# Recommending Operationalizing the Career Technical Education Incentive Grant and Kindergarten Through Grade Twelve Strong Workforce Program Data Metrics

The California Department of Education (CDE), and the California Community Colleges Chancellor’s Office (CCCCO) is recommending that a phased approach be taken in operationalizing the Career Technical Education Incentive Grant (CTEIG) and the Kindergarten Through Grade Twelve Strong Workforce Program (K–12 SWP) indicators and data metrics. Also, staff are recommending that there be no change in the CTEIG and K–12 SWP data metrics, as currently outlined in the respective statutes.

## A Phased Approach to Developing the CTEIG/K–12 SWP Indicators

The CTEIG and the K–12 SWP indicators should be operationalized in three phases, as described below. For ease of describing how CDE staff intend to operationalize the metrics, the order of metrics listed below is different from how they are listed in the CTEIG and the K–12 SWP statutes because several of the metrics are compound metrics; they have been separated into stand-alone metrics. This will help facilitate more precise measurability within the data reporting and analytics.

### **Phase I**

In Phase I, the operationalizing of the data metrics is currently possible because already established measures can be readily obtained from the California Longitudinal Pupil Achievement Data System (CALPADS). Also, the career technical education (CTE) completer indicator[[1]](#footnote-1) is already being collected as a component of the College and Career Indicator (CCI), as part of the California School Accountability Dashboard. Additionally, these Phase I indicators are being reported as part of the annual submission to the U.S. Department of Education to fulfil the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) Consolidated Annual Reporting (CAR) requirement. The proposed indicators listed in Phase I can now be reported within CALPADS and disaggregated by race/ethnicity and special population status.

**Metric 1:** The number of pupils completing CTE coursework.

* ***Indicator 1A:*** The number of pupils completing one CTE course.
* ***Indicator 1B:*** The number of pupils completing two CTE courses.
* ***Indicator 1C:*** The number of pupils completing more than two CTE courses.
* ***Indicator 1D:*** The number of pupils who are a CTE pathway completer and defined as a CTE student who completed at least 300 hours of a course sequence in an industry pathway, where the sequence includes the capstone course; and the CTE student receives a grade of C- or better in the capstone course.

Taken together, the above indicators permit an analysis of how K–12 students impacted by these programs progress towards completing a CTE pathway, which is the last indicator.

Indicator 1A and Indicator 1D are required for state and federal reporting. Indicator 1D shows that the pupil participated in a high-quality CTE program in a specific industry pathway, the ultimate intent of the CTEIG and the K–12 SWP statutes.

**Metric 2*:*** The high school graduation rate.

* + ***Indicator 2A:*** An unduplicated aggregate count of pupils in the adjusted cohort for the graduating class, where the local educational agency (LEA) has identified the pupil as having completed one CTE course during the four-year cohort period.
  + ***Indicator 2B:*** An unduplicated aggregate count of pupils in the adjusted cohort for the graduating class, where the LEA has identified the pupil as having completed two CTE courses during the four-year cohort period.
  + ***Indicator 2C:*** An unduplicated aggregate count of pupils in the adjusted cohort for the graduating class, where the LEA has identified the pupil as having completed more than two CTE courses during the four-year cohort period.
  + ***Indicator 2D:*** An unduplicated aggregate count of pupils in the adjusted cohort for the graduating class, where the LEA has identified the pupil as having completed at least one CTE pathway within the last four years.

Having high school graduation rates measured at different levels of CTE participation can provide information about the relative success with regard to high school graduation when students progress along a CTE pathway. Only Indicator 2D is required for state and federal reporting.

**Metric 3:**The number of pupils meeting academic and career-readiness standards as defined in the CCI associated with the California School Accountability Dashboard.

* + ***Indicator 3A:*** The number of CTE Completers as defined in the CCI associated with the California School Dashboard.
  + ***Indicator 3B:*** The number of pupils completing college coursework as defined in the CCI associated with the California School Dashboard.
  + ***Indicator 3C:*** The number of pupils meeting a score of Level 2 “Standard Nearly Met” on the English Language Arts assessment.
  + ***Indicator 3D:*** The number of pupils meeting a score of Level 2 “Standard Nearly Met” on the mathematics assessment.

The primary reason for including the above set of indicators that operationalizes Metric 3 is because they can now be readily obtained from the CALPADS. These indicators are already being collected in the CCI as part of the California School Dashboard. Additionally, these indicators are also reported as part of the annual submission to the U.S. Department of Education to fulfill the Perkins V CAR requirements. The above indicators should be ready in Summer 2021.

### Phase II

What is presented for Phases II and III is intended to demonstrate how a metric that is listed currently as a compound metric in the CTEIG and K–12 SWP statutes, can be split out into separate simple metrics. However, what methodology will be applied to develop corresponding indicators for the metrics listed in Phases II and III is still under discussion within the CDE. Therefore, as collection and reporting of data, as well as developing precision around methodologies become standardized, creating specific indicators for each data metric becomes more feasible. What makes this easier is the fact that LEAs that are engaged in providing high-quality CTE, using state (CTEIG and K–12 SWP) funds or federal (Perkins V) funds, are expected to report into CALPADS, starting with the 2021 data collection period (for the 2019–20 academic year).

**Metric 5:** The number of former pupils employed and the types of businesses in which they are employed.

* + ***Indicator:*** The number of former pupils employed and the types of businesses in which they are employed.

There is no difference between the metric and the indicator. However, this metric (indicator) will be available for academic year 2019–20 when LEAs submit data into the CALPADS in Spring 2021.

**Metric 6:**The number of former pupils enrolled in each of the following:

1. A postsecondary educational institution.
2. A state apprenticeship program.
3. A form of job training other than a state apprenticeship program.
   * ***Indicator 6A:*** The number of CTE pathway completers enrolled in a postsecondary educational institution.

Given that the above metric is a compound metric, it permits the creation of a separate indicator. Inclusion of the above indicators in Phase II is recommended as the LEAs will be submitting the information into the CALPADS beginning in the 2021 data collection period (for the 2019–20 academic year). The above indicators should be ready in summer 2021.

### Phase III

**Metric 6:**The number of former pupils enrolled in each of the following:

1. A postsecondary educational institution.
2. A state apprenticeship program.
3. A form of job training other than a state apprenticeship program.
   * ***Indicator 6B:*** The number of CTE pathway completers enrolled in a state apprenticeship program.
   * ***Indicator 6C:*** The number of CTE pathway completers enrolled in a form of job training other than a state apprenticeship program.

Academic year 2019–20 data for Indicators 6B and 6C will also be collected within the CALPADS in Spring 2020.

**Metric 4:** The number of pupils obtaining an industry-recognized credential, certificate, license, or other measure of technical skill attainment.

* + ***Indicator 4A:*** The number of CTE pathway completers obtaining an industry-recognized certification.
  + ***Indicator 4B:*** The number of CTE pathway completers completing work-based learning experience.

Given that the above metric is a compound metric, it permits the creation of separate indicators. However, the collection and reporting of the data from Indicators 4A and 4B have been widely inconsistent. Therefore, more work needs to be conducted and is subject to further discussions within CDE program and data offices, in consultation with the CCCCO. The above indicators should be ready in summer 2022.

## Appendix A

### Phase I

| Current CTEIG and K–12 SWP  Data Metrics in Legislation | Proposed Changes to CTEIG and  K–12 SWP  Data Metrics in Legislation |
| --- | --- |
| Metric 1: The number of pupils completing CTE coursework. | **Indicator 1A:** Drawn from an adjusted four-year graduating cohort that includes all students who exited grade twelve, the student:   * Has enrolled and completed at least one CTE course. * Exits any time during the cohort period.   Note: A student enrolling and completing at least one CTE course is often referred to as a CTE participant.  **Indicator 1D:** Drawn from an adjusted four-year graduating cohort that includes all students who exited grade twelve, the student:   * Has likely completed at least one CTE pathway. * Exits any time during the cohort period.   Note: A student enrolling and completing at least one CTE pathway is often referred to as a CTE completer, which is defined as a CTE student who completed at least 300 hours of a course sequence in an industry pathway, where the sequence includes the capstone course; and the CTE student receives a grade of C- or better in the capstone course. |
| Metric 2: The high school graduation rate. | **Indicator 2D:** An unduplicated aggregate count of CTE completers in the adjusted cohort who graduated high school. |
| Metric 3 (CTEIG only): The number of pupils meeting academic and career-readiness standards as defined in the CCI associated with the California School Accountability Dashboard. | **Indicator 3A**: The number of CTE completers as defined in the CCI associated with the California School Accountability Dashboard.  **Indicator 3B**: The number of pupils completing college coursework as defined in the CCI associated with the California School Dashboard.  **Indicator 3C**: The number of pupils meeting a score of Level 2 “Standard Nearly Met” on English Language Arts.  **Indicator 3D**: The number of pupils meeting a score of Level 2 “Standard Nearly Met” on mathematics. |

### Phase II

| Current CTEIG and K–12 SWP  Data Metrics in Legislation | Proposed Changes to CTEIG and  K–12 SWP  Data Metrics in Legislation |
| --- | --- |
| Metric 5: The number of former pupils employed and the types of businesses in which they are employed. | **No proposed changes at this time. Further analysis and discussion required.** |
| Metric 6: The number of former pupils enrolled in each of the following:   1. A postsecondary educational institution. 2. A state apprenticeship program. 3. A form of job training other than a state apprenticeship program. | **Indicator A:** The number of former pupils enrolled in a post-secondary educational institution. |

### Phase III

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| Current CTEIG and K–12 SWP  Data Metrics in Legislation | Proposed Changes to CTEIG and  K–12 SWP  Data Metrics in Future Legislation |
| Metric 6: The number of former pupils enrolled in each of the following:   1. A postsecondary educational institution. 2. A state apprenticeship program. 3. A form of job training other than a state apprenticeship program. | **Indicator B:** The number of CTE pathway completers enrolled in a state apprenticeship program.  **Indicator C:** The number of CTE pathway completers enrolled in a form of job training other than a state apprenticeship program. |
| Metric 4: The number of pupils obtaining an industry-recognized credential, certificate, license, or other measure of technical skill attainment. | **No proposed changes at this time. Further analysis and discussion required.** |

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1. . For all phases, the proposed methodology is to use the data from which the indicators will be calculated and drawn from an unduplicated aggregate count of students in the adjusted four-year graduating cohort. Specifically, all students who exited grade twelve, and completed at least 300 hours of a course sequence in an industry pathway; and, where the sequence includes the capstone course and the student receives a grade of C- or better in the capstone course. [↑](#footnote-ref-1)