



Cradle-to-Career Data and Tools Advisory Board Proposal Form

Instructions:

Per the [Governance Manual](#) proposal forms submitted will address significant gaps regarding whether the data system is providing access to actionable information. Please note there should only be one proposal per form.

Name:

Lisa Catanzarite, PhD

Proposal Title: *no more than 50 characters*

Adding Pathways and Placement Data to Strengthen Teacher Workforce Insights

- ☒ By checking this box, I understand that I will be presenting my recommendation at the Fall Advisory Board meeting.

Type of Proposal¹:

- ☐ Changes to tools such as dashboards or practical tools (*Complete section one*)
- ☒ Adding data points not available through the P20W data set or adjusting (including the removal of) the existing P20W data points (*Complete section two*)

¹ The C2C Governance Manual notes that DTAB members can also submit recommendations related to the data request process and query builder. As these are not yet live, they have been removed from the version of this form.

- Please note a proposal form(s) can recommend adding one data point or several clearly related data points to the data system.

Section One: Changes to Practical Tools

1. What is the nature of the gap regarding access to actionable information?

2. What type of tool should be developed?

3. How would a tool address the gap?

4. Who would be the likely user(s) of the tool?

5. How does the tool relate to the [mission and vision](#) of C2C?

Section Two: Adding Data Points Not Available Through the P20W Data Set or Adjusting the Existing P20W Data Points

1. Please state the research question of interest that cannot be fully addressed with the [existing data elements](#) in the P20W Data System.

This proposal aims to add data to the P20W data system that would enable users to understand 1) teacher shortages through data on vacancies and teacher assignments and 2) the impact of efforts to address shortages

Teacher Vacancy

- What regions and communities are most impacted by teacher shortages and how have those conditions changed over time?
- Which students are most impacted by, or most likely to attend schools

with, the most vacancies?

- How are students' educational trajectories impacted by the rates of teacher vacancies in the schools and districts they attend?

Teacher Assignment Monitoring Outcomes (% FTE Clear, Out-of-field, etc.)

- What proportion of teachers' assignments at the school level are clear versus other assignment monitoring outcomes (Out-of-Field, Intern, Ineffective, Incomplete, Unknown, N/A)? How do these teacher placement outcomes vary across school districts and across student subgroups, and how have they changed over time?
- Which regions and/or subjects have the highest levels of misassignments (ineffective, out-of-field, incomplete, etc.)?
- How does TAMO (CDE) status vary across the state and across settings?
- How are students' educational trajectories impacted by their access to fully prepared and properly assigned educators?

Teacher Pathways

- Which teacher pathway programs are producing the most teachers in high-need/priority subjects and high-need/priority school districts?
- What is the efficacy of key policies and programs (i.e. Teacher Residency Program, Classified Employee Credential Program, Golden State Teacher Grant Program, National Board Certification Incentive Grant Program) in recruiting new teachers and retaining them in the profession, and addressing teacher shortages? Specifically, what are the trends regarding participation in programs intended to address teacher shortages and increase teacher diversity?

2. How does this research question relate to the [mission and vision](#) of C2C?

These research questions directly relate to and support C2C's mission to be a trusted source of actionable data and research on education, economic, and health outcomes. Addressing these research questions will allow California's community-members and leaders to uncover opportunities to strengthen the TK-12 educator workforce and foster evidence-based decision-making to help the state build a more fair and abundant future for all Californians.

Robust, better-connected data on teacher supply and demand dynamics

such as those included here would enable aspiring and current teachers, educational institutions, policymakers, and researchers to better understand and strengthen the education to employment pipelines. Ultimately, this research is critical to support state efforts to build a qualified and diverse educator workforce, particularly in underserved and high-need school districts.

3. Please propose additional data element(s) needed in order to successfully address the research question of interest.

The data needed to answer these research questions includes the following elements, which can potentially be pulled from existing state-level data sets, including but not limited to:

- Regarding teacher misassignment/FTE %:
 - Number and proportion of misassigned educators and courses from the Teacher [Assignment Monitoring data](#) collected by CTC through [CalSAAS](#) (Available)
 - Proportion of full time equivalent positions that are Clear, misassigned, ineffective, intern, etc. per the [Teacher Assignment Monitoring Outcomes data/TAMO](#) (Available)
 - Collected by CDE and includes outcome/status of teaching assignment (ie. FTE % Clear, misassigned, ineffective, intern, etc); The C2C should also provide disaggregation of this data by demographics including race/ethnicity.
 - Given that both the CDE and CTC collect similar TAMO data sets, the C2C Data System should clearly define any differences in how data elements are reported, such as discrepancies in how “clear” credentials and educator assignments are defined by CTC versus CDE
- Regarding teacher vacancy:
 - [CBEDS](#), specifically [Estimated teacher hires by region and subject](#) (Available)
 - Collected by CDE
 - Estimated teacher hires for the following year may help to understand trends of teacher vacancies and workforce needs.
 - Additionally, this research will help policymakers understand

where there may be high-level needs surrounding teacher vacancies.

- California Educator Assignment Monitoring [Data](#) which also includes the vacancy data they define, collect, and report
 - Collected by CTC
- Regarding teacher pathways:
 - CTC's Annual [State Trends](#) reports
 - Collected by CTC
 - CTC's Annual [Teacher Supply Report](#) to the Legislature
 - Demographic data of new enrolled teacher candidates
 - CTC currently only reports disaggregation by program route and separately disaggregation by race/ethnicity for the entire cohort; there is no option at CTC to cross-tabulate and see race/ethnicity data across program types. The C2C should integrate these data to provide a more comprehensive understanding of teacher candidates along their pathways.
 - Lastly, CTC should also provide where a teacher candidate was a recipient of a state grant program, including but not limited to Golden State Teacher Grant and the National Board for Professional Teaching Standards Certification Incentive Program.

4. Please verify that the proposed data element(s) do not already exist in the P20W Data System.

The proposed data in question #3 do not already exist in the P20W Data System.

However, we have found that the data point entitled "Staff Job Classification FTE %" included as of last May may come from CDE; however it is unclear whether this data point will be reflective of the TAMO data definitions.

5. If the P20W Data System does not currently include the proposed data element(s), can the proposed data element(s) be derived from the existing data element(s) in the P20W Data System?

No. While all of these elements exist in contributing agencies, it is unlikely that they could be derived from existing data elements in the P20W Data System.

6. If the P20W Data System does not currently include the proposed data element(s), are there existing data element(s) closely related to the proposed data element(s)? If so, please list them and why they are not sufficient to answer the proposed research question.

The P20W data set does not currently include the proposed data elements. There are several closely related metrics already included or planned for inclusion in the P20W dataset which the requested metrics would complement. They include the following Teacher Variables:

- Status of Credential (Valid, Pending, Revoked) by CTC
- Type of Credential (e.g., Preliminary, Clear, Intern) by CTC
- School of Assignment/Delivery by CDE
- Credential Program Type by CSU

While incredibly valuable, these data are not sufficient to answer the proposed research questions surrounding teacher vacancies, teacher pathways, and teacher misassignments. While these data provide some of the picture of which individuals within the teacher workforce hold various types of credentials, the proposed data will help us understand variations in and impacts of students' access to qualified teachers across school districts.

As regards the proposed data on teacher preparation programs and pathways, none of the existing data elements currently relate closely to these proposed elements, which would both aid state policymakers in program evaluation and investment and help empower individuals interested in pursuing education to make informed decisions about the programs and resources available to them to reach their full potential.

7. C2C keeps a [repository](#) of previous data elements that were either a) considered during the planning process or b) proposed through the mechanisms as outlined in the Governance Manual, but were ultimately not included in the P20W, along with related feasibility studies. Do any of the data element(s) being proposed overlap with the data elements in this repository? (New proposals can build on or duplicate prior proposals. It is helpful for proposers to share that context, including prior related feasibility studies.)

- In 2023, Data and Tools Advisory Board Member Dr. Lisa Chavez submitted a data [proposal](#) on CDE's TAMO data set. While this proposal did not advance that year, it did bring attention to this data set related to teacher preparation and teacher assignments by CDE. This proposal aims to bring part of that conversation back to decision-makers.
- In 2024, Wendy Threatt, Senior Policy Fellow at Teach Plus California submitted a data [proposal](#) on demographic and program data related to the teacher workforce. While this proposal did not advance that year, it builds on the ongoing advocacy for better data on teacher pathways to build a high-quality, diverse educator workforce.

This proposal seeks to build on previous efforts and uplift data gaps in the C2C Data System's forthcoming dashboard on Teacher Training and Retention. The proposed data elements in this proposal are data that is currently collected by state agencies/data providers and are aligned with the mission and values of the data system.

8. Are the proposed data element(s) already collected by a state-level entity? For data element(s) already collected, please answer question nine. For data element(s) not collected, please answer question ten.

Yes, see question #9.

9. [For proposed data element(s) already collected] To the extent possible, please share details pertaining to the proposed data element(s). Relevant details may include but are not limited to: a) corresponding entity that collects and houses the data element(s); b) specific variable name(s) used in the originating data system; and c) timeframe available.

TAMO Data (CDE)

- Source: [CDE Teaching Assignment Monitoring Outcomes](#)
- Variables:
 - Assignment Status (Clear, Intern, Ineffective, Out-of-Field)
 - School/District ID
 - Subject Area
- Timeframe: Annual from 2020-21

CTC CalSAAS Misassignment Data

- Source: [CTC California Educator Assignment Monitoring](#)
- Variables:
 - Misassigned educators
 - Misassigned courses
 - Vacancies
 - Local Assignment options
- Timeframe: 2020-2021

CBEDS/Estimated Teacher Hires (CDE)

- Source: CDE's [CBEDS Data](#)
- Variables:
 - Vacancy by subject, region, estimated needs
- Timeframe: Annual from 2011-12

Program Completer Data (CTC)

- Source: CTC [Annual Reports](#)
- Variables:
 - Program Route
 - Completion Year
 - Demographics
- Timeframe: Annual from 1997-98

Data on grant recipients is housed by the following entities:

- Teacher Residency Grant Program (**Commission on Teacher Credentialing**)
- Classified Employee Certification Grant Program (**Commission on Teacher Credentialing**)
- Golden State Teacher Grant Program (**California Student Aid Commission**)
- National Board Certification Incentive Grant Program (**California Department of Education**)

10. [For proposed data element(s) not collected] Please propose institution(s) that would be most suited for the new data collection effort.

N/a

11. Please explain the desired level(s) of grain size for each data element proposed. (i.e., individual-level, institution-level, or other aggregated levels)? Multiple grain sizes may be requested for each proposed data element.

- Teacher Shortage/ Vacancy Data:
 - K-12 Institution level. Disaggregation should be available at the school and district/LEA levels.
- [Teacher assignments/TAMO](#):
 - K-12 Institution level. Disaggregation should be available at the school and district/LEA levels. Additionally, disaggregation should support cross-tabulation with teacher demographic data (e.g. race/ethnicity) to enable more nuanced equity-focused analyses.
- Grant Recipients:
 - Answering the research question around efficacy of teacher training programs would require an individual-level grain size to evaluate the programs.

12. Please explain the intended use case(s) for the proposed data elements (i.e., dashboards, query builder, or the research request tool)? Multiple use cases may be requested for each proposed data element.

- First, these proposed data can be intended for the forthcoming Teacher Training and Retention Dashboard which aims to visualize the teacher pipeline from training and credentialing to assignment and long-term retention. These data will be essential to identify teacher pipeline trends across teacher credential pathways, teacher assignment monitoring outcomes, teacher shortages, and indicators of teacher effectiveness.
- Additionally these proposed data can be used in the data system's query builder and research request tool to explore how educator workforce demands align with program outputs across specific regions and subjects.