DATA FOR DEMOCRACY: Lessons for California’s Educational Data System

Percentage of 9th grade enrollment

- 9th Grade: 100
- 10th Grade: 93
- 11th Grade: 84
- 12th Grade: 75
- Grads 2005: 69
- A-G Grads: 26
- Community College 1st Year: 23
- CSU 1st Year: 7
- UC 1st Year: 5

INSTITUTE FOR DEMOCRACY, EDUCATION, AND ACCESS
What is the purpose of an educational data system?

**Educational Improvement.** A quality educational data system provides information that policy makers, educators, and members of the public can use to improve schools and make them more equitable. Data should provide information about “best practices.” What course sequence do we find in schools that enable high proportions of English Learners to graduate ready for college? It should help educators pinpoint factors related to the cause of problems. Were students who failed the math section of the Exit Exam more likely to be taught by teachers without certification in math? And it should identify instances of inadequacy or inequality. Did all students in this school have access to the A-G curriculum?

**Public Accountability.** A quality data system allows the public to watch over its schools. The public has an interest in ensuring that its tax dollars are spent wisely. This goal requires transparency on the budget, on educational programs, and on the degree to which educational goals are met. Further, the public has an interest in knowing that its schools treat everyone fairly and with dignity.
Empowering the Public. A quality data system supports public deliberation about schooling. The democratic purpose of public schools demands a data system that engages members of the public as participants in educational improvement and governance. We need a data system that invites all parents and community members to share, analyze, and make use of educational information.

What sort of data is needed?

Data on Conditions and Outcomes. Californians need information about the conditions of teaching and learning as well as the educational outcomes that these conditions produce. For all of its limitations, the No Child Left Behind Act provides a solid core of data about some educational outcomes as well as some important data on conditions such as teacher qualifications. Further, it provides data on student race, language status, and family income. This demographic information is critically important as it allows us to examine whether California’s public schools are providing all groups of students with an equal and adequate education. Yet, the No Child Left Behind Act’s requirements only cover a narrow set of educational conditions or opportunities. In order to assess whether all students have an equal opportunity to learn, California needs to develop a broader set of opportunity indicators. These indicators, in turn, require additional data collection.

Data About Participants’ Experiences. The many Californians who use our reports often ask us questions about their schools that extend beyond the data made available by the state. California needs to collect more information to answer critically important questions about the quality of the state’s schools. The state needs to develop systematic plans for surveying students, teachers, and parents to gather an array of information on the quality of educational services. In states such as Rhode Island that have initiated such a process, the information has promoted school improvement and policy development. Some California districts, for example San Jose Unified and Santa Monica-Malibu Unified, have incorporated surveys into their data gathering with similarly positive results. Survey data serves a dual purpose. First, it provides “on the ground” information about educational conditions and practices. Second, it engages key stakeholders as participants in educational improvement and communicates to them that their knowledge and insights matter.

Financial Data. Better and more comprehensive data collection is also critical to inform California’s school finance system and formulate the best approach to improving it. As the state considers new approaches to school funding, including student-based budgeting (or weighted student formula), we need more information about how money is spent at the school level. We also need more comprehensive information about all the private dollars that flow into each public school through school fundraisers, foundation gifts, the PTA, and individual donors.
Longitudinal Data. Education is a process that unfolds over time—it takes 13 years for a student to move from kindergarten to high school graduation. We thus want data that document students’ progress. Yet currently, California’s data system only offers annual snapshots of our public schools. We have no way of knowing, for example, how many students who originally enroll as 9th graders in a high school graduate from that same school four years later. We need a longitudinal data system that tracks the educational experiences of each California student. And we need to gather, store, and share this information in a way that protects each student’s privacy.

How should data be presented?

Contextualize Data. Information about students and schools need to be brought together so that they paint a picture of the entire educational pipeline. This picture should enable parents, community leaders, elected officials and educators to understand students’ outcomes in the context of the school conditions in which those outcomes were achieved.

Compare Data. Information about educational conditions and performance becomes meaningful when it is placed in the context of information about other schools, districts, and states. Providing comparative data allows parents, community leaders, elected officials and educators to make meaningful judgments about how well schools are doing. It also enables them to examine whether California is providing education to all groups of students on equal terms.

Make Data Accessible To All. Information is only useful when it is presented in a format that allows the public to make sense of the conditions and outcomes across California’s public schools. This requires that reports use clear, non-technical language and, where possible, present findings through charts and tables intended for a general audience. It also requires that educational reports be produced in multiple languages.

What support is needed for data to be used in powerful ways?

Professional Development. Teachers and principals need training to make optimal use of new data. Training should provide educators with knowledge of what data is available and how they can use this data to answer questions about their practice. This training should prompt educators to reflect on equity issues—on who is receiving what educational services and to what effect. It should also empower educators to gather additional data and share this information with other professionals as well as members of their school community.
Community-Based Data Support. If California wants its data system to promote educational reform, it needs to support community-based structures that build the capacity of parents, community members, and educators to use the data effectively. The state should provide grants to community-based organizations to inform community members (and perhaps develop workshops) about what data is available and how they can use it to promote educational improvement.

What investment is needed to create a quality data system?

Investing in Data Input. The quality of any data system turns on the reliability of that system’s data. Currently, most California schools set aside few resources for staff to collect and input data. Neither districts nor the state have the staff necessary to check all this data entry. As a consequence, it is common to find schools and districts that mis-report the number of graduates or graduates ready for college. We need to invest sufficient dollars in the data system so that staff in all schools and districts can input data reliably. Further, this investment in data collection and input needs to be matched with oversight that ensures quality control.

Investing in Presentation and Participation. As noted above, California needs to produce data reports that the public can read. A modest investment from the state in graphic design and marketing (including ensuring the readability of text) will make a substantial difference in documents like the School Accountability Report Card. Further, the state’s role does not end when it has produced (or directed districts to produce) reports. The state needs to create structures that support educators and community members to use the data system in powerful ways.

Investment Beyond Data. Finally, investment in data, however important, will only make a substantial difference as California invests more broadly in its educational infrastructure—its facilities, equipment, and educators. It would be a mistake to infer that a quality data system alone can drive reform. Rather, a quality data system can help build the commitment and understanding necessary for the public to invest wisely to meet its educational goals.