

Office of Vocational and  
Adult Education, U.S.  
Department of Education

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# Core Indicator Framework

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January, 2000

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# **OVAE Core Indicator Framework for State Performance Accountability Systems**

## **1. Introduction and Overview**

### **1.1 Introduction**

This paper presents the core indicator framework for State performance accountability systems for vocational and technical education. The Office of Vocational and Adult Education (OVAE) has worked closely with states and major stakeholder organizations to develop this framework. OVAE will use this framework to provide clear guidance and technical assistance to states. The framework will also be the basis for performance reporting required by Perkins III. A proposed annual performance report form will be submitted to the Office of Management and Budget for approval under the Paperwork Reduction Act later this year.

OVAE views the development of this core indicator framework as the first step in working with states, the Department of Labor, and stakeholder organizations to develop a larger performance accountability framework. This larger framework will address the remaining performance accountability system issues including setting and adjusting performance levels, continuous improvement, and incentive grants and sanctions. OVAE will work with states, the Department of Labor, and key stakeholders on the remaining elements of the larger accountability framework.

This paper first provides a background discussion of the changing performance accountability environment and federal and state efforts to develop and implement performance accountability systems. It also summarizes the process, products, and timetable for developing this core indicator framework. The paper then presents the proposed core indicator framework. Appendix A summarizes the core indicator framework. It presents the goals, measures, measurement approaches, and quality criteria for each of the fifteen sub-indicators.

### **1.2 Framework Background**

The Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III) requires a continued federal and state commitment to performance measurement and accountability. Perkins III builds on significant past efforts to evaluate and improve vocational and technical education. The 1990 Perkins Act required States to develop and implement performance measures for vocational and technical education programs. These provisions made it necessary for states to develop at least one measure of student outcomes (competencies or skill attainment, retention or completion of school, or placement in additional training, education, military service or employment). Because States could choose a

minimum of two indicators, the scope of the measurement systems developed was limited in comparison to what Perkins III requires. For example, 20 States did not measure either retention in, or completion of, secondary school by vocational education students. 32 States did not measure either retention in, or completion of, a postsecondary degree or certificate program by vocational education students.

The new law gives States, school districts, and postsecondary institutions greater flexibility to design services and activities that meet the needs of their students and communities. In return for that flexibility, Perkins III establishes a rigorous State performance accountability system "to assess the effectiveness of the State in achieving statewide progress in vocational and technical education and to optimize the return of investment of Federal funds in vocational and technical education activities" (sec. 113(a)).

There are a number of significant changes in the performance measurement system in Perkins III. Whereas the 1990 Perkins Act focused on the development of the measures, Perkins III focuses on the reporting of the information and the accountability of State and local recipients of Perkins funds for results. It also identifies four core measures that every state must include in its system, rather than allowing states to choose a few outcomes to track. There is also a shift from measuring student gains to measuring student attainment. With the new system, Congress and other major stakeholders expect OVAE and states to achieve and demonstrate results.

Perkins III requires states to work with OVAE to establish rigorous performance measures and standards for four core performance indicators and establish performance management systems that are fully capable of sustaining and reporting continuous improvement. States must report annually to the Department on their progress in achieving agreed-upon levels of performance (sec. 113(c)(1), (2)). The Secretary is required to make these reports available to the public and to Congress and to disseminate "State-by-State comparisons" of performance information (sec. 113(c)(3)). Incentive grants will be awarded to States that exceed agreed-upon performance levels for Perkins III, the Adult Education and Family Literacy Act, and employment training services authorized under Title I of the Workforce Investment Act (sec. 503 of the Workforce Investment Act of 1998 (WIA)). Grants may be reduced to States that do not meet agreed-upon performance levels (sec. 123(d)(2)). Each State must annually evaluate the performance of its grantees using the performance indicators, and enter into a local improvement plan with grantees that are not making progress toward achieving the States' performance levels (sec. 123(c)).

High Stakes Environment: Need for Rigorous Performance Accountability Systems. The Perkins III performance accountability framework is being developed in a new high stakes environment. Since the early 1980s, federal and state education and workforce development legislation and government reinvention initiatives have raised the stakes for performance accountability

systems. Now, most federal and state education and workforce development programs have established performance requirements. Most states have established state educational accountability systems, although many of the systems are still under development.

Since 1993, the Government Performance Results Act (GPRA) has required federal agencies to establish performance accountability systems. Federal agencies are required to clarify their missions, set performance measures and goals, and integrate these measures into performance management systems for all major programs. Federal agencies are expected to report regularly to Congress on their progress in reaching their performance goals.

One major trend in this new performance accountability environment is rising stakeholder expectations about the quality of performance measurement and the effectiveness of performance accountability systems in getting results. Congress and state legislatures and major stakeholder organizations now have higher expectations on the quality and reliability of performance measures and data collection systems. They also are expecting high levels of performance on these measures and sustained performance improvement. The provisions of Perkins III tying state and local performance in vocational education, adult education, and workforce development to incentive grants and sanctions are part of this trend toward higher expectations.

Integrated Systems and Shared Accountability: Coordinating Performance Accountability Systems. Federal and state policy-makers are increasingly seeing vocational education as a critical component of larger education and workforce development systems. One goal of Perkins III is to align vocational and technical education with State and local efforts to reform secondary schools and improve postsecondary education. Another goal is to promote the development of seamless education and workforce development systems at the State and local level. To support these goals, the Perkins III performance accountability framework should promote common or consistent performance accountability systems including common or consistent:

- Performance measures - including common terminology and operational definitions
- Measurement approaches - including shared or consistent student assessment, data collection (e.g., administrative record exchange, surveys) and data management systems.
- Continuous improvement approaches - including setting and adjusting annual performance targets and establishing and managing continuous improvement systems
- Reporting system definitions - including student or participation and service definitions.

Common or consistent approaches to performance definitions and measurement across different systems will reduce data collection and reporting burden on State agencies, school districts and institutions of higher education that receive funding from multiple systems. Greater consistency and commonality in performance measurement across States will also make performance data more readily understandable and useful to parents, students, and policy-makers. Furthermore, common or consistent approaches to measurement among states is necessary to the compilation of State data into a national profile of vocational education and the measurement of the national "return on investment" of Federal funds.

### **1.3 Framework Development and Review Process**

The Office of Vocational and Adult Education (OVAE) is committed to working closely with states, the Department of Labor and other major stakeholders to develop a rigorous and coordinated performance accountability framework that is fully capable of meeting stakeholder expectations and requirements. As discussed earlier, OVAE views the development of the core indicator framework as the first step in working with states, the Department of Labor, and stakeholder organizations to develop a larger performance accountability framework. This larger framework will address the remaining performance accountability system issues including setting and adjusting performance levels. The development and review process for the core indicator framework and the larger performance accountability framework is summarized in Figure 1.

As shown in Figure 1, OVAE used the draft core indicator framework for a final round of consultation with states and stakeholder organizations in August, 1999. OVAE will then incorporate final changes into the framework and pilot test the framework with volunteer states. During the pilot-testing of the core indicator framework, OVAE will begin development of the remaining components of the performance accountability framework for completion by November, 1999. OVAE will then use the framework to work with states to continuously improve state performance accountability systems through a series of technical assistance workshops and national institutes.

**Figure 1**  
**Framework Development and Review:**  
**Process and Timetable**

<b>WHAT</b>	<b>WHEN</b>
Develop plan for development of the OVAE accountability framework. Solicit input from State Directors at annual meeting.	April 1999
Develop and review first draft of core indicator framework—sub-indicator definitions and performance measures	May 1999
Develop and review second draft of core indicator framework—second draft of sub-indicator definitions and performance measures and first draft of state measurement approaches and quality criteria for measurement approaches	June 1999
Develop and review final draft of core indicator framework—final draft of sub-indicator definitions and performance measures and final draft of state measurement approaches and quality criteria for measurement approaches	July – August 1999
Introduce quality criteria and solicit input from states on criteria and ranking of measurement approaches during regional technical assistance meetings	August 1999
Pilot test framework with volunteer states and NASDVTE	September-November 1999
Develop and review first draft of remaining components of performance accountability framework—setting and adjusting performance levels, continuous improvement, and incentives and sanctions	September – October 1999
Develop final draft of remaining components of performance accountability framework	November 1999
Implement accountability framework, provide technical assistance to state teams at the National Institute for Program Improvement	November 1999

## 2. Core Indicator Framework Overview

### 2.1 Purpose of Core Indicator Framework

Perkins III defines major roles for OVAE and states in establishing performance accountability systems for vocational and technical education. States are given the responsibility for developing performance measures and data collection systems for the four required core indicators as well as additional indicators of performance. OVAE is responsible for ensuring that state performance measures are sufficiently rigorous (sec. 122(e)(1)(B)) and comparable to ensure consistency and fairness in setting and adjusting performance levels (sec. 113(b)(3)(A)(vi)) and reporting state comparisons (sec 113(c)(3)(B)).

The OVAE Core Indicator Framework is being developed in cooperation with states, the Department of Labor and stakeholder organizations to achieve two major objectives:

1. Establish Performance Measurement Approaches for Core Indicators. The framework is intended to define state performance measurement approaches for each core indicator to ensure sufficient rigor and comparability among state performance accountability systems. The framework also is intended to define performance and data collection approaches that can be easily integrated into state and local performance management systems to support continuous improvement.
2. Coordinate Performance Measurement. The framework is intended to support the coordination of performance measure development at the national and state levels for core indicators that also are addressed in related federal and state performance accountability systems. These related federal and state performance accountability systems include:
  - State Educational Accountability Systems
  - Elementary and Secondary Education Act (ESEA)
  - Higher Education Act (Student Right to Know Requirements)
  - Adult Education (WIA Title II)
  - WIA Title I—Youth Ages 14-18
  - WIA Title I---Youth Ages 19-21
  - WIA Title I---Youth Ages 21+

### 2.2 Components of Core Indicator Framework

The core indicator framework addresses four core indicators and fifteen sub-indicators. These indicators and sub-indicators are shown in Figure 2.

**Figure 2:  
Core Indicators and Subindicators**

Core Indicator 1. Student Attainment

- 1S1: Secondary Academic Attainment
- 1S2: Secondary Vocational and Technical Skill Attainment
- 1P1: Postsecondary Academic Attainment
- 1P2: Postsecondary Vocational and Technical Skill Attainment

Core Indicator 2. Credential Attainment

- 2S1: Secondary Completion
- 2S2: Proficiency Credential with Secondary Diploma
- 2P1: Postsecondary Degree or Credential

Core Indicator 3. Placement and Retention

- 3S1: Secondary Placement
- 3S2: Secondary Retention
- 3P1: Postsecondary Placement
- 3P2: Postsecondary Retention

Core Indicator 4. Participation in and Completion of Non-Traditional Programs

- 4S1: Participation in Secondary Non-Traditional Programs
- 4S2: Completion of Secondary Non-Traditional Programs
- 4P1: Participation in Postsecondary Non-Traditional Programs
- 4P2: Completion of Postsecondary Non-Traditional Programs

As described below, the core indicator framework defines the goals, performance measures, and state measurement approaches for each of the fifteen subindicators. It also defines the quality criteria for assessing state measurement approaches.

- Subindicator Goals. The long-term vision or goal statement for each subindicator—that is, what we hope to achieve in the future through continuous improvement of vocational education.
- Performance Measures. The definition of the performance measures for each subindicator including the definition of the numerator and denominator of each performance measure.



- Performance Measurement Approaches. The major state approaches for performance measurement for each performance measure. These approaches include assessment and data collection strategies.
- Quality Criteria for Performance Measurement. The quality criteria for performance measurement to ensure sufficient rigor and comparability of state performance measurement and reporting.

### 2.3 Quality Criteria for Performance Measurement

The quality criteria for state performance measurement approaches for each sub-indicator are based on five general quality criteria for performance measurement and data collection. These general quality criteria are summarized in Figure 3. These general quality criteria are intended to insure that states have chosen a measurement approach that has sufficient rigor and comparability and that provides a cost-effective approach to managing continuous improvement in vocational education and larger education and workforce development systems.

The proposed quality criteria described in Attachment A for each performance measure address only the first two general quality criteria—validity and reliability. The other remaining general quality criteria are global criteria that apply equally to all performance measures and the entire state performance accountability system.

**Figure 3**  
**General Quality Criteria for Performance Measurement Approaches**

**Validity**—the degree to which the performance measurement approach directly and fully measures the student outcomes at an appropriate time interval. Performance measurement approaches produce valid data when they use assessment and other data collection instruments they have strong content validity—directly measure what they are supposed to measure. Indirect or proxy measures are valid to the extent that they are associated with or highly predictive of student outcomes. In addition, performance measures are valid when they are free of bias especially bias by race, gender, or special need. Finally, performance measures are valid when measurement is conducted at the appropriate times—that is, concurrent with services or after services—to make reasonable inferences about the effectiveness of vocational education.

**Reliability**—the degree to which performance measurement is conducted in a consistent manner using standardized or consistent data collection instruments (e.g., student record forms, surveys, assessment instruments) and effective management information systems for insuring data quality. Performance

measures are reliable when repeated measurements yield similar results and when measurement is conducted consistently across student groups and entities.

**Cost-Effectiveness**—the degree to which performance measurement uses measurement approaches and data collection systems that provide the highest quality data at the lowest possible costs. Performance measurement is most cost-effective when states make the fullest possible use of existing data systems and share data systems with other programs.

**System-Focused**—the degree to which states develop common or consistent measurement approaches and data collection systems with other program within education and workforce development systems.

**Management Utility**—the degree to which measurement approaches are useful in managing continuous improvement at the state and local levels. Management utility is highest when performance measurement approaches are easy to understand and use and provide timely data to users to manage continuous improvement.

## 2.4 Definition of Threshold Level of Vocational Education

Although Perkins III requires that states report student information on all students participating in vocational education, the OVAE core indicator framework applies only to those students who reach (i.e., enroll in) a state-defined threshold level of vocational education. Throughout the framework, these students are defined as vocational concentrators. The only exceptions are the two subindicators for participation in non-traditional programs—4P1—Participation in Secondary Non-Traditional Programs and 4P1--Participation in Postsecondary Non-Traditional Programs. These two subindicators address all vocational participants—that is, students who enrolled in at least one vocational-technical education course. In addition, the placement and retention subindicators only address vocational completers. Vocational completers are those vocational concentrators who have attained the academic and technical knowledge/skills/proficiencies in their programs/sequences of courses.

OVAE has worked cooperatively with states to develop the definition of state-defined threshold level of vocational education for both secondary and postsecondary vocational education. States have the flexibility to develop their own definitions of threshold level of vocational education within the context of their own unique vocational education system as long as these definitions provide the foundation for the development of high-quality performance measures for all four core indicators. OVAE also has worked with states to define the three major student populations addressed in the core indicator framework—vocational participant, vocational concentrator, and vocational completer. These definitions are provided below.

**Threshold Level of Vocational Education**

A threshold level of vocational education is defined as a program/sequence of courses or instructional units that provides an individual with the academic and technical knowledge/skills/proficiencies to prepare the individual for employment and/or further/advanced education (Section 3 (29) Definitions).

**Vocational Participant**

Student who enrolled in at least one vocational-technical education course.

**Vocational Concentrator**

Student who enrolled in a threshold level of vocational education.

**Vocational Completer**

Student who attained the academic and technical knowledge/skills/proficiencies within a program/sequence of courses or instructional units that provides an individual with the academic and technical knowledge/skills/proficiencies to prepare the individual for employment and/or further/advanced education.

## CORE INDICATOR 1- Attainment

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
IS1. Secondary Academic Attainment	All students who reach a state-defined threshold level of vocational education will master academic knowledge and skills that meet challenging state academic standards.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education and who have met state academic standards and have left secondary education in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education and who have left secondary education in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>State Academic Assessment System</u> – State-defined performance benchmarks on state-developed academic assessment systems used in state educational accountability systems including high school graduation qualification examinations.</li> <li>2. <u>National Standardized Academic Assessments</u> – State-defined performance benchmarks on national standardized assessments.</li> <li>3. <u>Academic Course Completion</u> – State-defined performance benchmark (e.g., grade, certificate) in designated academic courses including integrated academic/vocational courses.</li> <li>4. <u>Academic Grade Point Average</u> – State-defined grade point average for designated academic course including integrated academic/vocational courses.</li> <li>5. <u>Embedded Academic Assessment in Vocational/Integrated Courses/Programs</u> – Performance benchmark on course or program assessments in integrated courses and programs.</li> <li>6. <u>Overall Grade Point Average</u> – State-defined grade point average for all courses in the school or program.</li> <li>7. <u>High School Graduation/Program Completion</u> - Graduating from high school or completing a program (when graduation or completion is the same as attaining state- or program-defined academic standards).</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to State Academic Standards</u> – Attainment measures and assessment systems are aligned to state academic content and performance standards.</li> <li>2. <u>Scope of Attainment Measurement</u> – Attainment measures address all of the core academic content areas(language arts, mathematics, social studies, science) addressed in state academic standards and assessed in state assessment systems.</li> <li>3. <u>Timing of Attainment Measurement</u> – Attainment is measured concurrent with or after concentrated participation in vocational education.</li> <li>4. <u>Reliability of Attainment Measurement</u> – Attainment is measured using reliable assessment instruments that are administered consistently in assessment systems.</li> <li>5. <u>Student Coverage in Attainment Measurement.</u> Performance measurement reports attainment data for all students reaching state-defined threshold levels in the state.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
1S2. Secondary Vocational and Technical Skill Attainment	All students who reach a state-defined threshold level of vocational education will master the knowledge and skills that meet state-established, industry-validated career and technical skill standards.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education and who have met state-established, industry-validated career and technical skill standards and have left secondary education in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education and who have left secondary education in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>National/State Standards and Assessment Systems</u> – Performance benchmarks on national or state standards and assessment systems using national or state-developed and standardized assessment instruments and assessment procedures (includes licensing/certification examinations).</li> <li>2. <u>National/State Standards and State-Approved Local Assessment Systems</u> – Performance benchmarks on local assessment systems that have been approved by national or state organizations based on national or state standards.</li> <li>3. <u>State-Approved Local Standards and Assessment Systems</u> – Performance benchmarks on state-approved local assessment systems based on state-approved local standards.</li> <li>4. <u>Locally-Approved Local Standards and Assessment Systems</u>. Performance benchmarks based on locally-approved assessment systems based and local standards.</li> <li>5. <u>Vocational/Technical Education Course</u> – Performance benchmarks (e.g., grades, competency completion) in vocational education courses or programs.</li> <li>6. <u>Vocational/Technical Education Grade Point Average</u> – Grade point average for designated vocational courses including integrated academic/vocational courses.</li> <li>7. <u>Vocational/Technical Education Program Completion</u>--- Completion of vocational/technical education program when program completion represents attainment of career and technical skill standards.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment of Attainment Measurement to Industry Standards</u>. Attainment measures are aligned to state-established, industry-validated skill standards – both content and performance standards.</li> <li>2. <u>Scope of Attainment Measurement</u>. Attainment measures provide sufficient coverage of a state-established, industry-validated skill set addressed in industry skill standards.</li> <li>3. <u>Timing of Attainment Measurement</u> – Attainment is measured concurrent with or after concentrated participation in vocational education</li> <li>4. <u>Reliability of Attainment Measurement</u> – Attainment is measured using reliable assessment instruments that are administered consistently in assessment systems.</li> <li>5. <u>Student Coverage of Attainment Measurement</u>. Performance measurement reports attainment data for all students reaching state-defined threshold levels in the state.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
1P1. Postsecondary Academic Attainment	All students who reach a state-defined threshold level of vocational education to complete a postsecondary program will master the knowledge and skills that meet program-defined academic standards.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education to complete a postsecondary program and who have met program-defined academic standards and have stopped program participation in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education to complete a postsecondary program and who have stopped program participation in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>National/State Academic Assessment System</u>—State-defined performance benchmarks on statewide academic assessment systems.</li> <li>2. <u>Academic Course Completion</u>—State-defined performance benchmarks (e.g., grade, certificate) in designated academic courses including integrated academic/vocational courses.</li> <li>3. <u>Academic Grade Point Average</u>—Grade point average for all designated academic courses including integrated academic/vocational courses.</li> <li>4. <u>Embedded Academic Assessment in Vocational/Integrated Courses</u>—Performance benchmarks on course or program assessments in vocational/integrated courses.</li> <li>5. <u>Overall Grade Point Average</u>—State-defined grade point average for all courses in the school or program.</li> <li>6. <u>Program Completion</u>—Completion of postsecondary programs (when graduation or completion is the same as attaining state-or program-defined academic standards).</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to Program Standards</u>-- Academic attainment measures and assessment systems are aligned to program academic content and performance standards.</li> <li>2. <u>Scope of Attainment Measurement</u>-- Academic attainment measurement addresses the academic content areas addressed in program academic standards.</li> <li>3. <u>Timing of Attainment Measurement</u>-- Academic attainment is measured concurrent with or after concentrated participation in vocational education.</li> <li>4. <u>Reliability of Attainment Measurement</u>-- Academic attainment is measured using reliable assessment instruments that are administered consistently in program assessment systems</li> <li>5. <u>Student Coverage in Attainment Measurement</u>--Performance measurement reports attainment data for all students reaching state-defined threshold within the state.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
1P2. Postsecondary Vocational and Technical Skill Attainment	All students who reach a state-defined threshold level of vocational education to complete a postsecondary program will attain the knowledge and skills that meet program-defined, and industry-validated career and technical skill standards.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education to complete a postsecondary program and who have met program-defined, and industry-validated career and technical skill standards and have stopped program participation in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined level of vocational education to complete a postsecondary program and who have stopped program participation in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>National/State Standards and Assessment System</u>—Performance benchmarks on national or state standards and assessment systems using national, or state-developed and standardized assessment instruments and assessment administration procedures (including licensing/certification examinations).</li> <li>2. <u>National/State Standards and Approved Local Assessment System</u>---Performance benchmarks on local assessment systems that have been approved by national or state organizations based on national or state standards.</li> <li>3. <u>State-Approved Local Standards and Assessment Systems</u>—Performance benchmarks on state-approved local assessment systems based on state-approved local standards.</li> <li>4. <u>Locally-Approved Local Standards and Assessment Systems</u>. Performance benchmarks based on locally-approved assessment systems based and local standards.</li> <li>5. <u>Vocational/Technical Education Course</u> --State-defined performance benchmarks (e.g., grade, certificate) in designated career and technical education courses including integrated academic/vocational courses.</li> <li>6. <u>Vocational/Technical Education Grade Point Average</u>---Grade point average for all designated vocational/technical courses including integrated academic/vocational courses.</li> <li>7. <u>Vocational/Technical Education Program Completion</u>---Completion of vocational/technical education program when program completion represents attainment of career and technical skill standards.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment of Attainment Measurement to Industry Standards</u>. Attainment measures are aligned to program-defined, and industry-validated skill standards—both content and performance standards</li> <li>2. <u>Scope of Attainment Measurement</u>. Attainment measurement provides sufficient coverage of a program-defined, and industry-validated skill set addressed in industry skill standards.</li> <li>3. <u>Timing of Attainment Measurement</u>--Attainment is measured concurrent with or after concentrated participation in vocational education.</li> <li>4. <u>Reliability of Attainment Measurement</u>.-Attainment is measured using reliable assessment instruments that are administered consistently in program assessment systems.</li> <li>5. <u>Student Coverage in Attainment Measurement</u>. Performance measurement reports attainment data for all students reaching state-defined thresholds within the state.</li> </ol>

## CORE INDICATOR 2: Completion

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
2S1. Secondary Completion	All students who reach a state-defined threshold level of vocational education will attain a secondary school diploma or its recognized state equivalent.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education and who have attained a high school diploma or its recognized state equivalent and have left secondary education in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education and who have left secondary education in the reporting year.</p>	1. <u>Secondary Completion</u> — Completion based on state requirements that may include passing state graduation qualification examination.	<ol style="list-style-type: none"> <li>1. <u>Alignment of Completion Measure to State Graduation Requirements.</u> Completion measure reports only those students meeting all state requirements for high school diploma or recognized state equivalent.</li> <li>2. <u>Timing of Completion Measurement.</u> Completion is measured at the same time for all students reaching threshold levels in the state.</li> <li>3. <u>Reliability of Completion Measurement:</u> Completion measurement is based on consistent definitions of state requirements and is reported using standardized methods for calculating graduation rates.</li> <li>4. <u>Student Coverage in Completion Measurement.</u> Performance measurement reports completion data for all students reaching state-defined threshold within the state.</li> </ol>



Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
2S2. Proficiency Credential with Secondary Diploma	All students who reach a state-defined level of vocational education will attain a proficiency credential in conjunction with a secondary school diploma or its state-recognized equivalent.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education and who have attained a proficiency credential in conjunction with a secondary school diploma or its state recognized equivalent and who have left secondary education in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education and who have received a secondary school diploma or its state equivalent and who have left secondary education during the reporting period.</p>	<ol style="list-style-type: none"> <li>1. <u>National/State Standards and Assessment Systems</u> – Performance benchmarks on national or state standards and assessment systems using national or state-developed and standardized assessment instruments and assessment procedures (includes licensing/certification examinations).</li> <li>2. <u>National/State Standards and State-Approved Local Assessment Systems</u> – Performance benchmarks on local assessment systems that have been approved by national or state organizations based on national or state standards.</li> <li>3. <u>State-Approved Local Standards and Assessment Systems</u> – Performance benchmarks on local assessment systems based on state-approved local standards.</li> <li>4. <u>Locally-Approved Local Standards and Assessment Systems</u>— Performance benchmarks based on locally-approved assessment systems based and local standards.</li> <li>5. <u>Vocational/Technical Education Course Completion</u> – Performance benchmarks (e.g., grades, competency completion) in vocational education courses or programs</li> <li>6. <u>Vocational/Technical Education Grade Point Average</u> – Grade point average for designated vocational courses including integrated academic/vocational courses</li> <li>7. <u>Vocational/Technical Education Program Completion</u>—Completion of vocational/technical education program when program completion represents attainment of career and technical skill standards.</li> </ol>	<ol style="list-style-type: none"> <li>8. <u>Alignment of Attainment Measurement to Industry Standards</u>—Attainment measures are aligned to state-established, industry-validated skill standards – both content and performance standards.</li> <li>9. <u>Scope of Attainment Measurement</u>—Attainment measures provide full coverage of a state-established, industry-validated skill set addressed in industry skill standards.</li> <li>10. <u>Timing of Attainment Measurement</u>—Attainment is measured concurrent with or after concentrated participation in vocational education</li> <li>11. <u>Reliability of Attainment Measurement</u> – Attainment is measured using reliable assessment instruments that are administered consistently without significant assessor bias.</li> <li>12. <u>Student Coverage of Attainment Measurement</u>—Performance measurement reports attainment data for all students reaching state-defined thresholds within the state.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approach	Quality Criteria for Measurement Approach
2P1. Postsecondary Degree or Credential	All students who reach a state-defined threshold level of vocational education to receive postsecondary degrees, certificates, or credentials will receive these postsecondary credentials.	<p><u>Numerator:</u> Number of students reaching a state-defined threshold level of vocational education and who received or were eligible to receive a postsecondary degree, certificate, or credential and who stopped program participation in the reporting year.</p> <p><u>Denominator:</u> Number of students reaching a state-defined threshold level of vocational education who are not yet eligible to complete plus those students who received or were eligible to receive a postsecondary degree, certificate, or credential, and who stopped program participation in the reporting year.</p>	1. <u>State/Local Administrative Data</u> – Reporting those students receiving degrees and other types of credentials using information from local administrative data. These data could be maintained as individual student records and sent to the state as individual student records or aggregated data. The data also could be maintained at the local level in aggregated form and sent to the state as aggregated data. Although these represent distinct types of reporting systems, they do not represent different performance measurement approaches.	<ol style="list-style-type: none"> <li>1. <u>Alignment of Completion Measurement to Standards</u>— Completion measures aligned to program-defined, and industry-validated skill standards as well as program-defined academic standards – both content and performance standards.</li> <li>2. <u>Scope of Completion Measurement</u>— The completion measurement provides full coverage of all vocational/technical programs in the state.</li> <li>3. <u>Reliability of Completion Measurement</u>—Completion measurement is based on clear and consistent credentialing and program stopping criteria (e.g., time interval with no additional course enrollment for defining leavers) and is measured using consistent measurement and reporting procedures.</li> <li>4. <u>Student Coverage of Completion Measurement</u>—Performance measurement reports completion data for all students reaching state-defined thresholds for programs within the state.</li> </ol>

### CORE INDICATOR 3: Placement and Retention

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
3S1. Secondary Placement	All students who reach a state-defined threshold level of vocational education during secondary education will successfully transition to postsecondary education or advanced training, employment, and/or military service.	<p><u>Numerator:</u> Number of students who completed secondary vocational education programs and who received a high school diploma or its recognized state equivalent and left secondary education in the reporting year, and who were placed in postsecondary education or advanced training, employment, and/or military service within an OVAE-designated time period (expressed in months/UI wage record quarters).</p> <p><u>Denominator:</u> Number of students who completed secondary vocational education programs and who received a high school diploma or its recognized state equivalent and left secondary education in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>State-Developed, School-Administered Surveys/Placement Records</u>— Mail and/or telephone surveys of students using state-developed surveys or placement forms administered by schools. Schools administer and conduct the surveys and maintain placement records under state guidelines.</li> <li>2. <u>State-Developed and Administered Surveys</u>—Mail and/or telephone surveys of students using state-developed and administered surveys.</li> <li>3. <u>Administrative Record Exchanges/Matching of Administrative Records</u>—Student records, UI wage records, U.S. Department of Defense records—based on student identifiers.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to Definitions of Three Types of Placement</u>—Surveys, forms or administrative exchanges are based on standardized definitions of the three types of placement—postsecondary, employment, or military.</li> <li>2. <u>Timing of Placement Measurement</u>— Placement is measured at the same time (e.g., 3 months and 6 months after leaving secondary education) for all program completers in the state.</li> <li>3. <u>Reliability of Placement Measurement</u>— Placement measurement reports placement data based on consistent surveys, forms, and administrative records and measurement procedures.</li> <li>4. <u>Student Coverage in Placement Measurement</u>—Placement measurement attempts to track all program completers from programs within the state.</li> <li>5. <u>Response/Match Rates</u>—Placement measurement achieves acceptable and consistent response or match rates.</li> <li>6. <u>Non-Duplicated Counts</u>—Placement measurement is based on non-duplicated counts for the three types of placement—postsecondary, employment and military.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
3S2. Secondary Retention	All students who reach a state-defined threshold level of vocational education and who leave secondary schooling and who are placed in postsecondary education or advanced training, employment and/or military service will be retained in these activities.	<p><u>Numerator:</u> Number of students who completed secondary vocational education programs and who received a high school diploma or its recognized state equivalent and were placed in postsecondary education or advanced training, employment, and/or military service in the reporting year and who were retained in one or more of these types of placement after an OVAE-designated time period (expressed in months/UI wage record quarters).</p> <p><u>Denominator:</u> Number of students who completed secondary vocational education programs and who received a high school diploma or its recognized state equivalent and were placed in postsecondary education or advanced training, employment and/or military service in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>State-Developed, School-Administered Surveys/Placement Records</u>— Mail and/or telephone surveys of students using state-developed surveys or placement forms administered by schools. Schools administer and conduct the surveys and maintain placement records under state guidelines.</li> <li>2. <u>State-Developed and Administered Surveys</u>—Mail and/or telephone surveys of students using state-developed and administered surveys.</li> <li>3. <u>Administrative Record Exchanges/Matching of administrative records</u>—Student records, UI wage records, U.S. Department of Defense records—based on student identifiers.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to Definitions of Three Types of Retention.</u> Surveys, forms or administrative exchanges are based on standardized definitions of the two types of retention—employment and military.</li> <li>2. <u>Timing of Retention Measurement.</u> Retention is measured at the same time (e.g., 3 months and 6 months after leaving secondary education) for all program completers who were placed in the state.</li> <li>3. <u>Reliability of Retention Measurement.</u> Retention measurement reports retention data based on consistent surveys, forms, and administrative records and measurement procedures.</li> <li>4. <u>Student Coverage in Retention Measurement.</u> Retention measurement attempts to track all program completers who were placed from all programs within the state.</li> <li>5. <u>Response/Match Rates.</u> Retention measurement achieves acceptable and consistent response or match rates.</li> <li>6. <u>Non-Duplicated Counts.</u> Retention measurement is based on non-duplicated counts for the two types of retention—employment and military</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
3P1. Postsecondary Placement	All students who reach a state-defined threshold level of vocational education to complete a postsecondary program will successfully transition to further postsecondary education or advanced training, employment, and/or military service.	<p><u>Numerator:</u> Number of students who completed a postsecondary program in the reporting year, and who were placed in further postsecondary education or advanced training, employment, and/or military service within an OVAE-designated time period (expressed in months/UI wage record quarters) after stopping participation in the postsecondary program.</p> <p><u>Denominator:</u> Number of students who completed a postsecondary program in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>State-Developed, School-Administered Surveys/Placement Records</u>— mail and/or telephone surveys of students using state-developed surveys or placement forms administered by schools. Schools administer and conduct the surveys and maintain placement records under state guidelines.</li> <li>2. <u>State-Developed and Administered Surveys</u>—mail and/or telephone surveys of students using state-developed and administered surveys.</li> <li>3. <u>Administrative Record Exchanges</u>---matching of administrative records—student records, UI wage records, U.S. Department of Defense records—based on student identifiers.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to Definitions of Three Types of Placement.</u> Surveys, forms or administrative exchanges are based on definitions of the three types of placement—postsecondary, employment, or military.</li> <li>2. <u>Timing of Placement Measurement.</u> Placement is measured at the same time (e.g., 3 months and 6 months after stopping postsecondary education programs) for all program completers in the state.</li> <li>3. <u>Reliability of Placement Measurement.</u> Placement measurement reports placement data based on consistent surveys, forms, and administrative records and measurement procedures.</li> <li>4. <u>Student Coverage in Placement Measurement.</u> Placement measurement attempts to track all program completers for programs within the state.</li> <li>5. <u>Response/Match Rates.</u> Placement measurement achieves acceptable and consistent response or match rates.</li> <li>6. <u>Non-Duplicated Counts.</u> Placement measurement is based on non-duplicated counts for the three types of placement—postsecondary, employment and military.</li> </ol>

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
3P2. Postsecondary Retention	All students who reach a state-defined threshold level of vocational education who leave secondary schooling and who are placed in further postsecondary education or advanced training, employment, and/or military service will be retained in these activities.	<p><u>Numerator:</u> Number of students who completed a postsecondary program and were placed in further postsecondary education or advanced training, employment, and/or military service in the reporting period and were retained in one or more of these types of placement within an OVAE-designated time period (expressed in months or UI wage record quarters).</p> <p><u>Denominator:</u> Number of students who completed a postsecondary program and who were placed in further postsecondary education or advanced training, employment, and/or military service in the reporting year.</p>	<ol style="list-style-type: none"> <li>1. <u>State-Developed, School-Administered Surveys/Placement Records</u>— mail and/or telephone surveys of students using state-developed surveys or placement forms administered by schools. Schools administer and conduct the surveys and maintain placement records under state guidelines.</li> <li>2. <u>State-Developed and Administered Surveys</u>—mail and/or telephone surveys of students using state-developed and administered surveys.</li> <li>3. <u>Administrative Record Exchanges</u>---matching of administrative records—student records, UI wage records, U.S. Department of Defense records—based on student identifiers.</li> </ol>	<ol style="list-style-type: none"> <li>1. <u>Alignment to Definitions of Three Types of Retention.</u> Surveys, forms or administrative exchanges are based on definitions one of the three types of retention—postsecondary, employment, or military.</li> <li>2. <u>Timing of Retention Measurement.</u> Retention is measured at the same time (e.g., 3 months and 6 months after leaving secondary education) for all program completers in the state.</li> <li>3. <u>Reliability of Retention Measurement.</u> Retention measurement reports retention data based on consistent surveys, forms, and administrative records and measurement procedures.</li> <li>4. <u>Student Coverage in Retention Measurement.</u> Retention measurement attempts to track all program completers from programs within the state.</li> <li>5. <u>Response/Match Rates.</u> Retention measurement achieves acceptable and consistent response or match rates.</li> <li>6. <u>Non-Duplicated Counts.</u> Placement measurement is based on non-duplicated counts for the three types of retention—postsecondary, employment and military.</li> </ol>

### CORE INDICATOR 4: Participation in and Completion of Nontraditional Programs

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
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Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
4S1. Participation in Secondary Non-Traditional Programs	All secondary vocational education programs preparing students for further training and employment in careers or occupations with significant underrepresentation of males or females will increase participation of underrepresented males or females.	<p><u>Numerator:</u> Number of students in underrepresented gender groups who participated in a non-traditional secondary program in the reporting year.</p> <p><u>Denominator:</u> Number of students who participated in a non-traditional secondary program in the reporting year.</p> <p><u>Note:</u> Non-traditional programs are those programs that address occupations or occupational areas in which underrepresented gender groups represent less than 25 percent of employment.</p>	1. <u>State/Local Administrative Data</u> —reporting those students participating in non-traditional programs using information from local administrative data. These data could be maintained as individual student records and sent to the state as individual student records or aggregated program or school-level data. The data also could be maintained at the local level in aggregated form and sent to the state as aggregated data. Although these represent distinct types of reporting systems, they do not represent different performance measurement approaches.	<p>1. <u>Accurate Classification of Programs as Non-Traditional.</u> Non-traditional programs are accurately defined at the state level based on a state crosswalk between programs and national or state occupational data..</p> <p>2. <u>Reliability of Non-Traditional Reporting.</u> Programs are consistently classified and student participation is accurately reported based on state-established definitions of non-traditional programs and underrepresented gender groups.</p> <p>3. <u>Student Coverage in Reporting Non-Traditional Programs.</u> All secondary vocational education participants are measured and reported if they participate in non-traditional programs.</p>

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
4S2. Completion of Secondary Non Traditional Programs	All secondary vocational education programs preparing students for further training and employment in careers or occupations with significant underrepresentation of males or females will increase program completion for underrepresented males or females.	<p><u>Numerator:</u> Number of students in underrepresented gender groups who completed a non-traditional program in the reporting year.</p> <p><u>Denominator:</u> Number of students who completed non-traditional programs in the reporting year.</p> <p><u>Note:</u> Non-traditional programs are those programs that address occupation or occupational areas in which underrepresented gender groups represent less than 25 percent of employment.</p>	1. <u>State/Local Administrative Data</u> —reporting those students completing non-traditional programs using information from local administrative data. These data could be maintained as individual student records and sent to the state as individual student records or aggregated program or school-level data. The data also could be maintained at the local level in aggregated form and sent to the state as aggregated data. Although these represent distinct types of reporting systems, they do not represent different performance measurement approaches.	1. <u>Accurate Classification of Programs as Non-Traditional.</u> Non-Traditional programs are defined at the state level based on a state crosswalk between programs and national or state occupational data. 2. <u>Accuracy of Completion Measurement.</u> Secondary completion is measured based on consistent definitions of and criteria for successful completion. 3. <u>3.Reliability in Reporting Completion of Non-Traditional Programs.</u> Programs are consistently classified and reported based on state-established definitions of non-traditional programs and underrepresented gender groups. 4. <u>4.Student Coverage in Reporting Non-Traditional Programs.</u> All students who complete vocational education programs are measured and reported if they are in non-traditional programs.



Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
4P1. Participation in Postsecondary Non-Traditional Programs	All postsecondary vocational education programs preparing students for further training and employment in careers or occupations with significant underrepresentation of males or females will increase participation of underrepresented males or females.	<p><u>Numerator:</u> Number of students in underrepresented gender groups who participated in a non-traditional postsecondary program in the reporting year.</p> <p><u>Denominator:</u> Number of students who participated in a non-traditional postsecondary program in the reporting year.</p> <p><u>Note:</u> Non-traditional programs are those programs that address occupation or occupational areas in which underrepresented gender groups represent less than 25 percent of employment.</p>	1. <u>State/Local Administrative Data</u> —reporting those students participating in non-traditional programs using information from local administrative data. These data could be maintained as individual student records and sent to the state as individual student records or aggregated program or school-level data. The data also could be maintained at the local level in aggregated form and sent to the state as aggregated data. Although these represent distinct types of reporting systems, they do not represent different performance measurement approaches.	1. <u>Accurate Classification of Programs as Non-Traditional.</u> Non-Traditional programs are defined at the state level based on a state crosswalk between programs and national or state occupational data. 2. <u>Reliability of Non-Traditional Reporting.</u> Programs are consistently classified and student participation is accurately reported based on state and local definitions of non-traditional programs and underrepresented gender groups. 3. <u>Student Coverage in Reporting Non-Traditional Programs.</u> All postsecondary vocational education participants are measured and reported if they participate in non-traditional programs.

Sub-Indicator	Goal	Measure	Measurement Approaches	Quality Criteria for Measurement Approaches
4P2. Completion of Postsecondary Non Traditional Programs	All postsecondary vocational education programs preparing students for further training and employment in careers or occupations with significant underrepresentation of males or females will increase program completion for underrepresented males and females.	<p><u>Numerator:</u> Number of students in underrepresented gender groups who completed a non-traditional postsecondary program in the reporting year.</p> <p><u>Denominator:</u> Number of students who completed a non-traditional postsecondary program in the reporting year.</p> <p><u>Note:</u> Non-traditional programs are those programs that address occupation or occupational areas in which underrepresented gender groups represent less than 25 percent of employment.</p>	1. <u>State/Local Administrative Data</u> —reporting those students completing non-traditional programs using information from local administrative data. These data could be maintained as individual student records and sent to the state as individual student records or aggregated program counts. The data also could be maintained at the local level in aggregated form and sent to the state as aggregated data. Although these represent distinct types of reporting systems, they do not represent different performance measurement approaches.	<p>1. <u>Accurate Classification of Programs as Non-Traditional.</u> Non-Traditional programs are defined at the state level based on a state crosswalk between programs and national or state occupational data.</p> <p>2. <u>Accuracy of Completion Measurement.</u> Secondary completion is measured based on consistent definitions of and criteria for successful completion.</p> <p>3. <u>Reliability in Reporting Completion of Non-Traditional Programs.</u> Programs are consistently classified and reported based on state and local definitions of non-traditional programs and program completion.</p> <p>4. <u>Student Coverage in Reporting Non-Traditional Programs.</u> All vocational participants are measured and reported if they are in non-traditional programs.</p>