

Data and Accountability Guidebook



OFFICE OF CAREER-TECHNICAL EDUCATION

The Strengthening Career and Technical Education for the 21st Century Act—better known as Perkins V—requires Ohio to set state performance measures for a required set of indicators of performance for career-technical education concentrators. This document provides information about the definitions, state-determined performance indicators and work-based learning guidance. The document serves to ensure the changes from Perkins IV to Perkins V are clearly articulated and all stakeholders have the information needed to implement Perkins V data and accountability metrics.

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Definitions

This section covers key terms in Perkins V legislation and Ohio's career-technical education accountability system. The definitions include information, guidance and business rules not found in the Education Management Information System (EMIS) Manual.

Program of Study

The term “program of study” means a coordinated, nonduplicative series of courses spanning secondary and postsecondary levels with multiple entry and exit points that culminate in a diploma, credential and/or degree. All programs of study must:

- Include at least four courses within the career field pathway;
- Include all aspects of the industry-identified career-technical content standards for the chosen courses;
- Include the opportunity for students to earn postsecondary credit in the technical area;
- Include the opportunity for students to earn relevant credentials of value as appropriate for the technical area;
- Integrate academic content as appropriate for the course;
- Integrate career and technical student organizations, to the extent possible;
- Integrate work-based experiences, to the extent possible; and
- Assess the attainment of technical skills within the program using the appropriate technical assessments, as identified in the program and assessment matrix.

Participant

The term “Career-Technical Education Participant” means an individual who completes not fewer than one course in an approved career-technical education program or program of study of an eligible recipient.

Concentrator

Perkins V defines “Career-Technical Education Concentrator” as follows: “at the secondary school level, a student served by an eligible recipient who has completed at least two courses in a single approved career-technical education program or program of study.” In Perkins IV, states were allowed to define “Career-Technical Education Concentrator” through the state plan development process. For examples of determining concentrator status please refer to the [Concentrator Reporting Examples Matrix](#).

Course Completion

In order to consider a student as having completed a course, the student must have been enrolled for at least 90 percent of the scheduled hours and/or earned full or partial credit in a state-approved career-technical education workforce development course (curriculum element VT, VP, VN [JTC], PS), including job training programs.

Awarding of full or partial credit is a local decision. The local district credit policy must reflect what is happening in the local program.

When calculating the percentage of scheduled hours, keep in mind this is based on student enrollment in the course, not student attendance. Please see the following examples:

- Student A was enrolled in a course scheduled for 60 minutes a day for 180 days. During that time, Student A was absent 21 days while enrolled for the entire school year. Student A failed the course and was not awarded any credit.
- Student B was enrolled in a course scheduled for 60 minutes a day for 180 days. During that time, Student B was absent one day, but moved to a different district at the beginning of March and was therefore only enrolled for 120 of the 180 days. Student B was not awarded any credit.
- Student C was enrolled in a course scheduled for 60 minutes a day for 180 days. During that time, Student C was absent 18 days, but moved to a different district two weeks before the end of the school year and was therefore only enrolled for 170 of the 180 days. Student C was awarded full credit for the course.
- Student D was enrolled in a course scheduled for 60 minutes a day for 180 days. During that time, Student D dropped the class after the first semester and was therefore only enrolled for 90 of the 180 days. Student D was awarded partial credit.

Student	Scheduled Course Hours	Enrolled Hours	Enrolled %	Credit Awarded	Course Completion Status
Student A	180	180	100	No	Yes
Student B	180	120	67	No	No
Student C	180	170	94	Yes	Yes
Student D	180	90	50	Yes	Yes

Career-Technical Education Course

Funded VT, VP, VN (JTC) and PS curriculum-coded courses that can be counted toward completion of a workforce development pathway:

- Exclude FCS and CBI;
- Include Job Training Programs;
- Utilize course filters to identify a course at a minimum of 120 hours;
- Accept two 60-hour courses as equivalent to one course;
- Count across districts and years;
- Can be delivered to students in grades 7-12; and
- Do not include VM curriculum code courses.

Career-Technical Education Exploratory Course

VM courses are introductory-level courses linked to business, industry and labor that enable seamless pathways from middle school to college and careers. Career-technical education exploratory courses may be offered for any pathway with an approved CTE-26 on file for students in grades 7-10. VM courses do not count toward a student's concentrator status, and students in VM courses are not subject to career-technical education technical assessments.

State Performance Level Indicators

The Ohio Department of Education calculated state baseline levels using current performance level data, when available, and simulated data based on the Perkins V concentrator definition for each core indicator of performance. Baseline levels, along with growth targets, then were shared with the data and accountability working group and posted for public comment. Before adoption, measures were adjusted based on public comment and stakeholder input. The following are Ohio’s state-determined performance level indicators.

Four-Year Graduation Rate

The percentage of career-technical education concentrators who graduate high school, as measured by the four-year adjusted cohort graduation rate (defined in section 8101 of the Elementary and Secondary Education Act of 1965).

1S1 Student Graduation Rate - 4 Year	<p>Numerator: Number of career-technical education concentrators who graduated within four years of the fiscal year in which they were first reported as ninth-graders (including summer graduates) in alignment to the graduation rate described in the Elementary and Secondary Education Act of 1965 as amended by the Every Student Succeeds Act.</p> <p>Denominator: Number of career-technical education concentrators who were ninth-graders in the same fiscal year as the numerator in alignment to the graduation rate described in the Elementary and Secondary Education Act of 1965, as amended by Every Student Succeeds Act.</p>
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The performance level baseline is 85.3 percent and will increase to 91 percent in Fiscal Year 2023. The baseline was established using the class of 2018 four-year graduation rate (published in September 2019). The performance levels are aligned to the interim goals established in Ohio’s Every Student Succeeds Act (ESSA) plan for the ‘All Students’ group. More information on the ESSA interim and long-term goals can be found online [here](#).

Indicator	Baseline	FY20	FY21	FY22	FY23
1S1: 4-Year Graduation Rate	85.3%	88.0%	89.0%	90.0%	91.0%

Five-Year (Extended) Graduation Rate

The percentage of career-technical education concentrators who graduate high school, as measured by extended-year adjusted cohort graduation rate defined in such section 8101 of the Elementary and Secondary Education Act.

1S2 Student Graduation Rate - Extended	<p>Numerator: Number of career-technical education concentrators who graduated within five years of the fiscal year in which they were first reported as ninth-graders (including summer graduates) in alignment to the graduation rate described in the Elementary and Secondary Education Act of 1965 as amended by the Every Student Succeeds Act.</p> <p>Denominator: Number of career-technical education concentrators who were ninth-graders in the same fiscal year as the numerator in alignment to the graduation rate described in the Elementary and Secondary Education Act of 1965, as amended by the Every Student Succeeds Act.</p>
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The performance level baseline is 85.9 percent and will increase to 93 percent in FY23. The baseline was established using the class of 2017 five-year graduation rate (published in September 2019). The performance levels are aligned to the interim goals established in Ohio’s Every Student Succeeds Act (ESSA) plan for the ‘All Students’ group. More information on the ESSA interim and long-term goals can be found [here](#).

Indicator	Baseline	FY20	FY21	FY22	FY23
1S2: Extended Graduation Rate	85.9%	90.0%	89.0%	90.0%	91.0%

Academic Attainment Indicators

The academic attainment indicators are reading/English language arts, math and science. Career-technical education concentrator proficiency in the challenging academic standards adopted by the state under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments described in section 1111(b)(2) of such act.

2S1 Academic Attainment – Reading/ Language Arts	The weighted average of individual student performance levels on each achievement test in all subject areas for grades 3-8, plus the English language arts alternate assessment for students in grade 10 and the applicable end-of-course assessments in English language arts for any student taking the end-of-course assessment for the first time. For the purpose of creating the Performance Index score, all applicable assessments (both standard and alternate) are included.
2S2 Academic Attainment - Mathematics	The weighted average of individual student performance levels on each achievement test in all subject areas for grades 3-8, plus the mathematics alternate assessment for students in grade 10 and the applicable end-of-course assessments in mathematics for any student taking the end-of-course assessment for the first time. For the purpose of creating the Performance Index score, all applicable assessments (both standard and alternate) are included.

<p>2S3 Academic Attainment - Science</p>	<p>The weighted average of individual student performance levels on each achievement test in all subject areas for grades 3-8 and the applicable end-of-course assessments in science for any student taking the end-of-course assessment for the first time. For the purpose of creating the Performance Index score, all applicable assessments (both standard and alternate) are included.</p>
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The performance levels are aligned to the method of measurement for academic achievement described in Ohio’s approved Every Student Succeeds Act (ESSA) plan. The Performance Index measures performance levels using a score range of 0-120, and the goals mirror this calculation. The baseline is a combination of all student actual performance and career-technical student simulations, adjusted based on public comment and stakeholder input. The measures increase annually like the ESSA interim goals increase for English language arts and math.

Academic Indicator	Baseline	FY20	FY21	FY22	FY23
2S1: Academic Proficiency in Reading Language Arts	78.0 (65.0%)	80.0 (66.7%)	82.0 (68.3%)	84.0 (70.0%)	86.0 (71.7%)
2S2: Academic Proficiency in Mathematics	54.0 (45.0%)	56.0 (46.7%)	58.0 (48.3%)	60.0 (50.0%)	62.0 (51.7%)
2S3: Academic Proficiency in Science	78.0 (65.0%)	80.0 (66.7%)	82.0 (68.3%)	84.0 (70.0%)	86.0 (71.7%)

Post-Program Placement

The percentage of career-technical education concentrators who, in the second quarter after exiting secondary education, are in postsecondary education or advanced training; are in a military service or service program that receives assistance under Title I of the National and Community Service Act of 1990 (42 U.S.C 12511 et seq.); are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C 2504(a)); or are employed.

<p>3S1 Post-Program Placement</p>	<p>Numerator: Number of status-known career-technical education concentrators who left secondary education the previous year and, in the second quarter following the program year in which they left secondary education, are in postsecondary education or advanced training, are in a military service or service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are employed.</p> <p>Denominator: Number of status-known career-technical education concentrators who left secondary education the previous year.</p>
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While Post-Program Placement has been a consistent measure from Perkins IV to Perkins V, the new definition of career-technical education concentrators will impact this measure. For this reason, performance levels have been modified to acknowledge the transition to more students being included in the required follow-up and calculation. Under Perkins IV, the performance levels for Post-Program Placement ranged from 87 to 90 percent. The performance levels for Perkins V begin at 70 percent and increase to 74 percent by FY23.

Indicator	Baseline	FY 2020	FY 2021	FY 2022	FY 2023
3S1: Post-Program Placement	70.0%	71.0%	72.0%	73.0%	74.0%

For Quality Program Review and the Career-Technical Planning District Report Card, only students with a “Status Known” designation are included in the measure. This “Status Known” rate may cause a grade increase (greater than 95 percent status known) or a grade decrease (less than 85 percent status known).

FOLLOW-UP RESPONSIBILITIES

If a student was previously a concentrator at one Local Education Agency (LEA) and becomes a concentrator in the same or a different pathway at another LEA, the last Local Education Agency in which the student met concentrator status is responsible for post-program follow-up.

If a student leaves career-technical education before leaving school, the most recent LEA in which the student met concentrator status is responsible for post-program placement follow up.

Non-Traditional Program Enrollment

The percentage of career-technical education concentrators in career-technical education programs and programs of study that lead to non-traditional fields.

<p>4S1 Non-Traditional Program Enrollment</p>	<p>Numerator: The number of career-technical education concentrators, in the reporting year, enrolled in programs that leading to employment that is non-traditional for their gender.</p> <p>Denominator: The number of career-technical education concentrators enrolled in the reporting year in programs with non-traditional designations.</p>
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Non-traditional program enrollment consolidates two measures in Perkins IV, participation and completion, into a new one that captures students who have enrolled in programs or programs of study leading to non-traditional fields. However, the change in the definition of career-technical education concentrators will impact the measure and should be considered when setting performance levels. Under Perkins IV, performance levels ranged from 18.5 percent to 35 percent (between

targets and actual percentages at the state level). With the shift in the career-technical education concentrator definition, performance levels for Perkins V have been adjusted to account for the transition. Performance levels for Perkins V begin at 17 percent and increase to 19 percent by FY23. Performance levels were simulated using any student identified as a Perkins V concentrator by EMIS in 2019.

Indicator	Baseline	FY20	FY21	FY22	FY23
4S1: Non-traditional Program Enrollment	17.0%	17.5%	18.0%	18.5%	19.0%

Work-Based Learning

The percentage of career-technical education concentrators in the graduation cohort having participated in a minimum of 250 hours of work-based learning. **This measure only includes concentrators that have graduated.**

5S3 Program Quality – Work-based Learning	<p>Numerator: The number of career-technical education concentrators in the 4-year graduation cohort who graduated and who participated in a minimum of 250 hours of state-defined work-based learning.</p> <p>Denominator: The total number of career-technical education concentrators who graduated in the 4-year graduation cohort.</p>
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While many Career-Technical Planning Districts across Ohio have been offering work-based learning opportunities, the approved definition, requirements, and calculation of work-based learning is a new focus with Perkins V. With the increasing value placed on work-based learning and transition to implement opportunities for students, Perkins V performance levels range from 12 percent to 15 percent by FY23. There is no data available to simulate these performance levels, and Ohio will conduct a review after two years of implementation as allowed by Perkins V.

Students enrolled in career-technical education courses should participate in experiences aligned to their program of study, and work-based learning completed before enrollment in career-technical education courses should be aligned to the student's graduation and/or student success plan. For detailed guidance and additional information, please visit the [Work-based Learning](#) webpage.

Indicator	Baseline	FY20	FY21	FY22	FY23
5S3: Program Quality – Participated in Work-Based Learning	12.0%	12.0%	13.0%	14.0%	15.0%

For detailed reporting information, please refer to the [EMIS Manual](#) or contact the school district Information Technology Center (ITC).

Technical Skill Attainment

Ohio has selected Technical Skill Attainment as an additional measure of student success in career-technical education. This measures the number of career-technical education concentrators who, in the reporting year, achieve the cumulative passing rate for the state-recognized technical skill assessment aligned with their programs of concentration.

<p>5S4 Program Quality – Technical Skill Attainment</p>	<p>Numerator: The number of career-technical education concentrators in the reporting year who were calculated as proficient or higher in technical skill assessments aligned with their program of concentration.</p> <p>Denominator: The number of career-technical education concentrators in the reporting year who participated in technical assessments aligned to their program of concentration</p>
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Technical Skill Attainment has been measured throughout Perkins IV and as part of Ohio’s Career-Technical Planning District report cards. The performance levels established in Perkins IV ranged from 74 percent to 77 percent. As the new definition for career-technical education concentrators impacts this measure, the performance levels for Perkins V have been established at 66 percent to 70 percent by FY23. The Department worked with the testing vendor to establish a simulated baseline taking the new definition into account.

Indicator	Baseline	FY20	FY21	FY22	FY23
5S4: Program Quality – Technical Skill Attainment	66.0%	67.0%	68.0%	69.0%	70.0%

Once a student becomes a concentrator, they will be included in the numerator only in years in which they complete a workforce development course in the aligned pathway.

The following calculation details and examples pertain only to 2021 Quality Program Review data and the FY2021 Career-Technical Planning District (CTPD) Report Card.

The Ohio Department of Education Office of Career-Technical Education, in collaboration with external stakeholders, is currently reviewing the calculation of Technical Skill Attainment. This section will be updated with the calculation methodology and examples when a final determination has been made.

Individual Concentrator Calculation:

- Current year concentrators only
- Current year calculation of pathway proficiency
- Includes all assessments from the program of concentration taken by the student before and during the calculation year.
- Equivalency scores from reported aligned College Credit Plus courses and in lieu of industry recognized credentials will be factored into the calculation.
- Retakes – the highest of all scores will be factored into the calculation.

Individual Concentrator Calculation Examples:

Student Grade	Concentrator Status	Work Force Development Course Taken	Calculated Assessments	Narrative
9	N	(DD*)1	No calculation	The student completed only one workforce development course and is not a concentrator.
10	Y	(DD)2	(DD)1, (DD)2	The student has completed the second workforce development course, becomes a concentrator and enters the calculation.
11	Y	(DD)3	(DD)1, (DD)2, (DD)3	The student completes additional courses. All current and previous assessment scores are included in the calculation.
12	Y	(DD)4	(DD)1, (DD)2, (DD)3, (DD)4	

Student Grade	Concentrator Status	WFD Course Taken	Calculated Assessments	Narrative
11	Y	(DD)1, (DD)2	(DD)1, (DD)2,	The student has completed two workforce development courses, becomes a concentrator and enters the calculation.
12	Y	(DD)3, (DD)4	(DD)1, (DD)2, (DD)3, (DD)4	The student completes additional courses. All current and previous assessment scores are included in the calculation.

* (DD) indicates pathway code

Participation (Quality Program Review and Career Report Card Only)

- Participation will be a factor in the calculation of technical skill attainment.
 - Districts that test a low proportion of students receive either a one- or two-grade decrease.
 - One-grade decrease for a Participation Rate of 80.0 - 89.9 percent
 - Two-grade decrease for a Participation Rate of less than 80.0 percent

Grade	Range	Compliance Status
A	90.0-100.0%	Compliant
B	80.0-89.9%	Compliant
C	70-79.9%	Compliant
D	60.0-69.9%	Non-Compliant
F	Below 60%	Non-Compliant

State-Determined Performance Levels Summary

Secondary Indicators	Baseline Level	Performance Levels			
		FY20 (Academic Year 2020-2021)	FY21 (Academic Year 2021-2022)	FY22 (Academic Year 2022-2023)	FY23 (Academic Year 2023-2024)
1S1: Four-Year Graduation Rate	85.3%	88.0%	89.0%	90.0%	91.0%
		2021 Graduation Cohort	2022 Graduation Cohort	2023 Graduation Cohort	2024 Graduation Cohort
1S2: Extended Graduation Rate	85.9%	90.0%	91.0%	92.0%	93.0%
		2020 Graduation Cohort	2021 Graduation Cohort	2022 Graduation Cohort	2023 Graduation Cohort
2S1: Academic Proficiency in Reading Language Arts	78.0 (65.0%)	80.0 (66.7%)	82.0 (68.3%)	84.0 (70.0)	86.0 (71.7%)
		2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator
2S2: Academic Proficiency in Mathematics	54.0 (45.0%)	56.0 (46.7%)	58.0 (48.3%)	60.0 (50.0%)	62.0 (51.7%)
		2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator
2S3: Academic Proficiency in Science	78.0 (65.0%)	80.0 (66.7%)	82.0 (68.3%)	84.0 (70.0)	86.0 (71.7%)
		2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator
3S1: Postsecondary Placement	70.0%	71.0%	72.0%	73.0%	74.0%
		Concentrators who left Secondary Education Academic Year 2020-2021	Concentrators who left Secondary Education Academic Year 2021-2022	Concentrators who left Secondary Education Academic Year 2022-2023	Concentrators who left Secondary Education Academic Year 2023-2024
4S1: Non-traditional Program Enrollment	17.0%	17.5%	18.0%	18.5%	19.0%
		2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator
5S3: Program Quality – Participated in Work- Based Learning	12.0%	12.0%	13.0%	14.0%	15.0%
		2021 Graduation Cohort Graduates	2022 Graduation Cohort Graduates	2023 Graduation Cohort Graduates	2024 Graduation Cohort Graduates
5S4: Program Quality – Technical Skill Attainment	66.0%	67%	68.0%	69.0%	70.0%
		2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator

Quality Program Review

Ohio legislation requires the Ohio Department of Education and the lead district of each secondary Career-Technical Planning District to conduct an annual review of each career-technical education program within the planning district.

The intent of the Career-Technical Education Quality Program Review is to maximize the use of resources and continuously improve career-technical education. The Career-Technical Education Program Review is a one- to five-year process. The district conducts a self-review and creates and implements improvement strategies for areas identified as noncompliant. This work is completed in collaboration with the Career-Technical Planning District and the Ohio Department of Education.

The indicators for the QPR 2021 Pathway Data and beyond, aligned to Ohio’s [Strengthening Career and Technical Education for the 21st Century Act \(Perkins V\)](#) and [Ohio School Report Card](#) grade bands, will be **Technical Skill Attainment, Work-based Learning and Post-Program Placement**. Pathways will return to accountability for the Quality Program Review measures as indicated in green on the chart below.

Measure	Performance Levels and Component				
	QPR 2021 Data	QPR 2022 Data	QPR 2023 Data	QPR 2024 Data	QPR 2025 Data
Technical Skill Attainment	2020-21 Concentrator	2021-22 Concentrator	2022-23 Concentrator	2023-24 Concentrator	2024-25 Concentrator
	2020 Graduation Cohort Graduates	2021 Graduation Cohort Graduates	2022 Graduation Cohort Graduates	2023 Graduation Cohort Graduates	2024 Graduation Cohort Graduates
Work-Based Learning	Concentrators who left Secondary Education Academic Year 2019-2020	Concentrators who left Secondary Education Academic Year 2020-2021	Concentrators who left Secondary Education Academic Year 2021-2022	Concentrators who left Secondary Education Academic Year 2022-2023	Concentrators who left Secondary Education Academic Year 2023-2024

Technical Skill Attainment (70%)

Post-Program Placement (84%)

Work-based Learning (TBD)