

# Teacher Data Infrastructures in Selected Southeastern States: Progress, Problems and Possibilities

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WHITE PAPER SUMMARY DOCUMENT

*for*

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### **Introduction**

This document is a summary of the white paper: "Teacher Data Infrastructures in Selected Southeastern States: Progress, Problems and Possibilities," by Stephen Clements, Department of Educational Policy Studies & Evaluation, University of Kentucky. The complete version is available from the Southeast Center of Teaching Quality, [www.teachingquality.org](http://www.teachingquality.org).

### **Overview**

Underneath current public discussions of teacher quality and quantity, lies a troubling reality. There is much disagreement within the policy community about:

- **how to define teaching quality and**
- **what the reasonable indicators of teaching quality are.**

Further, even where there is agreement about teacher quality and quantity indicators, the education data systems — or infrastructures — in most states are not sufficient to supply useful information to policymakers about the status of teacher workforce quantity and quality. Paucity of good data about teachers has stifled policy change, as educators and legislators grope to get a handle on teacher quality in their respective states.

Out-of-field teaching, an area in which definitions vary and data are lacking, presents an example of the problem. In recent years, standards-based criteria for certification or licenses have lead education policy leaders to move toward granting certification or licenses based on what a teacher knows and can do. This might be measured by a record of what college or graduate courses a teacher has taken and how well he or she performed in the courses. But extant teacher data infrastructures do not have the capacity to gather, store, or report course taking and outcomes. Therefore, as a proxy measure, some education policymakers classify as practicing out-of-field, individuals teaching middle or high school who have attained neither an undergraduate major nor minor in the academic area they are teaching. Major and minor data are more commonly, but by no means universally, available in electronic format. It is common to be able to access only the degree level and license category held by a teacher. These latter two data points are not sufficient to a support standards-based licensing system, nor are they robust teaching quality indicators. (The term "license" will be used hereafter to signify license, certification, or endorsement to teach). To restate -- there is no agreement on the definition of out-of-field teaching, and if there were the data might not be available to apply the definition to teaching accountability and improvement initiatives.

New Title II reporting makes the issue more urgent. Annual report cards, containing specific measures of the quality of teacher preparation programs, will be due to Congress on April 7, 2001. States will be required to produce annual report cards that will provide information on:

- teacher license requirements and assessments

- the percentage of teaching candidates that passed each of the assessments, disaggregated and ranked, by teacher preparation program
- standards and criteria that prospective teachers must meet in order to attain an initial teacher license
- the extent to which teachers are teaching on waivers and the proportion of such teachers distributed across high- and low-poverty districts and across subject areas
- descriptions of alternative routes to teacher licensing, if any, and the percentage of teachers licensed through alternative routes who pass state teacher assessments
- descriptions of proposed criteria for assessing the performance of teacher preparation programs, including indicators of teacher candidate knowledge and skills.

### **A Review of Teacher Data Infrastructures in Six Southeastern States**

In 1999, the Southeast Center for Teaching Quality undertook a review of the teacher data infrastructures that currently exist in six southeastern states. The author secured information on each state's education data system through an informal process that began with perusing state education agency websites for material and proceeded through document requests from, and phone interviews with, state department personnel who work with teacher or other databases.

The next three sections of this paper 1) profile the teacher data elements and infrastructures in each of the six states (Table 1), 2) present observations that describe the information gathered during the work of compiling table 1, and 3) make recommendations for action.

### **Interpreting Table 1. State Profiles**

Table 1 reveals that in all six states in the study data useful for assessing teaching quality are stored in more than one database, and that the databases are managed by separate administrative units within the state department of education. Furthermore, in two states license information is managed by the fiscal wing of the state department of education, a reflection of the time when license status was primarily used to determine pay grade. Table 1 lists five different units in which teaching data may be housed: licensing divisions, computer services/information technology/management information system offices, divisions of finance, human resources divisions, or school approval divisions. The summary nature of table 1 does not allow the inclusion of the types of information present or absent from the databases considered, but the full version of this report indicates that information needed for accountability and monitoring in a standards-based teaching improvement system are not being gathered.

The databases have accreted over time. There has been there is little coordination among programs or divisions to combine them into fewer more powerful collections, and that interdepartmental collaboration will be necessary to improve overall education data infrastructures. The comments section of table 1 shows that states have modernized their teacher licensure databases but modernization of an older licensure paradigm does not address the issues regarding the new kinds of data that need to be gathered for more effective teacher policymaking.

Table 1. State Profiles: License and Practice (Teaching Assignment) Data Available\*

State	License status data		Practice status data		Comments
	Name of database	Maintained by	Name of database	Maintained by	
AL	Alabama Certification of Teachers Management Information System	ADE Certification Specialists	Local Education Agency Personnel System (LEAPS)	ADE Computer Services Section	ADE developing new licensing database, and also developing PEPE, from teacher evaluation data to be part of teacher accountability initiative.
GA	Separate database on educator licenses	GDOE Certification Office	Certified/Classified Personnel Information (CPI)	GDOE Information Technology Office	GDOE will develop a statewide student data management system soon and plans to revise the personnel data structure after the student system is in place.
KY	Teacher Certification Database	Education Professional Standards Board	Professional Staff Data system (PSD)	KDE Division of Finance	PSD's coursework information can be used by certification office to determine if teachers are adequately prepared for the courses they teach.
MI	Separate database on educator licenses	MDE Office of Educator Licensure	PERSACCR	MDE Management Information System	MDE is installing upload software to provide quicker and more seamless storing of education data within the agency.
NC	Licensure Management System	NCDPI (SEA) Human Resources Division	Professional Personnel Activity Report/Student Activity Report (PPAR/SAR)	NCDPI state school finance system	NC has a more powerful database than many other states, and is creating a \$120 million portal system, NC WISE, to upgrade current system to be completed by 2003.
TN	Teacher Certification and Licensing Database	TDE	State Distribution Database	TDE School Approval Division	Both the Teacher Cert. and the State Distrib. databases can be used to determine if teachers are appropriately credentialed for the courses they are teaching.

\* For lists of the data points included in the infrastructures, refer to the complete paper referenced above.

### **Observations Developed in the Process of Collecting Data Presented in Table 1**

The adoption of standards-based teacher preparation and licensing, which requires defining what teachers should know and be able to do to receive a license, requires a related data gathering, storage, and reporting capacity in state agencies. The infrastructure must capture at a minimum:

- the variety and level of undergraduate or graduate courses a teacher has taken before or after entering classroom service, and his or her achievement levels in those courses
- and the types of professional development experiences a teacher has pursued, such as intensive summer subject academies, classroom research, or curriculum development

Information is lacking that would allow meaningful decisions about:

- how well teachers are being deployed or assigned by principals
- achievement of cohorts of a teacher's students

Better data about teachers are unavailable because in most states the accountability emphasis has been upon students rather than teachers.

The statutes that mandate accountability mechanisms have typically not allocated public school dollars to rebuild education data infrastructures, although the technology of data collecting is more powerful and relatively less expensive now.

Revealing data about teachers, especially data that could link the performance of specific teachers to the achievement levels of their students, is perceived by many as inappropriate to gather or politically volatile.

### **Recommendations for Action**

The Southeast Center for Teaching Quality (SECTQ) and its partners need to promote sound, cutting edge, and reasonably priced information technology improvements among states in its region. SECTQ should:

1. Lead a policy discussion that moves states toward a new teacher data paradigm that goes beyond simple license information and instead yields better indicators of performance, training, and the like, and also links these points eventually to the performance of students.
2. Sponsor an ongoing regional workgroup, consisting of state education agency officials, teacher license agency representatives, researchers, teacher policy experts, interest group and advocacy group representatives, and state legislators, to explore the teacher data elements they believe states should include.
3. Develop a model of a web-based portal system for better education and teacher data infrastructures that can create data that can be used within states and shared across state borders for better understanding of teaching phenomena.

*To obtain copies of the full document, please contact:*

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