California’s Emerging Teacher Data System
Key to a Stronger Teacher Workforce

Reliable and current data is the foundation upon which good public policymaking is built. While California collects a good deal of data on its teaching workforce, policymakers have lacked a state-level data and analysis system to provide answers to even some of the most basic questions: How many credential holders actually take jobs? In what types of schools do they take jobs? What types of schools do they tend to leave? Until now, policymakers, program administrators and researchers have had to rely on estimates, data from limited studies or other states, or inferences drawn from unreliable sources due to California’s poor collection and management of data. Making matters worse, the state has been plagued by an inability to make good use of the data it does collect. While a variety of state agencies keep records on various aspects of the teacher workforce, there has been no state-level system to integrate, organize, analyze and share available information or identify additional data needs. This disturbing lack of current and reliable information is now beginning to improve.

The Need for Good Workforce Information

For over a decade the Center for the Future of Teaching and Learning and other California education policy organizations have pointed out the shortage of good and timely information on the state’s teacher workforce. Each year, state and local education policymakers and program administrators make thousands of important decisions that impact the quality of student instruction. Among the most important decisions are those about the teaching force. These include:

- The content of college and university programs that initially prepare teachers;
- The specific requirements for teaching credentials at the elementary and secondary levels;
- Assignment of teachers to individual schools;
- Induction of new teachers into the profession; and
- Programs of professional development for experienced teachers.

Consequently, the absence of a reliable teacher workforce data system leaves the state’s education leadership working in the dark, trying valiantly to make best guesses about our students’ real needs relative to the allocation of teacher resources.

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The Value of Good Workforce Information: The Case of Kern County

In 2001 Kern County education leaders decided to take steps to improve the quality of their teaching workforce, which had 1,190 underprepared teachers inequitably distributed across its schools and districts. The educational leaders of Kern’s K-12 schools and institutions of higher education formed a strong alliance, partnering with the Center and SRI International for the purpose of strengthening teacher development—and, as a result, teaching—across the region. The initiative addressed the issue of teacher quality from all sides, keeping in mind the primary goal of having a fully credentialed teacher in every classroom in Kern County. They approached the challenge by analyzing Kern’s teacher preparation programs, incentives for equitable distribution of underprepared teachers, recruitment efforts, retention patterns, and professional development. Initiative leaders recognized early on the need for data on the supply, demand and local production of new credentials; teacher satisfaction; pre-employment training; and post-employment professional development.

With assistance from SRI researchers, Kern County leaders created a comprehensive data system that included the California Board of Education Data System (CBEDS), the Professional Assignment Information Form (PAIF), SRI studies, and local research using a newly developed exit survey and a regional survey of underprepared teachers. The exit survey provided policymakers in Kern County with specific data on where teachers were going after leaving the classroom, why they were leaving, and what led to any job dissatisfaction. Having access to these data in a timely manner, and the opportunity for the initiative leaders to carefully review them, was essential to driving good policy decisions for the county.

In 2004, only two years after implementation of this program, the number of underprepared teachers in Kern County was 502, or only 6.1% of the workforce, a reduction of over half from 1,190 underprepared teachers, or 12.3% of the workforce in 2002.

The replication of Kern County’s success throughout the state is possible and has been encouraged by the adoption of legislation establishing the California Longitudinal Teacher Integrated Data Education System.

The California Longitudinal Teacher Integrated Data Education System

The Budget Act of 2005 included funding for and a requirement that the California Department of Education (CDE) contract a feasibility study on establishing a state teacher data system that could convert “the existing data systems into an integrated, comprehensive, longitudinally linked teacher information system that can yield high-quality evaluations.” The feasibility study was completed in March 2006 and laid out a general approach for the development of the new system. This was followed by the 2006 passage of Senate Bill 1614 (Simitian) which established the California Longitudinal Teacher Integrated Data Education System (Cal TIDES).
The express purpose of Cal TIDES is to enable analysis of workforce trends; evaluation of teacher preparation including traditional and internship programs; and teacher workforce issues including mobility, retention, attrition and the monitoring of teacher assignments. The system is to be developed, through contract, by CDE working in collaboration with the Commission on Teacher Credentialing (CTC) and an advisory board composed of a variety of state agencies, research organizations, and special interest groups.

**Timeline**

The development of a comprehensive data system such as Cal TIDES takes planning and time; the new Cal Tides system is not expected to be operational until mid 2010. A request for proposals for the development of the system is under way and the selection of a contractor is expected by mid 2008. The development of the data system is projected to take until the latter part of 2009.

![Timeline Diagram]

Source: CDE/CTC Cal TIDES focus group presentation April 19, 2007

**Confidentiality and the Appropriate Use of Data**

In enacting SB 1614, the Legislature was careful to protect the privacy of individual teachers, intending the information only be used to evaluate and strengthen the state’s teacher development system. Cal TIDES is required to utilize existing teacher workforce databases, maintain longitudinal data while protecting teachers’ privacy, and comply with all other state and federal confidentiality and privacy laws. To further ensure that adequate protections are built into the system, the legislation calls on CTC to establish a “non-personally identifiable” number—a unique identifier—for each teacher in the state.

In addition, the Legislature specifically prohibited the use of Cal TIDES data alone or in conjunction with data from the California Longitudinal Pupil Achievement Data System (Cal PADS) for purposes of pay, promotion, sanction or personnel evaluation of an individual teacher or groups of teachers, or employment decisions related to individual teachers.

**Capacity of Cal TIDES**

The legislation calls for Cal TIDES to serve as the state’s central repository of information on the teacher workforce and identifies key information that will be available:

- Age profiles of teachers in the workforce
- Capacity to provide projections of retirees statewide in the next 10 years
- Identification of teacher shortages by subject matter
- Geographic distribution of teachers by credential type
- Patterns of in-service education for teachers
Initially, Cal TIDES will emphasize the integration of existing teacher data with Cal PADS student data as outlined below:

<table>
<thead>
<tr>
<th>Cal TIDES Teacher Data</th>
<th>Cal PADS Student Data</th>
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<tbody>
<tr>
<td>Teacher Demographics</td>
<td>Student Demographics</td>
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<td>Educational Attainment</td>
<td>School Environment and Transfer Rates, Suspensions and Expulsions</td>
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<td>Professional Development (BTSA &amp; Internship)</td>
<td>Test Results (STAR, EL, HS Exit Exam)</td>
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Source: CDE/CTC Cal TIDES focus group presentation April 19, 2007

The Center View

The passage of SB 1614 is a landmark in the effort to develop a teacher workforce data system for California. The joint contributions of the CDE and CTC to implement the legislation deserve commendation, but there is still much to be done if the state is to achieve the kind of comprehensive, longitudinal data system that is needed. Unfortunately, there will be some gaps in the data sources initially. For example, with the exception of information related to internship programs, data on teacher candidates in preparation programs and the type of program in which they are participating will not be included. The omission of this important data has the potential of limiting the capacity to examine these programs and project the future supply of new teachers. In addition, only professional development data from the Beginning Teacher Support and Assessment Program (BTSA) will be included, leaving out numerous state and federally funded professional development programs designed to strengthen and maintain the skills of veteran teachers. Further, there are other state, federal and private agencies, such as the teacher training institutions, the State Teachers Retirement System, and the Employment Development Department, which have teacher data that should be incorporated into the system. Finally, it is our view that a number of local education agencies such as Kern County, that have struggled to obtain current and reliable teacher information and have a working knowledge of what is most useful to local agencies, need to be more directly involved in the implementation of the legislation. The Center has agreed to assist CDE in involving knowledgeable local representatives in the advisory process.

We recommend that the Legislature:

- Request regular progress reports that would enable the policy community to closely monitor the implementation of SB 1614.
- Provide funding and any needed authorizations to ensure the existing Cal TIDES implementation work remains on schedule.
- Require the CDE to identify and work with other state and federal agencies that collect teacher workforce data to expand the variety of information included in Cal TIDES.
- Charge the Cal TIDES Advisory Board, with support from CDE and CTC, with the responsibility of developing a comprehensive inventory of additional information (including data on teacher preparation, recruitment, induction and professional development) needed to evaluate the overall effectiveness of the state’s teacher development system.

For further background on the development of the teacher workforce data system, please go to the publications section of the Center’s Web site, www.cftl.org, and click on Strengthening California’s Teacher Information System.