



No Time to Delay: Delivering the Statewide Data Systems California’s Students Deserve

California’s efforts to implement a statewide longitudinal data system are at serious risk. More than ever before, educators and policy-makers need reliable, robust data to inform decisions and address achievement gaps. While momentum toward such a system has been building over the last decade, technical snags, the state’s budget crisis, and shortsighted decisions have slowed the pace of progress.

This is true for several reasons. First, performance problems have beleaguered the rollout of the California Longitudinal Pupil Achievement Data System (CALPADS). Districts have found it difficult—and in some cases impossible—to submit data to the system. It remains unclear when and how the system will be fixed. Second, the state’s student and teacher data systems risk becoming mere compliance machines used to churn out accountability reports, instead of engines to improve student performance. This would be a terrible missed opportunity.

Despite the current budget crisis, California must not miss the opportunity to make the best use of the data it collects. CALPADS must sit at the center of a broader movement to use data in

classrooms and in the capital to improve outcomes for all students, ensure equitable access to excellent teaching, and close achievement gaps.

Drawing from the recommendations of the 2008 McKinsey report, “Framework for a Comprehensive Education Data System in California,” this report outlines four steps state policymakers must take to reach these goals.

Step 1: Keep Building the Student and Teacher Data Systems

CALPADS is being built to track individual student achievement from one grade to the next. This will equip educators and policymakers to learn how students are performing academically, understand what factors affect achievement, and help align educational policies and practices with effective strategies.

The state also is developing the California Longitudinal Teacher Information Data Education System (CALTIDES), which will track individual teachers over time. Once in place, CALTIDES will link to CALPADS, matching individual teachers to their students. This will allow researchers to study the effects of teacher preparation and other teacher characteristics on student academic performance. Decision makers, in turn, can use that information to design policies to improve teacher effectiveness.

Unfortunately, the state is having technical trouble getting infrastructure for the data systems up and running. For local school officials who must upload data to CALPADS, this has caused significant challenges. Consultants analyzing the

situation have placed the blame on the management of the project. Regardless of responsibility, unresolved issues of governance and operations

must be dealt with immediately. California needs the full-fledged commitment of state leaders to fully implement these systems.

Benefits of State Longitudinal Data Systems

Educators, researchers, and policymakers all need data to understand what works in our schools, what doesn't, and why. Thanks to existing data collection, management, and analysis, we know which schools and groups of students meet state standards and which lag farthest behind. We know which groups of students and schools have access to certified and experienced teachers and rigorous college-preparatory courses—and which groups do not.

Statewide longitudinal data systems help policymakers analyze the factors that contribute to student success. These efforts build upon and complement the data systems most school districts already have in place to track student achievement, measure progress, and make decisions about staffing, curriculum, and resource allocation. According to the Data Quality Campaign, a national effort to improve the availability and use of high-quality education data, decision makers need statewide data systems capable of providing timely, relevant, and reliable longitudinal data that can answer key questions on education policy, including the following:

Academic Growth	Middle-High Relationship	Graduation Rates	College/Career Readiness	Teacher Effectiveness
Which schools produce the strongest academic growth for their students?	What achievement levels in middle school indicate that a student is on track to succeed in rigorous high school courses?	What is the state's graduation rate, accounting for transfers, completions, and dropouts?	What percentage of high school graduates need remedial education in college?	Which teacher-preparation programs produce the graduates whose students grow the most academically?

Source: Data Quality Campaign

Effective statewide longitudinal data systems produce reports that help people make smart choices about public education. The best systems offer the capacity and ability to do the following:

- Link student achievement and program-participation data to assess the effectiveness of programs for preschools, professional development, teacher preparation, English-language learners, and special education;
- Use results from the previous year's standardized tests to inform instruction, such as reteaching specific standards and providing targeted supports or interventions;
- Use these data to follow student progress from preschool through graduate school;
- Provide "early warning" data that help educators identify students at risk of failure or dropping out, providing interventions and support before it is too late; and
- Coordinate data reporting throughout the segments, eliminating duplication of effort, and promoting the effective use of limited resources.

CALPADS and CALTIDES are intended to replace a redundant and cumbersome mix of aggregate-data collections. Yet once the state collects and stores the longitudinal data, these compliance-oriented systems will still have far to go before the data can answer the important questions listed here. For that reason, state leaders must understand the potential value of data systems and make sure their promise is fulfilled.

Step 2: Enhance the Quality, Accessibility and Transparency of the K-12 Data System

A statewide longitudinal data system will help boost achievement and close achievement gaps only if the data are accurate and if educators and policymakers have the skills to access and use the system to inform their decisions.

Currently, not all school districts can collect, maintain, and report data to the state accurately and reliably. To address this, the state is training district officials to manage their local data before submitting it to CALPADS. However, districts participate voluntarily in these programs, so data from nonparticipating districts may not be of comparable quality. To make CALPADS a trustworthy and reliable system, the state must resolve the following issues:

- **Quality:** Because many school districts fail to check data accuracy, the state should create incentives to ensure that occurs. For example, the state might link school funding to indicators of data quality, much as it currently does for attendance data. It also could provide analytical tools so districts can make better use of their data locally – an approach Texas is developing. Doing so may increase buy-in, and in turn, data quality.
- **Completeness:** When fully implemented, CALPADS will not collect all of the data elements necessary for educators and policymakers to identify and address persistent achievement gaps. For example, student attendance, a key predictor of educational outcomes, should be incorporated into CALPADS. This is not currently planned because the federal education department does not require the state to do so. This must change.
- **Accessibility and transparency:** All of these K-12 data must be accessible to the people who hold schools accountable for educating students to the highest levels – parents, educators, community groups, researchers, and policymakers – while protecting student privacy. To do so, California might take a cue from New York. As part of its Race to the Top plans, the state intends to expand the parent

and community-access elements of New York City’s data system. The New York system allows teachers to work together through blogs and discussion forums, and it gives parents access to individualized reports on their children.

Step 3: Expand the Use of Information and Data

Even after rolling out CALPADS and CALTIDES, California will remain data rich but information poor – unless something changes. The state is building these systems, first and foremost, to comply with federal accountability and reporting regulations. But state reporting should go farther: It should provide data that actually can help close the achievement gap and address issues of educational equity.

Exploiting the full power of statewide data systems for school improvement requires a significant culture shift. State leaders and educators must move toward policies and practices that foster obtaining, sharing, and using data – not just collecting it. California’s Education Department already crafts its own reports, allows researchers access to current data for independent analyses, and fields information requests from state policymakers. But state officials must do more to help turn information into evidence for use by educators in districts and schools.

- **Sharing best practices:** California should develop standard reports and interactive, dynamic query tools that put actionable data in the hands of school officials and researchers. Additionally, the state should build systems so that high-performing schools and districts can share best practices and mentoring with their peers. Leaders could build on a template for this approach developed during the state’s Race to the Top application process: A group of reform-minded districts collaborated to exchange best practices in areas vital to school reform, such as using data to improve teacher and principal quality.
- **Professional development:** The state must implement policies and practices to ensure educators view data systems as tools to support student learning – not simply as

compliance and accountability systems. School and district staffs must be provided ongoing, high-quality professional development to help them understand, navigate, and use state data for local decisions.

- **Program evaluation:** State leaders should enable districts and schools to use the statewide data system to answer a host of questions about their own effectiveness and the potential of various programs to improve the performance of their students.

Step 4: Encourage Interagency Links to Use Data Beyond K-12

State data systems that store longitudinal K-12 student data are a critical piece of the education-reform puzzle. But to truly improve student performance, these data systems must exchange information across traditional barriers with post-secondary, workforce, early learning, health, social services, and juvenile-justice systems. This means expanding CALPADS' ability to link across the education pipeline from preschool through graduate school (P-20) and sharing data with relevant state agencies. Meeting these goals will require the following approaches:

- **Pre-K:** California must collect basic demographic and enrollment information on students in publicly funded pre-K programs. Local school districts, which run some of these programs, can simply assign unique student identifiers to preschoolers, as they do to all new students. The state must develop systems to track and evaluate students in these programs in other preschools. That way, educators and policymakers will be able to use data about these students from kindergarten through high school to answer questions about school readiness and pre-K program quality.
- **Postsecondary and workforce:** Linking CALPADS to higher education and workforce data systems will show how well California is preparing students for college and a career. Collecting and analyzing data on students as they progress through K-12, postsecondary education, and the workforce can reveal important information about the education pipeline and where it may leak in terms of

preparation, remediation, transfer, and persistence rates. For example, if the data reveal that students who complete Algebra I in eighth grade are less likely to need math remediation in college, state policymakers can use that information to inform decisions on when students should take that course.

- **Health and human services:** The state data system must link to social services, health, criminal justice, and foster-care data systems to get a clear picture of what happens to students as they journey from schools into adulthood.

The good news is that California has made strides toward the goal of effective data sharing. In 2008, Senate Bill 1298 became law. It requires publicly funded child-care and child-development programs, K-12, and all three segments of California's public higher education system to issue, maintain, and report information using unique statewide pupil identifiers.

Next Steps

Now's the time for California to complete its longitudinal data systems and begin a culture shift that places a high value on sharing and using data to improve student achievement. Many school districts around the state already employ sophisticated systems toward this end. Other districts will rely on the CALPADS infrastructure to obtain critical information. State leaders must work with district leaders, teachers, researchers, and communities to ensure that California has the data it needs to boost student performance, close achievement gaps for low-income students, students of color and English learners and build an education system that gives all students the best chance to succeed in college and careers.



The Education Trust—West

1814 Franklin Street, Suite 220

Oakland, CA 94612

T 510/465-6444 • www.edtrustwest.org