Bringing the State and Locals Together:
What's Needed to Encourage Effective Use of Data in California School Districts
Executive Summary
Springboard Schools,
12-07-06

EXECUTIVE SUMMARY
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Providing a quality education that achieves adequacy for all children is a shared goal throughout the California public school system. Adequacy and resource allocation go hand-in hand. Resource allocation supported by data that enable smart decision-making is gaining ground as accepted good practice. Indeed, data-driven decision making has become a buzzword throughout the state. Research shows that much progress has been made in the field over the past decade in recognizing that data can play an important role in decision making, and California policymakers are increasingly focusing greater attention on developing effective data systems.

Despite this progress, little is known about what data decision makers in California need in order to make informed decisions, and until recently district central offices have been operating without central guidance in developing their data systems. In response to these issues, and as part of the larger collection of studies focused on California's school finance and governance, Springboard Schools has conducted a literature review and best practice study to answer the following questions:

- *How does the California state data system support school district data needs?*
- *Among school districts, what data are most needed?*
- *What are the desired characteristics of effective district-based data systems to encourage data use?*
- *What are the key issues to consider in designing a district-based data system?*
- *What effective district practices support good use of data?*

The literature review was enriched by interviews with high performing district and school leaders participating in Springboard Schools's California Best Practices school and district studies.

How does the California state data system support school district data needs?

The role of the California state data system in supporting school district data needs has been largely driven by Federal and state policy. The infrastructure for collecting and using data to support local education decision-making has been fueled by state testing and accountability systems, and in recent years by the No Child Left Behind Act (NCLB) of 2001. NCLB places higher demands on state systems to collect and report on indicators related to their Adequate Yearly Progress (AYP) goals. Among other measures, NCLB has called for rigorous state standards, assessments, and accountability to ensure appropriate attention is focused on helping all students learn. All students must test as proficient on state tests of math, reading and science by the year 2014. NCLB's attention to all students moves beyond a measure of all children in a school as a whole, and focuses on the performance of particular subgroups of students. These measures have increased pressures on states and districts to collect and disaggregate data on student

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performance for students with limited proficiency in English, students with disabilities, students from low income families, and students from racial minorities.

Academic Performance Index (API) in California

Consistent with the Federal context structured through NCLB, California's *Public Schools Accountability Act of 1999 (PSAA)* is the major state initiative currently shaping education improvement and data systems in California. The Academic Performance Index (API) is often cited as the cornerstone of the PSAA. The API, a numeric index, measures the academic performance and growth of schools on a variety of academic measures. Results from the API are shared by the State in printable state, county, district, and school level reports. Reports and data files are based on test results of the Standardized Testing and Reporting (STAR) Program, the California High School Exit Examination (CAHSEE), and the California Alternate Performance Assessment (CAPA).

NCLB and API together represent important features of a state system that is increasingly focusing attention on the collection, organization, analysis and reporting of data that holds potential for supporting local decision making. Still, the California data system, like most others, continues to face challenges. The Springboard Schools study found the following challenges and opportunities:

- Until recently, California's system lacked the basic elements needed for meaningful data tracking and reporting at the local level, such as a standardized student code or identifier. This is now being addressed, but the system will not reach its full potential until additional technical elements of this nature are developed.
- A second issue is the focus of the state on data systems primarily designed to support mandated reporting related to major initiatives, rather than collecting data to support local decision-making. These systems were not created to serve local needs per se, and the data collected through these initiatives appear to be less responsive to authentic local data needs. Springboard found some districts using state data to guide instructional decisions, but this was rare. California School Information Services (CSIS) is now beginning to address this issue by building local capacity to use state data.
- Finally, until this year, California has not provided separate funding to school districts to support development of data systems and the infrastructure needed to support an effective system.

Role of Districts

Within this larger Federal and state structure, the role of school districts in supporting school improvement through data systems has gained prominence in the field. Districts can serve as a bridge for using data collected and reported through the state for NCLB purposes, and they can develop their own data system in ways that are especially relevant to local needs. Even as the promise for improving decision making through district-based

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data systems emerges, there also exists a reality that districts vary largely in their capacity to design and use an effective data system. Springboard found that the quality of data systems varies across school districts in California, and by most reports widespread data use is limited.

To address these realities the Springboard Schools study provides findings that can hopefully encourage the development of high quality data systems that encourage effective data use in California school districts. An important starting point is the nature of the data needed by school districts.

Among school districts, what data are most needed?

Drawing on research and interviews from the field, at this stage district central offices and schools primarily need *student achievement data from multiple sources*, and secondly, data regarding *instructional practices*. District offices are focused on increasing student achievement and closing the achievement gap. Student achievement from assessments aligned with rigorous state standards is important, as are data from locally developed assessments that bring immediate relevancy to teachers and students. While other types of data are needed, fiscal constraints and the knowledge and skills needed to work with data create a context in which school district leaders and teachers are most urgently focused on first things first: data that directly support decisions about teaching and learning.

What are the desired characteristics of effective district-based data systems?

In addition to collecting, storing and reporting data on student learning and teaching, an effective data system will focus on enhancing active data use at all levels of the school and district, especially among teachers. Research indicates this is achieved by a data system characterized by three attributes:

- **Accessibility**
- **Ownership**
- **Ease of Use**

Teachers will need data collected at a much more fine-grained level than district administrators, and they need ready access to these data. While the literature supports appropriate access for all educators in the system, it is divided on the degree to which teachers and school leaders should own and analyze the data, once collected. Some analysts believe teachers are more capable of bringing insight to the analysis that draws on their classroom experience and expertise. Others argue that teachers lack the time or other resources needed for analysis, and that the system would be better served if analysis and presentation of data were left to administrators from the district central office. Interviews from high performing sites confirm that it is essential that teachers and students feel a sense of owning the data they will use to track progress and see it clearly linked to the work they are undertaking. In the absence of this sense of ownership they

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are less likely to use these data to inform further action. In addition to these issues, the degree to which all levels in the system can easily use the technology and data to engage in meaningful analysis and interpretation is important.

What are the key issues to consider in designing a district-based data system?

The literature and Springboard School's field interviews cite a number of ideas, structures and processes that support construction of an effective data system and active use of data. Furthermore, district central offices are seen as key players through which these supports can be empowered to develop a first rate data system. This includes the following:

- *Investing significant resources in the technological and data infrastructure;*
- *Providing fine-grained data on student achievement from multiple sources, supplemented with helpful data on instructional practices;*
- *Disaggregating data for student subgroups; and*
- *Harnessing the unique student identifier to enrich data analysis and provide greater tracking of individual students.*

Building an effective data system may involve re-distributing resources from other needs. Fine-grained data focused on student achievement for student subgroups increases the capacity of teachers and school leaders to identify relevant trends and begin to design instructional strategies for improvement. An effective system will also include multiple sources of information about students, such as assessment data, student work, and teacher logs about particular students. Triangulation of these data provides for more meaningful analysis and response to problems.

What effective district practices support good use of data?

While building a system that includes the elements needed to support meaningful data use is essential and necessary, by itself it is not sufficient to ensure good use of data. Springboard's review of best practices in the literature and in California school districts found the following supports to be especially helpful:

- *Engaging school leaders and teachers in helping district leaders design and implement the data system;*
- *Placing a premium on professional development related to data use;*
- *Using school-based data mentors to build capacity for individually effective data use and data-based collaborative inquiry; and*
- *Empowering data-based collaborative inquiry through professional learning communities.*

These supports are designed to build knowledge and skills related to data use at all levels of the system, but especially at the school level. They also focus on developing a trusting cultural environment and enhancing the value school communities allocate

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to data as a source for instructional improvement. District-school relations are important here as well. As district leaders partner with school staff to design the data system, not only do they benefit from their unique insight, but a foundation is laid for joint ownership and the trust needed to successfully launch the system.