CALIFORNIA Data System

Prioritizing Policy and Analytics Functions for Phase 1 of the California Data System: Policy & Analytics Advisory Group Brief

Kathy Booth & Kathy Reeves Bracco, WestEd

In 2019, California enacted the Cradle-to-Career Data System Act (Act), which calls for the establishment of a state longitudinal data system to link existing education, social services, and workforce information.[1] The Act also lays out a long-term vision for putting these data to work to improve education, social, and employment outcomes for all Californians, with a focus on identifying opportunity disparities in these areas.

The legislation articulated the scope of an 18-month planning process for a linked longitudinal data system. As part of this process, the Governor's Office appointed members to the Policy & Analytics Advisory Group, whose charge is to ensure that the California data system is designed to support research, evaluation, public accountability, and optimization of statewide investments in education and related services. A separate Practice & Operations Advisory Group was appointed to ensure that the state data system also addresses improvement efforts implemented at the level of individual institutions or regional partnerships, including tools that would be useful to students, families, and teachers. Input from both advisory groups will be used to inform final recommendations by a Workgroup consisting of the partner entities named in the California Cradle-to-Career Data System Act.[2] These recommendations

[1] Read the California Cradle-to-Career Data System Act at: https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=1.&title=1.&part=7.&chapter=8.5.&article=

[2] The partner entities include the Association of Independent California Colleges and Universities, Bureau for Private Postsecondary Education, California Community Colleges, California Department of

will form the basis of a report to the legislature and shape the state data system designs approved by the Governor's Office.

This brief provides a discussion framework for members of the Policy & Analytics Advisory Group. It includes background information on the rationale for a state data system and the authorizing legislation, in addition to five policy and analytical use cases that the state data system could support, based on priorities identified by the partner entities. Each use case describes key desired features and provides examples of how these use cases have been implemented in other states or on a limited scale in California. The brief concludes with framing questions that the advisory group will consider at their first meeting, in order to recommend which use cases should be prioritized in the first phase of state data system development.

Education, California Department of Social Services, California Department of Technology, California Health and Human Services Agency, California School Information Services, California State University, California Student Aid Commission, Commission on Teacher Credentialing, Employment Development Department, Labor and Workforce Development Agency, State Board of Education, and University of California.

Background

The Case for a State Data System to Address Policy and Analytical Needs

"Without access to [a state longitudinal data] system, students, families, educators, policymakers, and the public lack critical information with which to evaluate programs and interventions, illuminate roadblocks and solutions, inform decision-making, and address equity gaps." The Education Trust-West, 2019

Most states maintain a longitudinal data system, also known as a P20W data system because it links together information on individuals' participation in preschool, K–12, postsecondary, and the workforce (Education Commission of the States, 2016). The breadth and accessibility of these systems vary — some states also include information from health and social service agencies to provide a deeper understanding of the factors that can shape student outcomes. Other states have linked only K–12 and postsecondary data and have had little success in leveraging this information to address state priorities (Armstrong, 2017). California is one of only eight states that have not yet created a linked data system, despite the fact that researchers, advocacy groups, policymakers, and system stakeholders have been requesting one for over a decade (Jackson & Cook, 2018) (see box on page 5).

Supporters of a state data system note that although California is rich in information, its data systems are disconnected. Because it is difficult to follow students across education and social service systems, critical questions are often left unanswered. While stakeholders differ in how they think the state data system should be designed, they generally agree that, at a minimum, it should

- Produce information that contributes to a public good;
- Protect student privacy;
- Decrease rather than create additional burdens for system partners; and
- Address equity gaps.

In the absence of a state data system, many attempts have been made to link education and social service data to be better able to conduct analyses of student outcomes. For example, in 2011, after the dissolution of the California Postsecondary Education Commission, a state agency that linked K–12 and postsecondary data, the state's various education segments made significant progress toward creating their own data-sharing mechanism (Heiman & Boilard, 2012; Perry, Furgiuele, & Garcia, 2012). A number of regions have linked education data to allow them to better understand student outcomes. For example, the Silicon Valley Regional Data Trust has done so in order to examine the impact of early education on primary school reading levels and absenteeism.[3] In another example, the Central Valley Higher Education Consortium shared data to evaluate college readiness and college-going rates (Johnson et al., 2017).[4] In addition, state agencies have signed on to numerous memoranda of understanding (MOUs) that allow targeted data sharing, such as between the California Department of Education (CDE) and California State University (CSU) related to completion of college-preparatory coursework,[5] or between CDE and the Department of Social Services to identify youth who are in the foster care system (California Department of Social Services, 2016).

While individual and regional data-sharing efforts have produced valuable information and should not be replaced by a state data system, these more localized efforts entail significant costs and risks that a state data system could help address. For example, partners may spend months negotiating the legal framework for data sharing, which is costly and means that privacy protections may be unique to each negotiated agreement, rather than being implemented consistently statewide. Equally important, resource-strapped public entities may be unable to support the state-of-the-art security systems needed to ensure that student records are not compromised. Furthermore, it is not cost-effective to have data-sharing efforts duplicated in different regions, or to have entities in those regions competing for funding, in the attempt to replicate successful models. Finally, because many data-sharing systems are developed to support a specific initiative, they may be short-lived (Moore & Bracco, 2018).

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[3] Learn more about the Silicon Valley Regional Data Trust at: https://www.svrdt.org

[4] Learn more about the Central Valley Higher Education Consortium at: https://www.cvhec.org/

[5] Information provided in interview with Ed Sullivan, December 3, 2019.

Research, Policy, and Advocacy Organizations Call for the Establishment of a State Longitudinal Data System in California

The following list consists of selected publications calling for a state data system in California, with links to each report, where available.

- Association of California Independent Colleges and Universities: Report on Phase One of a Planning Grant on California Intersegmental Data and Postsecondary Educational Metrics
- California Competes: Out of the Dark: Bringing California's Education Data Into the 21st Century[6]
- Campaign for College Opportunity: Building a Student-Centered Data System in California[7]
- Education Insights Center: California Education Policy, Student Data, and the Quest to Improve Student Progress[8]
- The Education Trust-West: Data for the People campaign[9]
- Policy Analysis for California Education: Making California Data More Useful for Educational Improvement[10]
- Public Policy Institute of California: Increasing the Usefulness of California's Education Data[11] and Modernizing the State's Education Data System[12]
- Senate Select Committee: Longitudinal Data Systems[13]

[6] https://californiacompetes.org/publications/out-of-the-dark

[7] https://collegecampaign.org/wp-content/uploads/2019/05/Longitudinal-Data-FINAL.pdf

[8] http://edinsightscenter.org/Publications/Research-Reports-and-Briefs/ctl/ArticleView/mid/421/articleId/2198/California-Education-Policy-Student-Data-and-the-Quest-to-Improve-Student-Progress

[9] https://west.edtrust.org/dataforthepeople/

[10] https://gettingdowntofacts.com/sites/default/files/2018-09/GDTFII_Brief_DataSystems.pdf

[11] https://www.ppic.org/content/pubs/report/R_813PWR.pdf

[12] https://www.ppic.org/wp-content/uploads/modernizing-californias-education-data-system-1118.pdf

[13] https://www.documentcloud.org/documents/4638909-Staff-Report.html

The California Cradle-to-Career Data System Act

In 2019, California enacted the Cradle-to-Career Data System Act, which outlines the scope of an 18-month planning process for a P20W system, allocates $2 million to support that process, and earmarks an initial $10 million toward the development of a state data system.

The Act also lays out a long-term vision for putting data to work to improve outcomes for all Californians, with a focus on identifying disparities in opportunities. By securely linking data that schools, colleges, social service agencies, financial aid providers, and employers already collect, the data system will

- enable users to identify the types of supports that help more students learn, stay in school, prepare for college, graduate, and secure a job;
- provide information that teachers, parents, advisors, and students can use to identify opportunities and make decisions;
- help agencies plan for and improve education, workforce, and health and human services programs; and
- support research to ensure policy effectively supports individuals from birth through career.

Recognizing that the data system will need to be built in phases, the California Cradle-to-Career Data System Act lays out several priorities:

- Linking existing information in the system. The first data sets to be linked should be existing K–12 and college data sets, followed by employment and earnings data, early childhood education information, and social services information, although this order can be amended if the advisory groups and partner entities identify different priorities. Included in this priority is the need for the new data system to disaggregate information by several student characteristics in order to identify equity gaps.
- Guaranteeing privacy and security. The system cannot be built until clear guidelines and legal agreements have been established to ensure that information will be securely gathered and stored in compliance with federal and state laws and in accordance with privacy best practices, that the identity of

sensitive populations such as undocumented Californians will be protected, and that an appropriate managing entity has been identified to control access to data.

- Providing information for students, families, and educators. The system will include an interface for sharing information with teachers, parents, advisors, and students to support decisions. An advisory group that includes educators, community organizations, and advocates will help to identify which types of information would be most useful for these groups.
- Facilitating analyses for researchers and policymakers. The legislation identifies six priority areas that will be examined using data from the new system (see box on page 8).
- Assuring quality. The legislation addresses the need to improve the quality and reliability of education information, both within and between agencies and other entities providing data. This improvement effort will include creating a single identification number for each student to be used across all public entities; establishing consistent data definitions; and developing processes for correcting data. The Act also notes that new types of information may be needed to answer pressing questions.

Once the data system has been built, and data security and privacy safeguards are in place, the state data system can be leveraged to streamline service delivery. For example, in other states, data systems automatically identify students who are eligible for such benefits as free or reduced-price lunch. When information can be shared between agencies, families do not need to fill out as much paperwork to access social and financial supports, and they can be informed about the full range of options available to them.

In addition, data could be shared with entities and partnerships that are using information to support local and regional efforts. For example, if a collaborative of high schools and colleges in a large urban area is working together to improve college advising for low-income high school students, it could obtain information about whether students from the region enrolled in college in other parts of the state. Or, educators and employers in a rural region who are designing stronger pathways toward emerging careers could determine whether students in those programs are getting jobs and making living wages.

Priority Policy Questions from the California Cradle-to-Career Data System Act

Without a state data system that links information between agencies, it is difficult to answer foundational questions about the impact of state policies and investments. Legislators identified the following topics, which the state data system must be able to address:

- The impact of early education on student success and achievement as a student progresses through education segments and the workforce;
- The long-term effect of state intervention programs and targeted resource allocations in primary education;
- How prepared high school pupils are to succeed in college;
- How long it takes students who transfer from community college to the University of California, the California State University, or another four-year postsecondary education institution to graduate with a baccalaureate degree;
- College access, completion, and long-term effects of access to state financial aid; and
- The workforce effect of graduation from high school, community college, and four-year postsecondary education institutions.

Policy and Analytical Data Use Cases

Based on feedback from the partner entities, several potential use cases emerged for a state data system.

- **Pathway Analyses** that can identify the flow of students from early childhood through K–12 and into postsecondary education and the workplace;
- **Evaluations** that would allow stakeholders to better understand the efficacy of programs;
- **Student-Focused Cost Analyses** that examine the outcomes for students on such factors as program of study and debt-to-earnings ratios;
- **Mandated Reporting** tools that enable partner entities to respond to federal and state outcomes reporting requirements in a more efficient manner; and
- **Enrollment Projections** to help institutions plan for future enrollments in terms of number of students, program offerings, and necessary supports.

The sections below describe each use case, including summarizing what stakeholders are requesting, with some illustrative examples of the kinds of questions that information from a state data system could address that cannot currently be answered. The section also highlights examples of how entities in California, as well as across the country, are currently utilizing linked data for these purposes.

Pathway Analyses

The most frequently requested policy and analytic use case from partner entities is to identify the pathways students take from early childhood through K–12 education and into postsecondary education and the workplace. A pathway analysis can help answer such questions as the proportion of participants in early care programs who complete high school and go to college; whether some types of students are more likely to go straight to a four-year college as opposed to enrolling in community college and then transferring; whether students in private postsecondary colleges are more likely to graduate than those that attend public institutions; and the extent to which earnings vary for students based on their education attainment level.

Researchers have published several reports examining student pathways in **California** that utilize limited sets of cross-sector data. For example, in one study the Public Policy Institute of California examined student pathways from high school to community colleges and CSU, with a focus on key transitions, such as completion of a-g requirements for public four-year institutions, high school graduation, enrollment in college, transfer from two-year to four-year institutions, and baccalaureate completion (Gao & Johnson, 2017). The report flags several points at which students drop off the pathway and provides some recommendations for improvement. With a state data system, analyses like these could be expanded to include all types of education institutions, with particular attention paid to identifying equity gaps in student outcomes.

OregonLearns, an initiative of the **Oregon** Business Council, uses Oregon's state data system to track pathways for students beginning in grade 9. The pathway analysis shows how students move through secondary and postsecondary systems, including whether students graduate from high school, drop out, earn a GED, and enroll in postsecondary education within a set period of time. The analysis also includes completion and retention patterns in higher education. An interactive tool allows researchers and the public to review the pathways analysis for different demographic groups, as well as for individual schools and districts. This visualization can be used to identify areas for intervention and further research.[14]

Rhode Island uses its state data system to follow student trajectories within high-demand industries, such as information technology. For example, a public website shows how many high school students took the necessary advanced math courses, enrolled in college, declared a computer science major, graduated from college in that same major, and secured employment.[15]

[14] See the Oregon visualization at: http://data.oregonlearns.org/?

[15] See the Rhode Island visualization at: http://ridatahub.org/datamart/informing-rhode-islands-tech-talent-strategy/

Evaluations

The second most common use case is using linked data to evaluate long-term student outcomes. The partner entities described many different types of possible analyses, ranging from descriptive statistics that could be displayed in a dashboard to rigorous evaluations that would require access to anonymized student-level information. They also indicated that information should be available at various institutional and geographic levels, including by program, school or college, county, legislative district, and statewide.

Linking education data across segments would make it easier to identify whether outcomes vary when different delivery systems or implementation models are used. For example, CDE could assess whether there are differences in high school graduation rates for children served by early care providers with different levels of certification standards. Private colleges could demonstrate the degree to which they are helping to meet the need for more transfer opportunities and quantify their contribution toward the state's goals for attainment of a bachelor's degree. Regional consortia working to strengthen offerings for adult education could identify providers that are attaining stronger outcomes for English language learners, to shine a light on effective practices.

If the California state data system also included information from workforce, human, and social services agencies, evaluators could investigate the context for education attainment and earnings figures. For example, they could identify whether specific clusters of services were correlated with stronger outcomes, or they could analyze the relationship between race, incarceration, education attainment, and employment.

One example of a tool that tracks longer-term outcomes is the LaunchBoard, a suite of public dashboards created by the **California** community college system to display information on enrollment, milestone attainment, completion, transfer, and employment at the program, college, regional, and statewide levels. For example, one of the dashboards, the Community College Pipeline, includes infographics designed to support conversations about equity gaps, as well as detailed data tables that allow

comparisons across programs or institutions.[16] A state data system could enable the LaunchBoard to include additional outcomes, such as bachelor's degree attainment for students who transfer to four-year institutions.

The **Kentucky** Center for Statistics (KYSTATS) collects and links data from six different partner agencies in order to better understand education and workforce efforts in the state. For example, KYSTATS publishes reports and displays showing education and work outcomes seven years after high school graduation,[17] early childhood profiles that include links between kindergarten readiness measures and third grade test scores,[18] and education and employment outcomes for Medicaid beneficiaries.[19]

Connecticut's Preschool-Through-20-Workforce-and-Information-Network (P20WIN) data system generates a variety of reports that provide context on state investments. In one example, P20WIN data was used to analyze the impact of the state's Preschool Development Grant program on kindergarten outcomes (Meyer, 2019).[20] A report on postsecondary employment and wage outcomes summarizes employment and compensation information for graduates of the state's public institutions, including detailed summaries by industry, degree program, and institution (Connecticut Employment and Training Commission, 2017).[21]

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[16] See the California community college visualization at: https://www.calpassplus.org/LaunchBoard/Community-College-Pipeline.aspx

[17] See the Kentucky workforce visualization at: https://kcews.ky.gov/Reports/Tableau/HSLO_INT_2017

[18] See the Kentucky early childhood visualization at: https://kcews.ky.gov/Reports/Tableau/ECP_2019

[19] See the Kentucky Medicaid visualization at: https://kcews.ky.gov/Reports/Tableau/Medicaid

[20] See the Connecticut pre-school evaluation report at: https://medicine.yale.edu/psychiatry/peer/news-article/19772/

[21] See the Connecticut employment report at: https://www1.ctdol.state.ct.us/lmi/pubs/LRC2016.pdf

Student-Focused Cost Analyses

The third most common use case requested by partner entities is using data to understand the benefits and costs of education, based on the pathway a student chooses. A student-focused benefit-cost analysis can help answer such questions as

- whether students will be able to pay off their debt given salaries associated with their program of study;
- whether enrolling full-time over a shorter period is more cost-effective than part-time enrollment over more years;
- the extent to which students' lifetime earnings will vary based on whether they earn a high school diploma, college certificate, associate degree, or bachelor's degree — and if there are gaps in outcomes based on students' race, gender, and socioeconomic status; and
- the extent to which completing a degree or certificate correlates to stronger earnings compared to taking some college coursework without earning a degree or certificate.

A student-focused benefit-cost analysis explicitly links education and workforce data. In order to help policymakers and institutional leaders plan for how best to serve students in an evolving workforce marketplace, the skills taught in secondary and postsecondary education programs could be mapped to occupations, with a focus on the level of education required for related jobs. Additionally, interviewees suggested, projections for high-demand occupations should include an examination of whether there are sufficient teachers in the pipeline to prepare students with the skills for those occupations.

In **California**, a collaborative of CSU institutions developed CalStatePays.org, a website that displays program-level earnings outcomes over a 15-year period (including differentiated outcomes for graduates and those who leave without graduating), shows where CSU graduates work and what they earn, and calculates the rate of return on a CSU education. Users can select a program of study, enter their transfer status, their estimated earnings and financial aid, and then see their return on investment

rate.[22] A state data system could make this type of information available for all colleges.

The **United States** Department of Education recently released an updated College Scorecard, which shows return on investment by major in addition to showing overall results. Users can see costs, graduation rates, debt, and earnings for two- and four-year graduates who have received federal financial aid.[23]

The **Texas** Consumer Resource for Education and Workforce Statistics (Texas CREWS) is an interactive dashboard tool providing comparative information about two-year and four-year public postsecondary education institutions. By evaluating majors and institutions on the basis of graduates' wages and student loan levels, Texas CREWS allows a diversity of stakeholders to examine pathways that lead to a positive return on a student's investment in education.[24]

Mandated Reporting

The fourth most common use case requested by partner entities is the ability to automate federal- and state-mandated reporting. Currently, statewide entities negotiate individual data-sharing agreements to meet aspects of federal reporting requirements that cannot be met using data from just one segment, such as reporting employment outcomes for the 2018 Strengthening Career and Technical Education for the 21st Century Act, also known as Perkins V. Intersegmental data is also needed to comply with state-mandated reporting requirements, such as college-going and employment outcomes for schools receiving K–12 Strong Workforce Program funding, or, for the California Classified School Employee Teacher Credentialing Program, whether classified K–12 employees who became certified teachers secure employment in K–12 schools (Moore, Bracco, & Nodine, 2017).

[22] See the CSU visualization at: https://calstatepays.org/#/

[23] See the federal Scorecard at: https://collegescorecard.ed.gov/

[24] See the Texas visualization at: http://board.thecb.state.tx.us/apps/txcrews/

Offering automated reporting would help reduce the burden of mandated reporting for individual institutions. This would be especially beneficial for small, underresourced institutions that may not have the capacity to maintain an institutional research office. It would also be a powerful incentive for entities that are not governed by a centralized entity to participate in a state data system — particularly California's independent colleges and universities. In addition, using a state data system to manage reporting would improve the consistency and quality of data because information would need to meet common data standards across various systems. For example, the various definitions used by private and public institutions for racial and ethnic groups could be mapped to federal definitions. Finally, a state data system would reduce costs, because K–12 institutions and two-year colleges would not need to individually purchase information from the National Student Clearinghouse to determine whether students enrolled in four-year institutions within California.

In addition to conducting reporting on behalf of institutions, a state data system could help to improve core metrics. The **California** School Dashboard includes an indicator on College/Career Readiness that is based on predictive factors such as test scores, dual enrollment, career technical education pathway completion, and completion of a-g requirements.[25] However, numerous partner entities highlighted the need to evaluate these predictive factors. By looking at empirical data on college-going rates and employment outcomes, CDE could determine whether it has the optimal indicators or if the indicators vary for different types of students.

The state data system in **Kansas** provides information required for federal reporting, including Perkins and ED*Facts*. By combining information from K–12 schools, postsecondary, and the Departments of Labor, Revenue, Children and Families, and Health and Environment, the state can verify whether K–12 students enroll in college, enter workforce training, or secure a job. The Kansas data system also supplies state-mandated information such as graduation, absenteeism, and attendance rates, as well as information in response to data requests from the state legislature (Institute of Education Sciences, 2017).

[25] See the California K–12 visualization at: https://www.caschooldashboard.org/

Similar to the request made by partner entities to validate California's College/Career Readiness indicator, the **Maine** Education Policy Research Institute worked with its state data system to validate college-readiness measures. The effort yielded findings that grade 8 mathematics assessment scores were more predictive of college success than were grade 11 SAT results. The Institute also identified course-taking patterns that were positively associated with college success, such as taking Algebra I in grade 8 and completing Pre-Calculus while in high school (Institute of Education Sciences, 2014).

Enrollment Projections

Several partner entities noted the potential for a state data system to provide information to institutions to help them plan for future enrollments in terms of numbers, pathway offerings, and necessary supports. For example, four-year institutions in California could better plan for freshmen enrollments by analyzing the number of K–12 students on track for completing a-g requirements and graduating, or by identifying trends in eligible students who do not apply and examining whether there are equity gaps. With new multiple-measures placement practices now in place at CSU and community colleges, a state data system could be used to project the number of students who may require additional supports in their entry-level mathematics or writing courses. Data showing community college enrollment patterns and associate degree completion rates can also be used to determine how many students are likely to transfer to public and private four-year institutions, and in what majors.

Within **California**, the University of California (UC) uses the state's Department of Finance projections for high school graduates to estimate its future undergraduate and graduate enrollment. UC pairs this information with data on demographic shifts and labor market information on projected education and employment needs.[26] A state data system would allow UC to include additional information from feeder institutions that would strengthen its ability to identify enrollment and demographic trends and to use this information to support equitable outreach strategies.

[26] See the UC planning report at: https://www.ucop.edu/institutional-research-academic-planning/content-analysis/academic-planning/enrollment-planning.html

Georgia uses its state data system to provide information on K–12 students to its technical colleges, including courses taken, grades, and services received. This enables the technical colleges to plan for future enrollments, evaluate college readiness, and identify necessary services.[27]

In another example, **Iowa** publishes School Improvement Data Reports that are used for enrollment planning. The reports provide detailed information by district on grade-level proficiency and college readiness of the student population. Information is broken out by different types of students, such as students of color and those who are eligible for free or reduced-price lunch (Iowa Department of Education, 2018).[28]

Action Steps for the Policy & Analytics Advisory Group

A state data system cannot solve every problem, but it does have the potential to provide critical information that may allow policymakers, researchers, educators, and administrators to

- Understand how students make progress between education segments;
- Evaluate the effectiveness of, and identify potential improvements in, programs along each stage of student's education experience;
- Answer questions about the true cost of college and economic returns for different degrees;
- Respond to requirements for federal and state reporting more efficiently and effectively;
- Support colleges in planning for shifts in student populations and employment contexts; and
- Identify equity gaps and develop solutions to remedy those gaps.

[27] Information provided in interview with Robert Swiggum, December 11, 2019.

[28] See the Iowa reports at: https://educateiowa.gov/data-and-reporting/online-reports

Given the wide range of important uses for the California data system, a key challenge in designing it is to keep the vision expansive enough to meet critical needs, while also understanding how best to stage system development — to identify what can be done in the short term and what steps must be taken to reach longer-term goals. Interviewees and experts who provide support for state data systems note the importance of finding "low hanging fruit" that can be harvested in the first phase of system development to generate momentum and demonstrate the usefulness of the work (Clark et al., 2016).

In considering how to best phase in the priorities, advisory group members will be asked to consider the guidance provided in the legislation, the short- and long-term utility of the priorities identified by the partner entities, and the complexity required to implement each priority. The following questions can be helpful in identifying what the first phase of development should focus on:

- What key policy questions should inform the first phase of system development?
- Which use cases would you prioritize so that stakeholders can answer these questions?
- What additional use cases need to be anticipated as part of the first phase of design?
- What would change if the first phase of the system were in place?
- Would all students benefit from this change?

The rationale for building a state data system that links information from various education, employment, and service entities is clear, particularly when considering the types of data tools that have already been built in other states. The priorities recommended by the Policy & Analytics Advisory Group will help ensure that the new data system enables researchers and policymakers to address pressing unanswered questions and that the state data system builds upon successful work already underway to foster more equitable outcomes for all Californians.

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