

Career Technical Education Report Card

Background

Ohio statute requires the Ohio Department of Education to create a career-technical planning district (CTPD) report card. Ohio Revised Code Section 3302.033 states the following:

The state board of education, in consultation with the chancellor of the Ohio board of regents, any office within the office of the governor concerning workforce development, the Ohio association of career and technical education, the Ohio association of city career-technical schools, and the Ohio association of career-technical superintendents, shall approve a report card for joint vocational school districts and for other career-technical planning districts that are not joint vocational school districts, which may contain disaggregated data for each joint vocational school district, if applicable. The state board shall submit details of the approved report card to the governor, the speaker of the house of representatives, the president of the senate, and the chairpersons of the standing committees of the house of representatives and the senate principally responsible for education policy. The department of education annually shall issue a report card for each joint vocational school district and other career-technical planning districts that are not joint vocational school districts, beginning with report cards for the 2012-2013 school year to be published not later than September 1, 2013.

Because of the unique mission of CTPDs, their report card uses different accountability rules than those used for the traditional report cards. Traditional report cards use all accountable students for most report card measures whereas the CTPD report cards use subsets of students. Most of the measures use one of three types of students; “Participants,” “Concentrators” or “Concentrators Who Left Secondary Education” as the cohort for the evaluation. Shown below are definitions and calculations that will help readers understand the Career-Technical Education (CTE) report card.

The 2017 CTE report card includes 5 graded measures and one set of ungraded measures (Prepared for Success) that roll up to four graded components. This document also includes all of the business rules for each measure and component grade.

Career-Technical Education Definitions

Career-Technical Education

The term 'career and technical education' (CTE) means organized educational activities that:

- (A) offer a sequence of courses that--
1. provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions;
 2. provides technical skill proficiency, an industry-recognized credential, a certificate, or an associate degree; and
 3. may include prerequisite courses (other than a remedial course) that meet the requirements of this subparagraph; and
- (B) include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual.

CTE Participant

A secondary student who has earned credit in one or more courses in any CTE workforce development program of concentration.

To be a CTE Participant, a secondary student must be enrolled in a state-approved, funded CTE workforce development course and earn full or partial high school credit in that course. Students who earn no credit are not Participants.

CTE Concentrator

A CTE Concentrator is a student who completed a minimum of 50% of the courses required for a single CTE workforce development program of concentration (e.g., health sciences or marketing), and has enrolled for additional credit at the secondary level. Only one program of concentration can be reported for each student. For guidance in identifying when a secondary student becomes a CTE Concentrator and for examples, please click [here](#).

For a student enrolled in a CTE workforce development program of concentration who has a CTE credit flexibility plan, the student reaches CTE Concentrator status when the student demonstrates attainment of 50% (half) of the CTE program of concentration competencies/learning outcomes and

begins work on the second half of the CTE program of concentration competencies/learning outcomes.

Traditional districts, community schools and Science, Technology, Engineering and Mathematics (STEM) schools report a CTE program of concentration element in Education Management Information System (EMIS). This element, reported during the final student reporting window, designates the program of concentration where the secondary student has completed at least half of the high school courses required and where the student is enrolled for additional credit. Any student in any secondary grade (e.g. – a student in a grade below 12) can be reported as a Concentrator if they meet the requirement to have completed 50% of the courses required for a single CTE program of concentration and the student is enrolled for additional credit.

Ohio has a “once identified, always identified” rule for CTE Concentrators, so once a student is identified, they remain a Concentrator for the rest of their schooling, even if they decide not to continue working to complete their CTE workforce development program of concentration.

Although districts self-report students as Concentrators, it is important to understand that the Ohio Department of Education (ODE) performs ‘checks’ of the data to ensure that the district’s reporting is correct. Each program of concentration has an aligned list of courses. ODE’s check looks at the code reported for the program of concentration and the courses reported for each student to ensure that there is alignment. A student is removed from the calculations on the CTE report card that use CTE Concentrators if the check finds that there is not alignment between the program of concentration and the courses being taken by that student. The calculation in the “calculations” section of this technical document below shows what elements are used when ODE performs its check to confirm that the student is indeed a Concentrator.

CTE Concentrator Who Left Secondary Education

As the name implies, a CTE Concentrator Who Left Secondary Education is a secondary student who got reported in EMIS as a CTE Concentrator, and who no longer is enrolled in secondary education. For example, a Concentrator who graduated or otherwise left high school. Please note that this element is calculated differently in the final student reporting window versus the Graduate (G) EMIS reporting period. The information, in the “calculations” section below explains the differences.

Career-Technical Education Workforce Development Program

The definition of CTE and Tech Prep Programs are embodied in the definition of ‘career and technical education’ in the *Carl D. Perkins Career and Technical Education Improvement Act of 2006*. A workforce development program of concentration consists of multiple courses that total at least 450 hours in length and includes exploration and work experience to prepare students for further study and a career in their chosen career field.

Career-Technical Education Workforce Development Course

A workforce development course addresses some of the content standards of a workforce development program and in general contains content provided in a shorter time period (e.g. 60-280 hours). In order to be funded as a CTE workforce development course, the course must be aligned to a state-approved CTE program of concentration via the CTE-26 application.

Calculations

Career-Technical Education (CTE) Participant Calculation

A CTE Participant is derived from data reported in the Education Management Information System (EMIS):

1. A student must be enrolled in a state-approved CTE workforce development course (Curriculum Element 'VN,' 'VC,' 'VT,' 'VP') in the current year.
2. Student must have a 'Y' (Yes) or 'P' (Partial/Override) reported for that course in the current year in the High School Credit Earned field (Student Course Record (GN), High School Credit Earned Element (GN150)).
3. The Partial/Override Element (GN152) must be a number greater than '0.0' which indicates that some amount of credit was earned for that course.

CTE Concentrator Calculation

This calculation is used by the Ohio Department of Education (ODE) to determine whether a student reported as a Concentrator remains in the pool for those calculations that use Concentrators as the cohort for evaluation. A student's program area of concentration must align to the courses being taken in order to remain in the "Concentrator" calculations. Students with misalignment are removed.

A student must have a value not equal to "***" in the CTE Program of Concentration Field (*CTE Program of Concentration Element* (FN290));

and

The student must be enrolled and funded in a CTE workforce development course in the current year for the district reporting the *CTE Program of Concentration Element*. The course must be identified as a CTE anchor course (curriculum code 'VN,' 'VT,' 'VC,' 'VP') and must be aligned to the student's CTE program of concentration.

Again, please note that the course in which the student is enrolled in the current year must align to the program area of concentration being reported in the FN290 field. Students are not included in accountability calculations that use "Concentrators" as the cohort to be evaluated in cases where there is misalignment between the program area of concentration and the course being taken.

CTE Concentrator Who Left Secondary Education Calculation

As was explained above, this calculation uses two different sets of data depending on the reporting window.

The final reporting window calculation includes withdrawal data reported in the final student reporting window.

The Graduate (G) calculation includes withdrawal data reported in final window and diploma data reported in Graduate (G).

The count of CTE Concentrators Who Left Secondary Education can be updated in the Graduate (G) reporting period for two reasons:

1. A student will be **ADDED** to the count of CTE Concentrators Who Left Secondary Education if NOT reported with Withdrawal Reason '47,' '71,' '72,' '73,' '74,' '75,' '76,' '77,' '79,' or '99' in the final student reporting window, and reported with a diploma date (not equal to zeros) in Graduate (G).
2. Student will be **DELETED** from the count of CTE Concentrators Who Left Secondary Education if reported with withdrawal reason '99' in Yearend (N), and NOT reported with a diploma date in Graduate (G).

For the calculation, from the final student reporting window in EMIS:

A student must have a value not equal to "***" in the CTE program of concentration field (*CTE Program of Concentration Element* (FN290)) in Yearend (N);

and

The student must be enrolled in a funded CTE workforce development course in the district reporting the *CTE Program of Concentration Element* that is identified as a CTE anchor course (curriculum code 'VN,' 'VT,' 'VC,' 'VP') for the student's CTE program of concentration.

and

The student must have been enrolled in an approved CTE workforce development program of concentration the year the student was reported as a CTE Concentrator

AND ONE OF THE FOLLOWING:

From the 3rd student reporting window:

The student had a **Date of Withdrawal** (derived from *Effective End Date Element* (FS090)) and a **Withdrawal Reason** (*Withdrawal Reason Element* (FS100)) of one of the following:

- 47 **Withdrew due to *Yoder vs. Wisconsin*** (Only used for 8th grade students)
- 71 **Withdrew due to truancy/nonattendance**
- 72 **Pursued employment/work permit** (Superintendent approval on file)
- 73 **Over 18 years of age**
- 74 **Moved;** not known to be continuing
- 75 **Student completed course requirements** but did NOT pass the appropriate statewide assessments required for graduation. In the case of a student on an IEP who has been excused from the individual consequences of the statewide assessments, using this code indicates that the student completed course requirements but did not take the appropriate statewide assessments required for graduation.
- 76 **Non-Attendance According to the 105-Hour Rule**
- 77 **Withdrew due to ORC §3314.26 (non-tested)**
- 79 **No Longer Eligible to be Enrolled in District**
Student eligibility changed, district does not know where education will be continued.

Returning Withdrawal – Please note that if a student is reported as withdrawn in an earlier reporting window, but is reported as enrolled in the final student window, the student is NOT counted as withdrawn.

or

From Graduate (G):

The student has a **diploma date** (*Diploma Date Element* (FN090)) not equal to zeroes.

Joint Vocational School District (JVSD)s and Contract CTE – Please note that JVSDs and Contract CTEs do not report diploma dates, so the diploma date reported by the resident district is used.

Prior Year Contract CTE and JVSD CTE Concentrators and “Home School District”:

1. In the current year, if a prior year Contract CTE or JVSD CTE Concentrator has a withdrawal reason of 47, 71, 72, 73, 74, 75, 76, 77, or 79 or a diploma date not equal to zeros reported by the prior year “home school district”, then student is counted as a CTE Concentrator Who Left Secondary Education in current year.
2. In the current year, if a prior year Contract CTE or JVSD CTE Concentrator has a withdrawal reason of 47, 71, 72, 73, 74, 75, 76, 77, or 79 or a diploma date not equal to zeros reported by a district other than the prior year “home school district”, then student is NOT counted as a CTE Concentrator Who Left Secondary Education in the current year.

Prior Year JVSD CTE Concentrators and “received from” Community School:

1. In the current year, if prior year JVSD CTE Concentrator has a withdrawal reason of 47, 71, 72, 73, 74, 75, 76, 77, or 79, or a diploma date not equal to zeros reported by the prior year “received from” community school, then student is counted as a CTE Concentrator Who Left Secondary Education in current year.

2. In current year, if prior year JVSD CTE Concentrator has a withdrawal reason of 47, 71, 72, 73, 74, 75, 76, 77, or 79, or a diploma date not equal to zeros reported by a district or school other than the prior year “received from” community school, then student is NOT counted as a CTE Concentrator Who Left Secondary Education in current year.

CTE Workforce Development Course

In order to be counted as a CTE workforce development course, the course must be aligned to a state-approved CTE program of concentration via the CTE-26 application.

Then, the course must be submitted in the last reporting window of EMIS with both of the following:

1. A Curriculum Element of ‘VN’, ‘VC’, ‘VT’ or ‘VP’ (Course Master Record (CN), *Curriculum Element* (CN310))
2. One of the CTE Workforce Development **Subject Codes** (Course Master Record (CN), *Subject Code Element* (CN050)). See the “Career-Technical Education” Section of the Subject Code section of the EMIS manual located [here](#) for information on the courses that are as valid workforce development courses.

The remaining sections of this technical document outline how the CTE report card letter grades are derived. The definitions and calculations shown above will help readers understand which group of students is being evaluated. In some cases, the cohort are all CTE Participants. For other calculations it’s all Concentrators and for others it’s only Concentrators Who Left Secondary Education.

Career-Technical Education (CTE) Graduation Rate Calculation

Background

The CTE report card includes a four-year and five-year graduation rate. The calculation itself uses many of the same general business rules as the traditional school district report cards. A student is counted in the numerator only if he earned a regular or honors diploma within four years (for the 4-year rate) or five years (for the 5-year rate) of entering the 9th grade.

The CTE report card also uses data from the same two graduating classes as the traditional report card. For 2017, the letter grades will be based on students from the graduating classes of 2016 (4-year rate) and 2015 (5-year rate). A student is placed into a graduating class based on when they first are reported as a 9th grader and students who move into Ohio sometime later in their high school career are placed in a cohort based on the first grade level reported. For example, a new Ohio student reported with a grade of 10 during the 2013-14 school year is placed in the graduating Class of 2016, a new student reported with a grade of 11 in the 2014-15 school year is placed in the graduating Class of 2016 and a new student with a grade of 12 in the 2015-16 school year is placed in the graduating Class of 2016.

For the Career-Technical Planning District (CTPD) report card, there is one additional filter used to develop the cohort. For a traditional district, ALL STUDENTS from the Classes of 2015 and 2016 are included if they otherwise are accountable to the district. For the CTPD report card, only students who are reported as **CTE Concentrators** by their fourth year of high school are included in the CTPD graduation rate calculation. Students who participate in CTE coursework, but don't take enough courses to become Concentrators by their fourth year of high school do not get included, even if they later become Concentrators (i.e. they finally reach concentrator status in their fifth year of school).

The calculation uses data from the 3rd or yearend reporting window to identify which students are labeled Concentrators and as was mentioned above, because the rule is "once a Concentrator, always a Concentrator," it's not just students reported in 2015 for the Class of 2015 or 2016 for the Class of 2016 who get included. Any student reported as a Concentrator in any of the four years of high school will count in their CTPD's calculation.

Thus, for the Class of 2015, a student would be included if the concentrator status was reported in the final or yearend reporting window for either FY2012, FY2013, FY2014 or FY2015. A student in the Class of 2016 would be included if the concentrator status was reported in the final/yearend window for either FY2013, FY2014, FY2015 or FY2016.

Each graduating class (i.e. – Class of 2014, Class of 2015, Class of 2016, etc.) is reported on two different school year's report cards; once to show the percent of students who graduate within four years of entering high school and once, a year later, to show the percent of students who graduate within five years of entering high school.

Unlike the traditional district report cards, the cohort (denominator) for each graduating class is set at the time the four-year rate is calculated and it doesn't change for the five-year rate. There are two reasons for this.

First, since students are included only if they are reported as a Concentrator no later than the end of the fourth year of high school, no "new" Concentrators are added in that fifth year.

Second, the CTPD cohorts are not updated between the fourth and fifth years of high school to account for transfers in or transfers out. This is a different rule from what happens in a traditional school district's graduation rate calculation. For traditional school district report cards, students who transfer across districts sometime between the end of their fourth year of high school and end of the fifth year are removed from the five-year rate of the district they left and added to the five-year rate of the district to which they transferred. This "fifth year update" does not occur for the CTPD report card, so if a student changes CTPDs in the fifth year, he stays in the graduation rate of the CTPD where he was enrolled at the end of the fourth year.

There is one additional rule that is different between the CTPD graduation rate calculation and the calculation used for traditional districts. For traditional districts, a student counts in the rate of only one district per year. For example, a Class of 2015 student can transfer from one district to another sometime between the end of the fourth year and end of the fifth year, but he's in ONLY one district's rate (his first district) when ODE calculates the four-year rate for the Class of 2015 (shown on the 2016 report card) and in one district's rate (the second district) when ODE calculates the five-year rate for the Class of 2015 (shown on the 2017 report card).

CTPD students can appear in the graduation rate of more than one CTPD depending on the data reported. If a student is reported as a CTE Concentrator by multiple school districts, the following rules about where to count that student apply:

School District Level – If multiple school districts report the student as a Concentrator, the student counts in the district that reported the student as a CTE Concentrator most recently.

CTPD Level – For the CTPD report card, where the student counts depends on whether the school districts that reported the student as a Concentrator are part of the same CTPD or different CTPDs. The rules are:

1. If a student is reported as a Concentrator in the **same year or in different years** by multiple school districts and all reporting districts are members of a **single CTPD**, the student is counted only one time in the CTPD's graduation rate where all the districts are members.
2. If a student is reported as a Concentrator in **two different years** by two or more school districts and those districts belong to **different CTPDs**, then the student counts in the CTPD's graduation rate that most recently reported the Concentrator.
3. If a student is reported as a Concentrator in the **same school year** by two or more school districts and those school districts belong to **different CTPDs**, the student counts in the graduation rate of BOTH CTPD's.

Because of rule #3 above, a student can be included in more than one CTPD's graduation rate calculation.

4-Year CTPD Graduation Rate Calculation

Definition: Percent of CTE Concentrators who graduated within four years of the fiscal year in which they were reported as a ninth grader for the first time (including summer graduates).

Numerator: Number of CTE Concentrators who graduated within four years of the fiscal year in which they were reported as a ninth grader for the first time (including summer graduates).

Denominator: Number of students who were ninth graders for the first time in fiscal year 2013, who were ever reported as CTE Concentrators.

From 2013, 2014, 2015, or 2016 EMIS:

In 2013, or 2014, or 2015 or 2016, a student must have a value not equal to "***" in the CTE Program of Concentration Field (*CTE Program of Concentration Element (FN290)*) in Yearend (N);

and

Student must be enrolled in a funded CTE workforce development course (see definition for CTE Workforce Development Course) in the district reporting the *CTE Program of Concentration Element* that is identified as a CTE anchor course (curriculum code 'VN,' 'VT,' 'VC,' 'VP') for the student's CTE program of concentration.;

From 2013 EMIS:

A student must have a Grade Level equal to '9' on the State Equivalent Grade Level Element (GI370).

To be included in the numerator, students must meet the conditions above, AND be reported as having a *DIPLOMA DATE* and a *DIPLOMA TYPE* no later than the end of 2016 Graduate "G" reporting period, excluding students reported with Student Status = 'P' or 'T.'

Once the graduation rate is calculated, it is assigned a letter grade using the scale below:

93% - 100%	-	"A"
89% - 92.9%	-	"B"
84% - 88.9%	-	"C"
79% - 83.9%	-	"D"
0% - 78.9%	-	"F"

5-Year CTPD Graduation Rate Calculation

Definition: Percent of CTE Concentrators who graduated within five years of the fiscal year in which they were reported as a ninth grader for the first time (including summer graduates).

Numerator: Number of CTE Concentrators who graduated within five years of the fiscal year in which they were reported as a ninth grader for the first time (including summer graduates).

Denominator: Number of students who were ninth graders for the first time in fiscal year 2012, who were ever reported as CTE Concentrators by the end of their fourth year of high school.

From Yearend 2012, 2013, 2014, or 2015 EMIS:

In 2012, or 2013, or 2014 or 2015, a student must have a value not equal to "***" in the CTE Program of Concentration Field (*CTE Program of Concentration Element* (FN290)) in Yearend (N);

and

Student must be enrolled in a funded CTE workforce development course (see definition for CTE Workforce Development Course) in the district reporting the *CTE Program of Concentration Element* that is identified as a CTE anchor course (curriculum code 'VN,' 'VT,' 'VC,' 'VP') for the student's CTE Program of Concentration.;

From Yearend (N) 2012 EMIS:

A student must have a Grade Level equal to '9' on the State Equivalent Grade Level Element (GI370).

To be included in the numerator, students must meet the conditions above, AND be reported as having a *DIPLOMA DATE* and a *DIPLOMA TYPE* no later than the end of 2016 Graduate "G" reporting period, excluding students reported with Student Status = 'P' or 'T.'

Once the graduation rate is calculated, it is assigned a letter grade using the scale below:

95% - 100% - "A"
90% - 94.9% - "B"
85% - 89.9% - "C"
80% - 84.9% - "D"
0% - 79.9% - "F"

Graduation Rate Component Calculation

Just like the traditional report card, the two graduation rates are combined to get a graduation rate component grade.

Measures Included

1. 4-year Graduation Rate
2. 5-Year Graduation Rate

Weights*

1. 4-year Graduation Rate contributes 60% to the Graduation Component Grade
2. 5-Year Graduation Rate contributes 40% of the Graduation Component Grade

*If a CTPD has only one measure, then that one graded measure is used for the component. If neither measure is graded, then the component also is not graded.

Percentage to Points Scale

4-Year Graduation Percentage to Points		
Measure Grade Scale	Percentage	Points
93% - 100% - A	>=98.25% to 100%	5
	>=96.5% but <98.25%	4.75
	>=94.75% but <96.5%	4.5
	>= 93% but <94.75%	4.25
89% - 92.9% - B	>=92% but <93%	4
	>=91% but <92%	3.75
	>=90% but <91%	3.5
	>=89% but <90%	3.25
84% - 88.9% - C	>=87.75% but <89%	3
	>=86.5% but <87.75%	2.75
	>=85.25% but <86.5%	2.5
	>=84% but <85.25%	2.25
79% - 83.9% - D	>=82.75% but <84%	2
	>=81.5% but <82.75%	1.75
	>=80.25% but <81.5%	1.5
	>=79% but <80.25%	1.25
<79% - F	>=59.25% but <79%	1
	>=39.5% but <59.25%	0.75
	>=19.75% but <39.5%	0.5
	>=0% but < 19.75%	0

5-Year Graduation Percentage to Points		
Measure Grade Scale	Percentage	Points
95% - 100% - A	>=98.75% to 100%	5
	>=97.5% but <98.75%	4.75
	>=96.25% but <97.5%	4.5
	>=95% but <96.25%	4.25
90% - 94.9% - B	>=93.75% but <95%	4
	>=92.5% but <93.75%	3.75
	>=91.25% but <92.5%	3.5
	>=90% but <91.25%	3.25
85% - 89.9% - C	>=88.75% but <90%	3
	>=87.5% but <88.75%	2.75
	>=86.25% but <87.5%	2.5
	>=85% but <86.25%	2.25
80% - 84.9% - D	>=83.75% but <85%	2
	>=82.5% but <83.75%	1.75
	>=81.25% but <82.5%	1.5
	>=80% but <81.25%	1.25
<80% - F	>=60% but <80%	1
	>=40% but <60%	0.75
	>=20% but <40%	0.5
	>=0% but <20%	0

Component Grade Scale

Graduation Component Grade Assignment	
Points	Letter Grade
4.125 – 5.000	A
3.125 – 4.124	B
2.125 – 3.124	C
1.125 – 2.124	D
0 – 1.124	F

Examples of Calculation

Measure	Weighted Points	Component Points
4-Year Rate	$95.2\% = 4.5 \text{ Points} \times 0.60 \text{ weight}$	2.7 Points
5-Year Rate	$92.0\% = 3.5 \text{ points} \times 0.40 \text{ weight}$	1.4 Points
Total		4.10 points = "B" Component grade

Measure	Weighted Points	Component Points
4-Year Rate	$81.6\% = 1.75 \text{ Points} \times 0.60 \text{ weight}$	1.05 Points
5-Year Rate	$89.2\% = 3 \text{ points} \times 0.40 \text{ weight}$	1.2 Points
Total		2.25 points = "C" Component grade

Career-Technical Education (CTE) Prepared for Success (PFS) Calculation

Background

Career-Technical Planning District (CTPD)s are graded on the PFS component just like traditional districts. The calculation itself is identical to the traditional district calculation and like traditional districts, the cohort evaluated is the denominator of the CTPD's four- and five-year graduation rate.

The difference lies with how the graduation rate denominator or "cohort" is formed. A CTPD is held accountable only for students identified as Concentrators by the end of their fourth year of high school. Students who participate in CTE programming, but do not reach the status of concentrator by the end of their fourth year of high school are not included in a CTPD's graduation rate. Since the PFS denominator includes all students in the CTPD's four-year and five-year graduation rate denominators, the CTPDs are held accountable only for students who reach concentrator status by the end of their fourth year of high school.

Prepared for Success Calculation

Definition: The percentage of CTE Concentrators in the four-and five year graduation rates who have demonstrated through one of several measures that they are college or career ready.

Numerator: Number of CTE Concentrators have either a remediation free score on the ACT or SAT, an honors diploma or an industry recognized credential totaling 12 points in a single career pathway.

Denominator: Number of CTE Concentrators in the four-year and five-year CTPD graduation rates combined.

The individual measures are described below

ACT and SAT Data

Many colleges and universities use ACT and SAT scores to determine if a student is ready for college level coursework. Remediation-free scores have been set for each component of the ACT and SAT by the Ohio Department of Higher Education.

2017 ACT Remediation-Free Scores

English	18
Mathematics	22
Reading	21**

**The Department of Higher Education increased the ACT reading score to 22 in May 2016. Ohio Department of Education (ODE) will use 21 for the 2017 report card calculation because that score was the remediation free standard when the Classes of 2015 and 2016 took this test.

2017 SAT Remediation-Free Scores**

For SAT Tests Taken Before March 2016		For SAT Tests Taken In March 2016 or Later	
Critical Reading	450	ELA	480
Writing	430		
Mathematics	520	Mathematics	530

**College Board redesigned the SAT in March 2016. The Department of Higher Education recommended new scores in the spring of 2017. Because of the cohorts being evaluated for this measure, most students would have taken the “old” version of the test. However, some student may have taken the “new” version. A student can be deemed remediation free across the tests as shown below.

A student can earn a remediation free designation across the two versions of the SAT. Thus, there are four combinations that would qualify. They include:

Old test reading/writing and new test math

For SAT Tests Taken Before March 2016		For SAT Tests Taken In March 2016 or Later	
Critical Reading	450	ELA	
Writing	430		
Mathematics		Mathematics	530

Old test math and new test ELA

For SAT Tests Taken Before March 2016		For SAT Tests Taken In March 2016 or Later	
Critical Reading		ELA	480
Writing			
Mathematics	520	Mathematics	

All old tests

For SAT Tests Taken Before March 2016		For SAT Tests Taken In March 2016 or Later	
Critical Reading	450	ELA	
Writing	430		
Mathematics	520	Mathematics	

All new tests

For SAT Tests Taken Before March 2016		For SAT Tests Taken In March 2016 or Later	
Critical Reading		ELA	480
Writing			
Mathematics		Mathematics	530

ACT and SAT data participation and score data are reported through Education Management Information System (EMIS) by schools and districts.

ACT and SAT Participation

Two measures will report the percentage of students in the 2015 and 2016 graduation cohorts who took the ACT and SAT, at the school and district levels. These calculations are:

$$\frac{\text{Number of students who took the ACT}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

In order for students to be counted in the numerator for ACT participation, the following conditions must be met:

- Student is reported with an Assessment type code (FA060) = AC
AND
- Assessment Area Code (FA205) = M, R, ENG (all assessment type codes must be reported)
AND
- Score (FA240) ≥ 1 , and ≤ 36 (valid score ranges for the ACT)
AND
- Test Date (FA210) ≤ 201610 (indicating that the test was taken no later than October 2016).

A student must be reported with a valid score in **all sections** of the ACT listed above to be counted as a participant and thus included in the numerator.

Number of students who took the SAT
Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)

In order for students to be counted in the numerator for SAT participation, the following conditions must be met:

- Student is reported with an Assessment type code (FA060) = SA
AND
- Assessment Area Code (FA205) = M, R, W (all assessment type codes must be reported)
AND
- Score (FA240) ≥ 200 , and ≤ 800 (valid score ranges for the SAT)
AND
- Test Date (FA210) ≤ 201610 (indicating that the test was taken no later than October 2016).

A student must be reported with a valid score in **all sections** of the SAT listed above to be included in the numerator.

ACT and SAT Remediation Free

Two measures report the percentage of students in the cohort who met the remediation-free scores on all components of the ACT or SAT. These calculations are:

Number of students who scored remediation-free on all components of the ACT
Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)

In order for students to be counted in the numerator for ACT remediation free, the following conditions must be met:

- Student is reported with an Assessment type code (FA060) = AC

AND
- Assessment Area Code (FA205) = M, R, ENG (all assessment type codes must be reported)

AND
- Score (FA240) \geq 18 for English

AND
- Score (FA240) \geq 22 for Mathematics

AND
- Score (FA240) \geq 21 for Reading

AND
- Test Date (FA210) \leq 201610 (indicating that the test was taken no later than October 2016).

A student must be reported with a valid score at or above the remediation free benchmark in **all sections** of the ACT listed above to be included in the numerator. Note that the highest score from all attempts is used for the calculation. Therefore, a student that meets the required scores across multiple administrations is included. For example, if a takes the ACT three times, and scores remediation free in reading on the first test, remediation-free in math on the second test and remediation-free in English on the third test, the student is considered to be remediation-free on the ACT and will be in the numerator.

Number of students who scored remediation-free on all components of the SAT
Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)

In order for students to be counted in the numerator for SAT remediation free, the following conditions must be met:

- Student is reported with an Assessment type code (FA060) = SA

AND

- Assessment Area Code (FA205) = M, R, W (all assessment type codes must be reported)

AND

- Score (FA240) \geq 430 for Writing for tests taken before March 2016 or an ELA score \geq 480 for tests taken in March 2016 or later

AND

- Score (FA240) \geq 520 for Mathematics for tests taken before March 2016; or a score (FA240) \geq 530 for tests taken in March 2016 or later

AND

- Score (FA240) \geq 450 for Reading for tests taken before March 2016 or a score (FA240) \geq 480 for tests taken in March 2016 or later

AND

- Test Date (FA210) \leq 201610 (indicating that the test was taken no later than October 2016).

A student must be reported with a valid score at or above the remediation free benchmark in **all sections** of the SAT listed above to be included in the numerator. Note that the highest score from all attempts is used for the calculation. Therefore, a student that meets the required scores across multiple administrations is included. For example, if a takes the ACT three times, and scores remediation free in critical reading on the first test, remediation-free in math on the second test and remediation-free in writing on the third test, the student is considered to be remediation-free on the ACT and will be in the numerator.

Because of the changes to the SAT, a student's test date will be used to determine which scores will place the student in the numerator as remediation free.

It is important to note that a student must meet the remediation-free threshold for all ACT or SAT subjects to be included in the numerator. The table below helps to further clarify when a student is deemed remediation free.

ACT Subject	Attempt 1	Attempt 2	Attempt 3
Math	Not Remediation Free (Score less than 22)	Remediation Free (Score 22+)	Remediation Free (Score 22+)
Reading	Remediation Free (Score 21+)	Not Remediation Free (Score less than 21)	Not Remediation Free (Score less than 21)
English	Remediation Free (Score 18+)	Remediation Free (Score 18+)	Not Remediation Free (Score less than 18)

In the example above, the student took the ACT three times, and earned remediation free scores in all subjects across the three administrations, but never within the same administration. This student would be considered remediation free.

In order to be included in the numerator, all remediation free scores must come from the same assessment – scores from ACT and SAT may not be combined. For example, if a student were remediation free on the ACT in Reading and English but not Math, and remediation free in only Math on the SAT, this student **would not** be considered remediation free because they did not earn remediation free scores on all three sections of either the ACT or SAT.

Honors Diploma

Students have the ability to earn an honors diploma through one of three pathways. An ungraded Prepared for Success measure will report the percentage of students who graduate from high school with one of the three types of honors diplomas described in the [Ohio Honors Diploma Requirements](#).

The calculation for this measure is:

$\frac{\text{Students in the denominator of the 4- and 5-year graduation cohorts who earned an honors diploma within 4- or 5-years of entering ninth grade (FN100 Diploma Type Element = 2)}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$

Industry-Recognized Credentials

The State Board of Education approved a methodology in 2014 for identifying approved industry-recognized credentials for inclusion in the PFS component. The state board of education updated the methodology in 2015 to align with Ohio’s new high school graduation requirements and to reflect industry demand. The ungraded measure on 2015 report card, included all credentials from the approved 2014 list. In order to align the PFS component to Ohio’s new high school graduation requirements, the new list contained only those credentials that were also valid options for meeting graduation requirements.

For the report cards in 2016 and beyond, only credentials totaling 12 points from the approved list, either individually or totaled (within the same career field), count towards the PFS component.

The calculation for this measure is:

$$\frac{\text{Students in the denominator of the 4- and 5-year cohorts who earned industry-recognized credentials totaling 12 points in a single career field (Industry-recognized credentials reported as GW-type assessments (FA060))}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

- Test Date (FA210) <= 201701 (indicating that the credential was earned no later than January 2017).

Advanced Placement

There are currently over 30 Advanced Placement (AP) courses offered in multiple subject areas. Each high school determines locally which courses it will offer and not all courses are offered by each school or district. When a student takes an AP course, he or she can take an assessment at the end of the year that measures the student's knowledge of the course's academic content standards. Students who perform well enough (usually a score of 3 or higher) on the AP exam can receive college credit for that course when they eventually graduate from high school and enroll in college.

Two of the ungraded measures reported on the 2017 report card contain data pertaining to AP.

The first measure will report the percentage of students in the 2015 and 2016 graduation cohorts who took at least one AP course while in high school. This calculation is based on EMIS student course data.

$$\frac{\text{Students in the denominator of the 4- and 5-year graduation cohorts who earned credit in one or more AP courses while in high school}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

In order for students to be counted in the numerator of this measure, the following conditions must be met.

Student course data must include:

- Curriculum Element (CN310) = AP
AND
- High School Credit Earned Element (GN150) = Y or P
AND

- If High School Credit Earned Element = P, then Partial/Override Credit Element (GN152) must be greater than zero.

AP courses taken at any point prior to data publication are included in this measure. For example, a student who earns credit in an AP course during their freshman year will be included in this measure, but those data will not be published until the student's 4-year cohort graduates.

An additional AP measure reports the percentage of students in the cohort who received a score of three (3) or higher on a corresponding AP test. AP tests score data is reported by school districts through EMIS.

$$\frac{\text{Number of students who scored three (3) or higher on an AP test}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

- Score (FA240) >= 3
- AND
- Test Date (FA210) <= 201610 (indicating that the test was taken no later than October 2016).

International Baccalaureate

There are many International Baccalaureate (IB) courses offered in multiple subject areas. Each high school determines locally which courses it will offer and not all courses are offered by each school or district. When a student takes an IB course, he or she can take an assessment at the end of the year that measures the student's knowledge of the course's academic content standards. Students who perform well enough (usually a score of 4 or higher) on the IB exam can receive college credit for that course when they eventually graduate from high school and enroll in college.

Two of the ungraded measures reported on the 2017 report card contain data pertaining to IB.

The first measure will report the percentage of students in the 2015 and 2016 graduation cohorts who took at least one IB course while in high school. This calculation is based on EMIS student course data.

$$\frac{\text{Students in the denominator of the 4- and 5-year graduation cohorts who earned credit in one or more IB courses while in high school}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

In order for students to be counted in the numerator of this measure, the following conditions must be met.

Student course data must include:

- Curriculum Element (CN310) = IB

AND

- High School Credit Earned Element (GN150) = Y or P

AND

- If High School Credit Earned Element = P, then Partial/Override Credit Element (GN152) must be greater than zero.

IB courses taken at any point prior to data publication are included in this measure. For example, a student who earns credit in an IB course during their freshman year will be included in this measure, but those data will not be published until the student's 4-year cohort graduates.

An additional IB measure reports the percentage of students in the cohort who received a score of four (4) or higher on a corresponding IB test. IB tests score data is reported by school districts through EMIS.

$$\frac{\text{Number of students who scored four (4) or higher on an IB test}}{\text{Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)}}$$

- Assessment type code (FA060) = IB

AND

- Score (FA240) ≥ 4

AND

- Test Date (FA210) ≤ 201610 (indicating that the test was taken no later than October 2016).

Dual Enrollment

Ohio offers students the ability to take courses at a local college or university. If students take advantage of this option they can earn credit that counts towards high school graduation and also counts toward college graduation. The credit will be 'banked' until such time as the student graduates from high school and enrolls in college. This program is often referred to as "dual enrollment" and students can earn up to a year or more of college credit by taking advantage of this program.

One of the ungraded PFS measures reported in 2017 contains data pertaining to dual enrollment. It reports the percentage of students in the 2015 and 2016 graduation cohorts who earned at least three (3) dual enrollment/college credit plus credits while still in high school.

Number of students who earn at least three (3) dual enrollment/post-secondary credits
Students in the denominator of the 4- and 5-year graduation cohorts (Classes of 2015 and 2016)

In order to be included in the numerator, students must be reported with the following information:

- Dual enrollment credit earned (GC110) ≥ 3 .

Calculating the Component Grade

Once each ungraded measure is calculated, the elements are combined to determine how many students from the four-year and five-year graduation cohorts meet the definition to be deemed Prepared for Success. The calculation is as follows:

Denominator of the Component

The denominator of the calculation includes ALL students in each CTPDs denominators of the 4-year and 5-year graduation rates. For 2017, the data include the classes of 2016 (4-year rate) and 2015 (5-year rate). Students are included regardless of whether they graduated in one of those years or not. Please note, students who do not graduate will be included in the numerator of the component calculation if they meet the criteria to be placed there (i.e. scoring remediation-free on the ACT or SAT or earning and industry-recognized credential).

Numerator of the Component

A student must do one or more of the following to be in the numerator:

1. Earn a remediation free score on all parts of the ACT or SAT
2. Earn an honors diploma
3. Earn an industry-recognized credential.

Students receive a weight of 1.0 for meeting one or more of the criteria above. This means they count as one student in the numerator.

A student can earn an additional weight of 0.3 points to the numerator for completing one or more of the criteria listed above AND also doing one of the following:

1. Earn a three or higher on at least one AP exam
2. Earn a four or higher on at least one IB exam
3. Earn at least three college credits before leaving high school.

Students meeting the bonus criteria will count as 1.3 students in the numerator. A student cannot earn the 0.3 bonus weight unless they also do something to from the first list to earn the initial weight of 1.0. Thus a student can only count in the numerator with a weight of 1.0 or 1.3.

Once each student’s weighting is determined, the points are totaled and a Prepared for Success percentage is derived. Letter grades are assigned based on the following scale.

Range	Grade
90% - 100%	A
70% - 89.9%	B
45% - 69.9%	C
25% - 44.9%	D
0.0% - 24.9%	F

Examples of Calculation

This calculation is very different from the others because the measures are ungraded and a student has multiple ways to be counted in the numerator and also to earn a bonus weight for the numerator. The grade is awarded based on the total percentage of weighted students that have demonstrated they are prepared for success after high school. In the example below, there are 10 students that make up the denominator of the calculation.

Student	Students Count 1.0 in Numerator with One of More of These*			Students in Numerator Earn 0.3 Bonus Weight with One of More of These*			Total Points for Student
	ACT/SAT Remediation Free	Honors Diploma	Industry-Recognized Credential	AP Test 3 or Higher	IB test 4 or Higher	Three or More College Credits	
Student 1	YES	YES	No	YES	No	YES	1.3
Student 2	No	No	YES	No	No	No	1
Student 3	No	No	No	No	No	No	0
Student 4	No	No	YES	YES	No	No	1.3
Student 5	No	No	No	No	No	YES	0
Student 6	No	No	No	No	No	No	0
Student 7	No	YES	No	No	No	No	1
Student 8	No	No	No	No	No	No	0
Student 9	No	YES	No	No	YES	No	1.3
Student 10	YES	No	No	No	No	YES	1.3
TOTAL POINTS EARNED							7.2
GRADE ASSIGNMENT							7.2/10 = 72% = B

*A student counts 1.0 in the numerator regardless of how many elements are earned from the left side of the table shaded in blue. A maximum bonus of 0.3 earned for having one or more elements from the right side of the table shaded in yellow.

Percentage to Points Scale

The PFS component grade scale increases in each of the next three years. Because of this, the “percentage to points” conversion table also will change. Shown below is the table that will be used in 2017 to award points for this component. Note that this table shows the COMPONENT grade scale – not the measure grade scale.

Prepared for Success Percentage to Points – 2017 Only		
COMPONENT Grade Scale	Percentage	Points
90% - 100% - A	>=97.5% to 100%	5
	>=95.0% but <97.5%	4.75
	>=92.5% but <95.0%	4.5
	>=90% but <92.5%	4.25
70% - 89.9% - B	>=85% but <90%	4
	>=80% but <85%	3.75
	>=75% but <80%	3.5
	>=70% but <75%	3.25
45% - 69.9% - C	>=63.8% but <70%	3
	>=57.5% but <63.8%	2.75
	>=51.3% but <57.5%	2.5
	>=45% but <51.3%	2.25
25% - 44.9% - D	>=40% but <45%	2
	>=35% but <40%	1.75
	>=30% but <35%	1.5
	>=25% but <30%	1.25
<25% - F	>=18.8% but <25%	1
	>=12.5% but <18.8%	0.75
	>=6.3% but <12.5%	0.5
	>=0% but <6.3%	0

Component Grade Scale

Prepared for Success Component Grade Assignment	
Points	Letter Grade
4.125 – 5.000	A
3.125 – 4.124	B
2.125 – 3.124	C
1.125 – 2.124	D
0 – 1.124	F

Career-Technical Education (CTE) Post Program Outcomes Calculation

Background

When the state board of education designed the Career-Technical Planning District (CTPD) report card, they envisioned Post Program Outcomes having two measures that contributed to the component letter grade. The proposed measures included Post Program Placement and Industry Recognized Credentials and the resolution required the credentials to be graded for the first time in 2017. Legislation enacted in late 2016 requires Ohio Department of Education (ODE) to include industry recognized credentials in the Achievement component of the report card – so ODE is working to remove this measure from the Post Program Outcomes Component and move it to Achievement. The board is scheduled to discuss this topic at its July 2017 meeting. This technical document will be written with the assumption that the board will act to make the change and will be updated if something different happens.

Post Program Placement

The Post Programs Placement measure uses Concentrators Who Left Secondary Education as the cohort to be evaluated. This includes Concentrators who leave school because they graduated and those who leave for other reasons such as dropping out. These data are collected by surveying students several months after they leave school regarding their placement status. For this reason, data are lagged to allow for time to collect the data and report it to ODE. For the 2017 report card, Concentrators Who Left Secondary Education during the 2015-16 school year are reported.

The process begins when the ODE generates a list of students who were deemed to be Concentrators who also have a withdrawal code reported during the 2015-16 school year. Because the cohort includes students who left for any reason, the agency also performs an enrollment check early in the 2016-17 school year to determine if any students re-enrolled in the current school year. Students who left during the 2015-16 school but re-enrolled early in the 2016-17 school year are removed from the cohort.

CTPDs begin surveying their students in the fall after they leave and the list sent by ODE allows them to know exactly who will be in the denominator of their measure. In the survey, they ask students to tell report what they did professionally after leaving school, including asking if they are in an apprenticeship, are enrolled in post-secondary education, are employed or if they joined the military. It is important to understand that for this element, all data are self-reported by the former students. There is no confirmation 'check' performed by ODE or by the districts.

When reporting on post program placement, the final denominator for the percentages is based only on students who actually respond and whose status is known. If a student fails to respond to the survey, he is not included when reporting the placement percentages.

Status Known Rate

It is important to understand that as part of this calculation, ODE also reports a “Status Known Rate” which represents the percent of Concentrators Who Left Secondary Education where the district was able to obtain placement data via one of several reliable means.

Districts have multiple ways they obtain the data. Some common methods include:

1. Follow-up survey response, several months after leaving school, for placement status
2. National Student Clearinghouse (NSC) for postsecondary enrollment data
3. State Web sites for State licensing and certification data
4. Social media
5. Information from others (e.g. friends/family) who know the student

The Placement Status Known Rate is not a CTE indicator of performance, but provides an indication of the reliability and validity of the Post-Program Placement performance results. Generally, the higher rate of placement status known, the more reliable and valid the Post-Program Placement performance results.

To incentivize CTPDs to work to collect these data, the calculation uses the Status Known Rate to affect the final letter grade for Post Program Placement. If fewer than 85% of the students respond, the district receives a one letter grade demotion for this measure. If more than 95% of the students respond, the CTPD receives a one letter grade increase for this measure.

Post Program Placement Calculation

Definition: The percent of status-known CTE Concentrators Who Left Secondary Education the previous year and were enrolled in postsecondary education or advanced training, in the military service or employed.

Numerator: The number of status-known CTE Concentrators Who Left Secondary Education the previous year and, in the second (2nd) quarter following the program year in which they left secondary education, were enrolled in postsecondary education or advanced training, in the military service or employed (CTE Workforce Development Follow-Up Record (GV), *Apprenticeship Element* (GV620), *Employed Placement Element* (GV640), *Military Placement Element* (GV650) and *Postsecondary Education or Advanced Training Element* (GV670)).

Denominator: The number of CTE Concentrators Who Left Secondary Education the previous year who were not reported as Status Unknown (U), Deceased (D)², or Incorrectly reported as a CTE Concentrator (X) (CTE Workforce Development Follow-Up Record (GV) *Other Follow-Up Status Element* (GV660)) in March (D).

² Student reported as Deceased (D) and not reported as Y1 or Y2 for the *Apprenticeship Element*, *Employed Placement Element*, *Military Placement Element*, *Postsecondary Education or Advanced Training Element* (CTE Workforce Development Follow-Up Record (GV)).

Students are in the numerator if reported with one or more of the following options:

Apprenticeship Element (GV620)

- Y1** Yes, in an apprenticeship program related to CTE Program
- Y2** Yes, in an apprenticeship program not related to CTE Program

Employed Placement Element (GV640)

- Y1** Yes, employed in an occupation related to CTE Program
- Y2** Yes, employed in an occupation not related to CTE Program

Military Placement Element (GV650)

- Y1** Yes, in the military in an area related to CTE Program
- Y2** Yes, in the military in an area not related to CTE Program

Postsecondary Education or Advanced Training Element (GV670)

- Y1** Yes, in postsecondary education or advanced training related to CTE Program
- Y2** Yes, in postsecondary education or advanced training not related to CTE Program

Status Known Rate Calculation

Definition: The percentage of CTE Concentrators Who Left Secondary Education the previous year whose placement status is known.

Numerator: The number of CTE Concentrators Who Left Secondary Education the previous year who were not reported as Status Unknown (U) (CTE Workforce Development Follow-Up Record (GV), *Other Follow-Up Status Element* (GV660)) in March (D).

Denominator: The number of CTE Concentrators Who Left Secondary Education the previous year who were not reported as Incorrectly reported as a CTE Concentrator (X) (CTE Workforce Development Follow Up Record (GV), *Other Follow-Up Status Element* (GV660)) in March (D).

From March (D):

This measure is based on CTE Concentrators Who Left Secondary Education the previous year who were not reported with an *Other Follow-Up Status Element* (GV660) option of 'Incorrectly reported as a CTE Concentrator' (X) in the CTE Workforce Development Follow-Up Record (GV).

Industry Credentials

As was discussed above, ODE is working on changing how industry credentials are reported on the CTPD report card. In the PFS Component, credentials are reported for students in the 4-year and 5-year graduation rates. On the 2016 CTE Report Cards, credentials also were reported as part of the Post Program Outcomes Component, but with a different cohort of students. Instead of using students in the two graduation cohorts, the Industry Credentials measure in Post Program Outcomes uses Concentrators Who Left Secondary Education – so it's the same students reported in the Post Program Placement measure.

The calculation itself is identical to what is reported for the PFS component. Students are in the numerator if they earn an industry credential totaling 12 points or a bundle of credentials totaling 12 points in a single career pathway.

ODE creates a list of approved industry credentials annually. A student's list is "set" as of when the student first enters the 11th grade. This means that if an industry credential is on the list in the year when the student enters the 11th grade and later is removed, that industry credential remains valid for that student. However, all industry credentials that are added on a future year approved industry credential list also are valid for the 11th grade cohort.

The same rule holds true for cases where the number of points assigned to an industry credential changes. Many of the industry credentials change over time as new content is added or outdated content is removed. In some cases, when an industry credential changes, the points will also change. The number of points is set for each industry credential based when the student first enters the 11th grade and once set, they never decrease for those students. This means if an industry credential is worth 5 points when the student enters the 11th grade but is only worth 4 points on the next year's industry credential list, the industry credential is worth 5 points for that student. However, if the content is revamped and the credential's points increase, the industry credential is worth the higher point value for the student.

Industry Credentials Calculation

Definition: The percentage of CTE Concentrators Who Left Secondary Education the previous year, and who obtained a State or industry-recognized certificate or license totaling at least 12 points in a single career field.

Numerator: Number of CTE Concentrators Who Left Secondary Education the previous year and obtained a State or industry-recognized certificate or license totaling at least 12 points with either a single credential or a bundle of credentials in a single career field.

Denominator: Number of CTE Concentrators Who Left Secondary Education the previous year.

NOTE: All students NOT reported in March (D) as *Incorrectly Reported as a CTE Concentrator* (X) are included in the calculation.

Achievement Component

Background

Beginning in 2017, the Achievement Component will include two measures; Technical Skill Attainment and Indicators Met. For 2016 and earlier, only the Technical Skill Attainment measure was graded.

Two different cohorts of students are evaluated for these measures. Technical Skill Attainment uses CTE Concentrators Who Left Secondary Education for the calculation. Indicators met uses all current year (2016-17) CTE Participants for the calculation.

Technical Skill Attainment

Each year, ODE publishes a set of technical assessments (WebXams, and industry recognized credentials) required for each program of concentration. More information on WebXams can be found at this link located [here](#). The WebXam technical assessment is comprised of at least four modules, which students take across the time they are enrolled in CTE. Students who take at least three modules, receive an overall rating of “not proficient”, “proficient” or “advanced.” This is not an individual rating/score for each test taken, but an overall rating across all modules to make the whole WebXam technical assessment.

The Technical Skill Attainment measure reports the percentage of CTE Concentrators Who Left Secondary Education in the prior year who received a score of proficient or higher on the aligned WebXam or who obtained an aligned industry credential. Some programs of concentration do not have technical assessments and those students do not get included in this measure. The denominator only includes those Concentrators Who Left Secondary Education in the prior year who had a technical assessment reported that align to their program of concentration.

It is important to understand that this calculation not only looks at whether a student took a technical assessment, but also includes a ‘check’ to make sure that the technical assessment aligns to the student’s program of concentration. Each program has a specific set of assessments that measure the content of that program of concentration and a student only gets included in the calculation if the assessment aligns to the program of concentration. The CTE Technical Assessment Matrix at the link above includes each program of concentration and the aligned technical assessment.

While the percent proficient determines the initial grade of the Technical Skill Achievement measure, Technical Assessment Participation plays a role in assigning the final grade. Students are required to test if they are in a program of concentration that includes a technical skill assessment. To ensure that districts are testing students, a Technical Assessment Participation rate is calculated and, if at least 80% but less than 90% of the students take the required technical assessment, the final letter grade for this measure is reduced by one level. Moreover, if less than 80% of the students take the required technical assessment, the final letter grade for this measure is reduced by two levels.

The denominator for the Technical Skill Participation calculation is the number of Concentrators Who Left Secondary Education who were in a program of concentration that had a required technical assessment.

The numerator is the number of those students who had the required aligned technical assessment reported.

Once the Technical Skill Attainment calculation is completed and the Technical Assessment Participation rate is factored in, a letter grade is assigned to this measure based on the following scale:

A = 90.0% - 100.0%
B = 80.0% - 89.9%
C = 70.0% - 79.9%
D = 60.0% - 69.9%
F = Below 60%

Technical Skill Attainment Calculation

Definition: Percent of CTE Concentrators Who Left Secondary Education in the previous year and who passed an aligned CTE technical assessment.

Numerator: Number of CTE Concentrators Who Left Secondary Education in the previous year and who passed a CTE technical assessment.

Denominator: Number of CTE Concentrators Who Left Secondary Education in the previous year and who took an aligned CTE technical assessment or

Reported in EMIS during the CTE Assessment (A) Collection:

EMIS Manual CTE Student Assessment Record (GY)

CTE Technical Assessment Code Element

- CTE technical assessment must align with the student's reported CTE program of concentration
- A student reported with an "aligned" CTE technical assessment is included in the denominator.

CTE Technical Assessment Score Element

- A student whose technical assessment scores at or above the benchmark score passed the technical assessment and is included in the numerator.

Technical Skill Attainment Participation Calculation

Definition: Percent of CTE Concentrators Who Left Secondary Education in the previous year and who participated in a required CTE technical assessments.

Numerator: Number of CTE Concentrators Who Left Secondary Education in the previous year and who took the required CTE technical assessment.

Denominator: Number of CTE Concentrators Who Left Secondary Education in the previous year and who were in a program of concentration that had a required CTE technical assessments

Indicators Met Measure

New in 2017 is an “Indicators Met” measure. This measure is similar to the Indicators calculation on the traditional school report cards. Students in CTE are required to take Ohio’s state tests (tests in grades 3-8 and end of course exams) just like their non-CTE peers. The Indicators Met measure reports the percent of CTE Participants who scored proficient or higher on each state test.

The calculation itself uses the same business rules as the traditional report card. See the technical document located [here](#) for additional information on the Indicators Met calculation.

It is the pool of students used in the calculation where there are differences. For a traditional school, ALL accountable students are included in the indicators calculation. For the CTPD report card, the denominator includes only those students who are CTE Participants during the CURRENT school year (e.g. the 2017 report card will use CTE Participants from the 2016-17 school year).

As was explained above, a Participant is a secondary student who both enrolled in a funded CTE workforce development course and earned full or partial high school credit in that course. Students who earn no credit are not Participants.

Students in grades 6-12 are permitted to participate in CTE, so it is possible for a CTPD to have sixth through eighth grade indicators in addition to having high school end-of-course exams. Although it’s *possible* to have indicators outside of the end of course exams, there are two reasons why it most likely will not happen. First, in order for a student to be included as a participant, they must be enrolled in a funded CTE workforce development course (Curriculum Element ‘VN,’ ‘VC,’ ‘VT,’ ‘VP’) in the current year and also must have earned some credit. Students taking traditional middle school courses (Curriculum Element ‘VM’) do not get included as those courses do not count towards their CTE program area of concentration.

Second, an indicator only counts in the calculation if at least ten (10) unique students have valid scores from that test. A complete list of indicators can be found [here](#). CTPDs do not have the Gifted Indicator shown at the bottom of the page on that link.

Students are allowed to substitute Advanced Placement (AP) or International Baccalaureate (IB) courses to fulfill graduation requirements in the social studies and science subject areas. For science, students still must take the state’s biology test, but for social studies (American history and American government), if they choose to use a substitute test, they are not required to take the state tests. In cases where only a substitute test exists, ODE includes the AP and IB tests in the respective indicators using the table below.

Advanced Placement	International Baccalaureate	Score for Indicator
4 or 5	6 or 7	Proficient (in numerator)
3	4 or 5	Proficient (in numerator)
2	2 or 3	Proficient (in numerator)
1	1	Not Proficient

CTPDs and traditional districts coordinate the educational programming for CTE Participants. In some cases, a student may take a course with a state test from a teacher employed by the CTPD. In other cases, the student takes the course at his home high school from a teacher employed by the traditional school district. Because this calculation is reporting on the performance of CTE Participants on the state tests, it is important to understand that ALL Participants are included regardless of where or from whom they take the course with the test.

An indicator is “met” if at least 80 percent of the students who take the test score Proficient or higher. Once a “met” or “not met” status is calculated for each indicator, ODE calculates how many (what percent) of the indicators are met and a grade is assigned based on the following scale:

- 90% - 100% = A
- 80% - 89.9% = B
- 70% - 79.9% = C
- 50% - 69.9% = D
- <50% = F

The Indicators Met measure counts 25% towards the Achievement Component.

Indicators Met Calculation

Definition: The percentage of CTE Participants per grade and test who scored at or above the proficient level on the test. Each test is calculated separately as its own indicator.

Numerator: Number of CTE Participants who scored proficient or higher on Ohio’s state tests. Each test is calculated separately as its own indicator.

Denominator: Number of CTE Participants who took Ohio’s state tests. Each test is calculated separately as its own indicator.

$$\begin{array}{l}
 \% \\
 \text{Proficient or} \\
 \text{Above on} \\
 \text{Each Test}
 \end{array}
 =
 \frac{
 \begin{array}{l}
 \text{Number of students scoring at or above the proficient level on} \\
 \text{the Standard Test + number of students scoring at or above} \\
 \text{the proficient level on the alternate assessment (Required test} \\
 \text{type = "STR" or "ALT")} + \text{number of students meeting the required} \\
 \text{Score on an approved substitute assessment}
 \end{array}
 }{
 \begin{array}{l}
 \text{Number of students taking the standard or alternate test (Required} \\
 \text{test type = "STR" and "ALT" and Scaled Score Not = "***" + number} \\
 \text{of students taking an approved substitute assessment}
 \end{array}
 }
 \times 100$$

Achievement Component Calculation

Measures Included

1. Indicators Met
2. Technical Skill Attainment

Weights*

1. Indicators Met contributes 25% to the Achievement Component Grade
2. Technical Skill Attainment contributes 75% of the Achievement Component Grade

*If a school/district has only one measure, then that one graded measure is used for the component. If neither measure is graded, then the component also is not graded.

Indicators		
Percent to Points Conversion		
Measure Grade Scale	Percentage	Points
90%-100% – A	>=97.5% to 100%	5
	>=95% but <97.5%	4.75
	>=92.5 but <95%	4.5
	>=90% but <92.5%	4.25
80%-89.9% – B	>=87.5% but <90%	4
	>=85 but <87.5%	3.75
	>=82.5% but <85%	3.5
	>=80% but <82.5%	3.25
70%-79.9% – C	>=77.5% but <80%	3
	>=75% but <77.5%	2.75
	>=72.5% but <75%	2.5
	>=70% but <72.5%	2.25
50%-69.9% – D	>=65% but <70%	2
	>=60% but <65%	1.75
	>=55% but <60%	1.5
	>=50% but <55%	1.25
<50 – F	>=37.5% but <50%	1
	>=25% but <37.5%	0.75
	>=12.5% but <25%	0.5
	>=0% but <12.5%	0

Technical Skill Attainment		
Percentage to Points		
Measure Grade Scale	Percentage	Points
90% - 100% - A	>=97.5% to 100%	5
	>=95% but <97.5%	4.75
	>=92.5 but <95%	4.5
	>=90% but <92.5%	4.25
80% 89.9% - B	>=87.5% but <90%	4
	>=85% but <87.5%	3.75
	>=82.5% but <85%	3.5
	>=80% but <82.5%	3.25
70% - 79.9% - C	>=77.5% but <80%	3
	>=75% but <77.5%	2.75
	>=72.5% but <75%	2.5
	>=70% but <72.5%	2.25
60% - 69.9% - D	>=67.5% but <70%	2
	>=65% but <67.5%	1.75
	>=62.5% but <65%	1.5
	>=60% but <62.5%	1.25
<60% - F	>=45% but <60%	1
	>=30% but <45%	0.75
	>=15% but <30%	0.5
	>=0% but <15%	0

Component Grade Scale

Achievement Component Grade Assignment	
Points	Letter Grade
4.125 – 5.000	A
3.125 – 4.124	B
2.125 – 3.124	C
1.125 – 2.124	D
0 – 1.124	F

Example of Calculation

Measure	Weighted Points	Component Points
Indicators Met	$84.7\% = 3.5 \text{ Points} \times 0.25 \text{ weight}$	0.875 points
TSA	$91.5\% = 4.5 \text{ points} \times 0.75 \text{ weight}$	3.375 points
Total		4.25 points = "A" Component grade

Measure	Weighted Points	Component Points
Indicators Met	$87.2\% = 3.75 \text{ Points} \times 0.25 \text{ weight}$	0.9375 points
TSA	$89.9\% = 4.0 \text{ points} \times 0.75 \text{ weight}$	3.0 points
Total		3.9375 points = "B" Component grade

Federal Accountability Results Component

Career-Technical Planning Districts (CTPD) are accountable to the United States Department of Education for eight measures in relation to the Carl D. Perkins Career and Technical Education Act. CTPDs negotiate local targets that encourage continuous improvement with the State. For documentation of the federal accountability calculations, please visit the [CTE Secondary Workforce Development Indicators of Performance Calculation Documentation](#).

Each CTPD sets local targets that are used to determine if the district “meets” the measure. Thus, the standards are different from the state’s standards used for the report card letter grades.

A brief explanation is shown below.

1. Academic Attainment – Reading

This measure reports the percent of Concentrators who left secondary education in the prior year who passed the reading/ELA Ohio Graduation Test (OGT). Note that students through the graduating Class of 2017 must pass the OGT as a condition to graduate. Students in the Class of 2018 or later will use end of course exams. Thus, for now, the reading OGT is used for this calculation.

2. Academic Attainment – Math

This measure reports the percent of Concentrators who left secondary education in the prior year who passed the math OGT. Note that students through the graduating Class of 2017 must pass the OGT as a condition to graduate. Students in the Class of 2018 or later will use end of course exams. Thus, for now, the math OGT is used for this calculation.

3. Technical Skill Attainment

This measure is identical to the Technical Skill Attainment measure explained in the Achievement Component calculation (see the Technical Skill Attainment section of this document).

4. Secondary School Completion

This measure reports the percentage of CTE Concentrators Who Left Secondary Education the previous year who received a diploma during the school year or a General Equivalency Diploma (GED).

*Note that the students who graduate are not identical to the four-year graduation rate because it includes students from other graduation cohorts (e.g. – kids from the Class of 2015 or 2014, etc.) who earned a diploma in the 2015-16 school year.

5. Single Year Graduation Rate

This measure reports the percentage of CTE Concentrators the previous year who earned a diploma during the school year.

*Note that this is identical to the four-year graduation rate measure.

6. Placement

This measure is identical to the Post Program Placement calculation (see the Post Program Placement section of this document).

7. Nontraditional Participation

This element reports the percentage of CTE Participants from underrepresented gender groups who participated in a CTE course that leads to employment in nontraditional fields.

8. Nontraditional Completion

The percentage of CTE Concentrators from underrepresented gender groups who completed a CTE program of concentration that leads to employment in nontraditional fields.