skills.</td>
<td>2.9</td>
<td>2.1</td>
<td>3.7</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>The curriculum incorporates industry-validated employability skills identified by the advisory committee that help students succeed in the workplace.</td>
<td>3.6</td>
<td>4.0</td>
<td>3.0</td>
<td>3.8</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Note: This example does not contain actual pilot site data.
Cross-tabulate program self-assessment scores with responses to Professional Learning Opportunity questions (see example below).

POS self-assessment scores for LEAs that offered professional learning opportunities in providing opportunities to advance knowledge, skills, and understanding of all aspects of an industry, including the latest workplace equipment, technologies, standards, and credentials

<table>
<thead>
<tr>
<th>Self-evaluation component</th>
<th>Baseline score (all programs)</th>
<th>Offered professional learning opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>The curriculum is aligned to industry-validated technical competencies and skills identified by the advisory committee.</td>
<td>3.1</td>
<td>3.9</td>
</tr>
<tr>
<td>The instructors and relevant staff are aware and knowledgeable of the appropriate industry-related competencies and skills.</td>
<td>2.9</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: This example does not contain actual pilot site data.
Steps 1 and 2 are designed to provide ISBE and pilot schools/LEAs with background data to help them assess the PQR process and criteria.

**Step 1** provides contextual data related to ISBE’s first question—How well are schools and LEAs meeting those criteria?

**Step 2** provides contextual data related to ISBE’s second question—Are the criteria appropriate and achievable for all schools and LEAs?

- Specifically, Step 2 is designed to highlight where POS self-assessment scores may vary systematically depending on school or LEA characteristics.
Step 3

Invite districts that participated in the PQR pilot to review and provide feedback on data tables from Steps 1 and 2 as well as their reflections on the pilot and PQR process.

Data: Tables/charts developed during Steps 1 and 2

Approach:

• Prepare a set of discussion prompts based on the data, such as the following:
  ▪ Why are POS self-assessment scores related to labor market alignment lower for rural districts than urban districts?
  ▪ Why are urban districts less likely than suburban districts to report that their programs are aligned to industry-validated technical competencies and skills?
• Host a review session with PQR pilot districts to review and discuss the data.
Collect feedback from PQR pilot sites on the following:

- **Ask**: How did pilot sites determine their self-assessment scores? What guidance is needed to improve consistency across sites?
- **Challenges**: Discuss summary findings and identify quality criteria where sites need additional support.
- **Opportunities**: Which sites report the greatest level of success in implementing quality criteria? In which clusters or locales (e.g., rural, urban)? What professional learning opportunities might be having an impact?
- **Next Steps**: Are we asking the right questions during the PQR? How can we improve the process?
Section 2: Methods of Administration Monitoring
States have started to consolidate or coordinate Perkins and MOA monitoring processes, using equity-related risk factors to identify LEAs for onsite or virtual monitoring visits.

**MOA-related risk factors:**

- Performance gaps (e.g., Colorado, Iowa, Oregon, Utah)

- Enrollment (comparison of CTE and district enrollment by subgroup) (e.g., Colorado, Iowa, Oregon,* Texas, Utah)

- Time since last MOA monitoring visit (e.g., Texas and Utah)

*Enrollment gaps are double-weighted in Oregon.*
Iowa has introduced a multitiered analysis to identify subrecipients for monitoring visits or additional review.

**Risk analysis (1): Review composite score on Perkins academic core indicators**

- 10 lowest-performing LEAs are selected for additional monitoring/TA

**Risk analysis (2): CTE enrollment distribution by subgroup: Race, sex, and disability**

- Individual CTE programs within an LEA are selected for review

**TA**

- **Targeted TA** for LEAs with fewer than 50% of programs selected for review
- **Comprehensive TA** for LEAs with more than 50% of programs selected for review
Iowa has introduced a multitiered analysis to identify subrecipients for monitoring visits or additional review.

**Targeted TA** for LEAs with fewer than 50% of programs selected for review:
- Document review
- Focused on specific areas of concern
- Subrecipient required to document trainings from MOA coordinator, Office of Civil Rights, or other state or national equity experts
- Onsite, Americans with Disabilities Act accessibility visit required for buildings constructed before 1990

**Comprehensive TA** for LEAs with more than 50% of programs selected for review:
- Same as above, plus onsite visit

Resources: [Community Colleges Perkins Desk Audit Form](#) and [Secondary Perkins Desk Audit Form](#)
## MOA Monitoring: Utah Example

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course-level CTE enrollment by subgroup compared with district demographics</td>
<td>Administrative data</td>
</tr>
<tr>
<td><em>(existing risk factor)</em></td>
<td></td>
</tr>
<tr>
<td>Length of time since previous MOA review</td>
<td>CTE/MOA review docs</td>
</tr>
<tr>
<td>“Most responsible person”*: Time in position</td>
<td>CTE Director Annual Survey</td>
</tr>
<tr>
<td>“Most responsible person” participation in annual MOA training</td>
<td>Annual MOA training registration</td>
</tr>
<tr>
<td>CTE director participation in annual MOA training</td>
<td>Annual MOA training registration</td>
</tr>
<tr>
<td>Perkins local application—identify strategies to improve programs for special populations</td>
<td>Local application</td>
</tr>
<tr>
<td>Grievance policies and procedures on district website are complete and in compliance</td>
<td>CTE Director Annual Survey</td>
</tr>
<tr>
<td>Continuous nondiscrimination notice is complete and in compliance</td>
<td>CTE Director Annual Survey</td>
</tr>
<tr>
<td>Annual Public Notification is complete and in compliance</td>
<td>CTE Director Annual Survey</td>
</tr>
<tr>
<td>Gaps in student performance</td>
<td>CTE performance reports</td>
</tr>
</tbody>
</table>

*The “most responsible person” is the staff person the district designates to meet the requirements in Title IX: 34 CFR 106.8 and Section 504: 34 CFR 104.7(a).

Resources: The draft list of MOA-related risk factors was provided to the TA team via email. The email was forwarded to ISBE staff. For additional information and context, see [DRAFT State of Utah Methods of Administration Plan, Revised 2020](#)
For additional information on state approaches to MOA monitoring under *Perkins V*, please view the [Aligning Perkins V Data and Methods of Administration (MOA) Plans Session](#).
Section 3: Documenting CTE Policies and Concepts
What approaches have states taken to documenting CTE policies and practices?

**Comprehensive CTE policy and procedures manuals**
- Alabama, Florida, Minnesota, Oregon

**Topic-specific manuals**
- Delaware, Florida, Wisconsin

**Web-based manual**
- Massachusetts

**Public-facing dashboards and reports**
- Maryland, Oregon, Pittsburgh (Pennsylvania), Rhode Island
<table>
<thead>
<tr>
<th><strong>Minnesota Perkins V Operational Handbook</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal and state CTE policy</strong></td>
</tr>
<tr>
<td><strong>Local application process</strong></td>
</tr>
<tr>
<td><strong>Local application content</strong></td>
</tr>
<tr>
<td><strong>Accountability, reporting, and data</strong></td>
</tr>
<tr>
<td><strong>Funding/financial requirements</strong></td>
</tr>
<tr>
<td><strong>Monitoring</strong></td>
</tr>
<tr>
<td><strong>Office of Civil Rights reviews</strong></td>
</tr>
<tr>
<td><strong>Policies</strong></td>
</tr>
</tbody>
</table>
Accountability, reporting, and CTE data

- Definitions
  - Participant
  - Concentrator
  - Performance indicators (at right)

- State-determined levels of performance
  - How they are established
  - Consolidated Annual Reporting requirements

- Reporting
  - Reporting process for LEAs
  - Data verification process
  - State-generated reports
  - Accessing data reports
  - Useful links (e.g., webinars, data documentation)
Florida Perkins V Implementation Guide

- Focuses on the program application approval process
  - Includes Perkins overview, general guidance, and detailed description of program application process and requirements
  - Appendices (about half the document) provide additional detail on program and accountability requirements

APPENDICES

- Appendix A: Size, Scope and Quality
- Appendix B: Labor Market Alignment
- Appendix C: CTE Programs and Programs of Study
- Appendix D: Program of Study Template
- Appendix E: Agency ID Reporting Numbers
- Appendix F: Performance Accountability
- Appendix G: Overall Distribution of Funds to Local Agencies
- Appendix H: Fiscal Requirements
- Appendix I: Relevant Sections of the Perkins V Act
Topic-specific CTE Guides

Delaware’s Fiscal and Accountability Policies and Procedures
• Allotment/distribution of funds
• Required/permissive uses
• Perkins fiscal guidance
• State funding mechanisms and guidance
• Grants
• Perkins core indicators/improvement plans
• Grant application process
• Monitoring overview
• Data management

Florida’s Guide to Calculating Perkins Secondary Accountability Measures
• Definitions
  ▪ CTE concentrator
  ▪ Performance indicators
  ▪ Graduation rate
• Business rules
  ▪ Numerators/denominators for performance indicators

Wisconsin Perkins V Accountability: CTE Concentrator
• Definitions, valid courses for concentrator definitions
# Massachusetts Perkins V Manual (web-based)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perkins essentials</td>
<td>Introduction to law and requirements, links to related resources</td>
</tr>
<tr>
<td>Access to programs</td>
<td>Equal access, disaggregation, and related guidance</td>
</tr>
<tr>
<td>Program components</td>
<td>Size, scope, and quality and other program requirements</td>
</tr>
<tr>
<td>Enrollment and performance reporting</td>
<td>Data reporting procedures and timeline</td>
</tr>
<tr>
<td>Performance and accountability</td>
<td>Perkins performance indicators, performance improvement plans, indicator calculations, state-determined performance levels</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Links to monitoring procedures, resources, and guidance</td>
</tr>
<tr>
<td>Perkins funding</td>
<td>Overview of funding allocation amounts by district</td>
</tr>
<tr>
<td>Additional resources</td>
<td><em>Perkins V</em> State plan, Perkins definitions</td>
</tr>
</tbody>
</table>
Public-facing Dashboards and Reports (slide 1)

Data definitions included in public-facing CTE dashboards and reports are typically “plain-language” versions of CTE business rules/data definitions.

Examples:

- Oregon’s Traffic Light Reports
- Pittsburgh Public Schools’ Industry-Recognized Credentials Report

Definitions/documentation included in dashboard visuals are typically sparse. However, Rhode Island’s RI DataHub incorporates data dashboards/visuals into more in-depth, topical discussions through its Data Stories page.
Maryland’s **CTE Performance Dashboards** dynamically present the “formula” used to compute performance rates based on user input.

When users want to view student performance on a specific indicator, they select the indicator from a dropdown list (see example at right).

When they make their selection, the numerator and denominator are automatically updated.
Review and leverage examples of how states document CTE data policies and documentation for internal and external audiences. Identify critical information for each audience, considering their degree of familiarity with data and the context in which policies and definitions are used.

- For example, Utah’s data definition flowcharts (provided to ISBE with this report) were developed for internal use by state data analysts and include detailed information on selection criteria/queries and where to locate variables in the state data system.

- For public-facing dashboards and data reports, definitions and documentation tend to be less detailed and mirror statutory (i.e., Perkins V) definitions for CTE concentrators, performance indicators, etc. (e.g., Oregon’s Stoplight Reports and Maryland’s CTE Data Dashboards).