

Cradle-to-Career Definitions Subcommittee Meeting Summary

January 26, 2021

This document provides a summary of the key points that emerged from the January 26, 2021 meeting of the Definitions Subcommittee. The suggestions from this group will be used to craft specific definitions for data points in the P20W data set. More information about the meeting, including support materials, a recording of the meeting, and the PowerPoint, are available at <https://cadatasystem.wested.org/meeting-information/definitions-subcommittee> (click on “Meeting Materials”).

The goals of this meeting were to establish public display options for the following data points:

- Participated in a pre-apprenticeship program
- Participated in an apprenticeship program
- Retained in an apprenticeship program
- Attained journey status
- College/Career Indicator level
- Completed high school
- Participated in a pre-apprenticeship program
- Number units taken in first year
- Number of transferrable units in first year
- Completed transfer-level math and English in first year
- Completed general education courses in first year
- General education requirements waived
- Retained fall to spring
- Returned for a second year
- Completed an award
- Program of study for award
- Transferred
- Time to transfer
- Time to completion

In addition, the group considered whether to include course-level information and noted new guidance on federal financial aid data.

The following Definitions Subcommittee representatives attended the meeting:

Randy Tarnowski, Association of Independent California Colleges and Universities; Marjorie Suckow, Phi Phi Lau, and Erin Skubal, California Commission on Teacher Credentialing; Todd Hoig, California Community College Chancellor’s Office; Paula Mishima, Randy Bonnell, Glenn Miller, and Jenny Singh, California Department of Education; Channa Hewawickrama, California Department of Education – ECE; Akhtar Khan, California Department of Social Services; Janet Buehler, California Department of Technology; Rima Mendez, California School Information Services; Monica Malhotra, California State University; Adrian Felix, California Student Aid Commission; Glen Forman, Department of Industrial Relations; Chris Furguele, University of California Office of the President; and Valerie Mendelsohn, West Coast University

Underlying Course Data

The subcommittee discussed the types of elements that will rely on course-level data and contemplated the implications for whether it was preferable to load all course-level information into the Cradle-to-Career Data System cloud repositories or for individual data providers to calculate these data points in advance of uploading information, particularly given the many ways that the data points might be disaggregated or combined for the query builder tool.

Monica Malhotra of CSU indicated that course-level information is important when working directly with faculty on program improvement, but that CSU's public-facing dashboards focus on higher-level outcomes such as completion. She noted that absent a specific use case, it is not clear whether course-level data would be necessary for the Cradle-to-Career Data System.

Todd Hoig of CCCCCO noted that his agency uses course-level data to derive many outcomes and would most likely have the managing entity apply agreed-upon formulas to course-level data.

Chris Furgiuele of UC noted that most of the elements listed could be calculated by the data providers. For example, because UC has an enrollment database, his office could create almost all of the listed data points without having to use course-specific information. Given that many concepts get recorded as course-level data, such as independent study, considerable work would need to be done to prepare course-level information for use in the dashboard or query builder. He also noted that it would be cheaper for the Cradle-to-Career Data System to not include course-level information due to the cost of storing more information.

Paula Mishima of CDE noted that her agency's dashboards do not provide course-level information. While it might be helpful to provide this information for a researcher, it is not as helpful for public-facing tools.

When queried about a potential use case of allowing employers to see how many students were in the pipeline for high-demand jobs, Todd Hoig of CCCCCO noted that his agency had provided information on students enrolled in healthcare fields to the Office of Statewide Health Planning and Development, but the information had been used to inform a study rather than to create a dashboard.

Chris Furgiuele of UC indicated that his office normally provides information related to occupations or earnings for students who graduate in specific majors, rather than based on course enrollments. His office has examined course-taking patterns (such as humanities courses taken by STEM majors or vice versa), but there were no clear implications related to employment.

Monica Malhotra of CSU noted that her agency also focuses on graduates or on people in specific majors. She added, given that the state only has information on a worker's industry of employment rather than occupation, it can be difficult to understand employment pipelines. For example, a lawyer who works at a college would be flagged as working in the education sector.

Randy Tarnowski of AICCU indicated that independent colleges have taken a range of approaches to examining employment pipelines, driven in part by whether they are focused on adult learners. Generally, this focuses on crosswalks of Classification of Instructional Program (CIP) codes and Standard Occupational Codes (SOC). But many colleges rely on contacts with alumni to establish pathways to jobs, which is difficult to translate into dashboards.

Apprenticeship Information

Participated in a Pre-Apprenticeship Program

Glen Forman of DIR, Paula Mishima of CDE, and Todd Hoig of CCCCCO noted that data collection on pre-apprenticeship is new and that information is not yet of high quality. For example, DIR first started collecting this data point in January 2020 and is still working to get registered pre-apprenticeship programs to enter their information into the state data system. CCCCCO had not been able to validate information on pre-apprenticeship programs. Therefore, the subcommittee recommended that information on pre-apprenticeship programs be reevaluated based on 2023-24 data.

DECISION: The subcommittee categorized Participated in a Pre-Apprenticeship Program as “do not include.”

Participated in an Apprenticeship Program

Glen Forman of DIR recommended adding a caveat that data may not match annual reports to the legislature because it is based on calendar year rather than academic year.

DECISION: The subcommittee categorized Participated in an Apprenticeship Program as “ok to include.”

Retained in an Apprenticeship Program

The group discussed whether individuals who completed apprenticeship programs should be grouped with those who are retained and the implications for similar measures such as being retained in a postsecondary program from fall to fall. Alternatively, metrics could be constructed such that completers would not be included in the denominator.

Chris Furguele of UC noted that completers are included in the numerator and not excluded in the denominator for IPEDS reporting. Monica Malhotra of CSU concurred. Todd Hoig of CCCCO noted that his agency handles completers differently in various retention contexts. The group recommended leaving completers in the numerator.

DECISION: The subcommittee categorized Retained in an Apprenticeship Program as “ok to include.”

Attained Journey Status

There were no concerns about this data point.

DECISION: The subcommittee categorized Attained Journey Status as “ok to include.”

Unique Identifier for Individuals Participating in Apprenticeship Programs

Glen Forman of DIR indicated that his agency most commonly uses social security numbers to identify individuals, but that this is a voluntary data point for pre-apprenticeship, which has hampered the agency’s ability to track students from pre-apprenticeship into apprenticeship.

Unique Identifier for Education Institutions Participating in Apprenticeship Programs

Glen Forman of DIR noted that his agency plans to add a unique identifier for education institutions helping to deliver pre-apprenticeship and apprenticeship programs, but that these identifiers are still being developed.

K-12 Information

College/Career Indicator (CCI) Level

There were no concerns about this data point.

DECISION: The subcommittee categorized Completed High School as “ok to include.”

Additional CCI-Related Components

The subcommittee discussed a request from the Research Agenda Subcommittee to make the components of the CCI available in the Cradle-to-Career Data System public facing tools. While most CCI components have already been approved for the public tools, three had not yet been considered: International Baccalaureate exams, the State Seal of Biliteracy, and leadership/military coursework. Jenny Singh of CDE noted that while it would be appropriate to include all of the components in the CCI,

it would not make sense to disaggregate information on students who attained the CCI to clarify which of the conditions were met.

Paula Mishima of CDE stressed that it would not be possible to use the components to calculate the CCI, and that this should be made clear in caveats about each data point. For example, while the subcommittee had already recommended that a data point be included on students who earned a 3 or higher on an AP exam (which aligns with national standards for AP tests), a student would need to earn a 3 or higher on at least two exams, plus fulfil other criteria, to attain the CCI indicator. In addition, CCI is only calculated for completers, which includes fifth year completers, which might not be align with the information pulled on individual CCI components.

Completed High School

There were no concerns about this data point.

DECISION: The subcommittee categorized Completed High School as “ok to include.”

Postsecondary Information

Completed Transfer-Level English/Math

Todd Hoig of CCCCCO indicated that the formula that the managing entity uses to create this data point should be confirmed with his agency’s research staff.

DECISION: The subcommittee categorized the following as “ok to include, but further evaluation needed on the calculation:”

- Completed Transfer-Level English
- Completed Transfer-Level Math

Number of Transferrable Units in First Year

Todd Hoig of CCCCCO indicated that the formula that the managing entity uses to create this data point should be confirmed with his agency’s research staff. He also felt that the specific unit thresholds should be determined as part of the user-centered design process.

DECISION: The subcommittee categorized Number of Transferrable Units in First Year as “ok to include, but further evaluation needed on display options and the calculation.”

Number of Units in First Year

Chris Furgiuele of UC noted that if students only attend for one term, their unit total would muddy the calculation. He suggested that only students who were enrolled for the full year should be included.

Todd Hoig of CCCCCO agreed, noting that the number of units taken in a specific term can be an important indicator of the student’s experience—for example if the student was full-time in the fall and part-time in the spring.

Monica Malhotra of CSU noted that the appropriate thresholds and timeframes relate to the use case. For example, if part of the intention is to understand course-taking related to financial aid eligibility, it would be important to have a threshold of six units per term. When trying to understand whether

students are likely to complete on-time, it is useful to see who is taking 15 units per term and who is only taking 12.

Chris Furgiuele of UC suggested limiting the number of unit groupings to help make the information more comprehensible. He also noted that it would be important to weight units based on whether the college uses a quarter or semester system.

The group calibrated the display options to align with financial aid and on-time graduation thresholds but recommended that these options be verified as part of the user-centered design process.

DECISION: The subcommittee categorized Number of Units in First Year as “ok to include, but further evaluation needed on display options.”

General Education Requirements

Monica Malhotra of CSU noted that data elements on completing general education requirements and waiving general education requirements are under development. For example, her agency is still ensuring it has appropriately identified all courses that fulfil general education requirements. Therefore, she recommended that the related data points not be included in the P20W data set.

No other postsecondary partner had information on these data points.

DECISION: The subcommittee categorized the following as “do not include:”

- Completed General Education English Requirement in First Year
- Completed General Education Math Requirement in First Year
- General Education English Requirement Waived
- General Education Math Requirement Waived

Retained from Fall to Spring

Monica Malhotra of CSU asked for clarification about whether the measure would only look at students who begin in the fall, as opposed to seeing if students who begin in the spring return in the subsequent fall. She noted that the Integrated Postsecondary Education Data System (IPEDS) had recently expanded its fall-to-fall measure to track first-time spring enrollments as well.

The group determined that for the initial data set, it would be preferable to only look at students who begin in the fall.

DECISION: The subcommittee categorized Retained from Fall to Spring as “ok to include.”

Returned for a Second Year

Monica Malhotra of CSU asked whether retention would need to be at the same campus or could be anywhere in the system. Having this level of specificity will be important for the data upload requirements, particularly given that IPEDS requirements only focus on retention at the same institution. If retention information is displayed at the system level, explanations and professional development will need to be provided about why numbers may not align with IPEDS figures.

Chris Furgiuele of UC suggested tweaking the definition to better align with IPEDS, such that a student who enrolls in the fall, is not enrolled in the spring, but returns in the fall would still be counted.

Monica Malhotra of CSU echoed this recommendation, noting that the current wording would require a determination of whether a student had completed a full year.

The subcommittee agreed and the wording was changed accordingly.

DECISION: The subcommittee categorized Returned for a Second Year as “ok to include.”

Completed an Award

When queried, Todd Hoig of CCCCCO agreed that it would be appropriate to include noncredit certificates in the calculation to address questions about workforce training. However, this means that an additional data point about the type of award would be important.

DECISION: The subcommittee categorized Completed an Award as “ok to include.”

Award Discipline

The subcommittee discussed using CIP codes to create a common language for programs of study. The group agreed this is the best option and aligns with how the four-year institutions display program-level information on their public-facing dashboards. They also discussed the appropriate CIP code level. Both CSU and UC primarily use 2-digit CIP codes, but Chris Furguele of UC noted that it is helpful to use 4-digit CIP codes in the social sciences.

Randy Tarnowski of AICCU cautioned that while CIP codes are the best option, they can still cause confusion because the same CIP code can be assigned to multiple credentials.

Chris Furguele of UC noted that there can also be issues looking at 4-digit CIP codes over time, particularly if institutions change the CIP codes assigned to specific programs. This is often the case for newer disciplines, given that CIP codes are only updated once a decade.

Monica Malhotra of CSU suggested that the data providers load data using the 6-digit codes, to provide optimal flexibility for how information is displayed on the dashboard.

Chris Furguele of UC noted that it might be helpful to provide both 2-digit and 4-digit options, or to use a combination of both based on common offerings. The user centered design process could help to clarify what works best.

DECISION: The subcommittee categorized Award Discipline as “ok to include, but further evaluation needed on display options.”

Time to Completion

The group discussed the implication of having the managing entity calculate time to completion, rather than having the data providers do this calculation. Having the managing entity undertake this work would allow the results to take into account movement across various segments.

Chris Furguele of UC noted that it would be important for the managing entity to document how it is calculating time to completion, particularly to ensure there is clarity about how calculations might vary from similar calculations produced by data providers for their own dashboards.

Monica Malhotra of CSU noted that it will be important to capture information on the term of completion to calculate this metric. It is also useful to display results by number of terms rather than number of years. This relates to the earlier discussion about ensuring that students are taking enough units per term to complete on time.

Chris Furguele of UC noted that it would be important to have different starting points, such that you could look at time to completion from first postsecondary enrollment anywhere or from the point at which a transfer student enrolled in a four-year institution.

The group determined that precise formulas for time-based measures should be documented in a later stage of data system development, once there was more detail about how the public-facing tools will be built.

DECISION: The subcommittee categorized the following as “ok to include, but further evaluation needed on display options and the calculation:”

- Time to Degree
- Time from Transfer to Bachelor’s Degree

Transferred

Todd Hoig of CCCCCO noted that the match done by the managing entity could replace the match currently conducted by his agency.

DECISION: The subcommittee categorized Transferred as “ok to include.”

Time to Transfer

Todd Hoig of CCCCCO noted that the managing entity should run its formula by his agency’s research staff.

Monica Malhotra of CSU indicated that it would be helpful to have an additional variable that looked at time from last community college enrollment to first four-year enrollment as a transfer student, in addition to calculating the time from first enrollment at a community college to transfer. She recommended documenting gaps as the number of terms, rather than using academic years. The group felt that the addition of this data point and its display options should be investigated as part of the user centered design process.

DECISION: The subcommittee categorized the following as “ok to include, but further evaluation needed on display options and the calculation:”

- Time to Transfer
- Total Time to Transfer

Financial Aid Data

Kathy Booth of WestEd alerted the group about new federal legislation that indicates Free Application for Federal Student Aid (FAFSA) data may be used for research purposes. Specifically, the [Consolidated Appropriations Act of 2021](#), which was passed on December 21, 2020, states the following:

Sec. 483: FREE APPLICATION FOR FEDERAL STUDENT AID (a)(3)(C)

(C) USE OF INFORMATION PROVIDED TO THE INSTITUTION.—An institution—

(i) shall use the information provided to it solely for the application, award, and administration of financial aid to the applicant;

(ii) may use the information provided, excluding the information described under section 6013(l)(13) of the Internal Revenue Code of 1986, for research that does not release any

individually identifiable information on any applicant, to promote college attendance, persistence, and completion; and

(iii) shall not share such educational record information with any other entity without the explicit written consent of the applicant.

Given concerns raised in earlier meetings about whether data gathered through the FAFSA can be included in the Cradle-to-Career Data System, she suggested that subcommittee members review the new legislation with their legal teams to determine how this might impact whether their agency can provide financial aid data.

Chris Furgiuele of UC requested that the Governor's Office weigh in on whether this federal guidance provides a valid legal framework for partner entities to submit financial aid data. Monica Malhotra of CSU concurred.