

Professionalizing the Occupation of Teaching in a Time of Transition

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In California, prospective elementary school teachers are required to take and pass four separate tests prior to entry into the profession, measuring basic skills competency, knowledge of the subject matter, ability to teach reading, and overall pedagogical knowledge and skill. Although these are unquestionably important areas of expertise for teachers, the system appears overzealous, even overreaching, in its multiple efforts very early on to measure the quality of teacher candidates. The California credentialing system is not alone in its enthusiasm for teacher testing: a study conducted by the National Research Council (NRC; 2001) counted more than 600 distinct tests administered to teachers across the fifty United States. California accounted for 30 of these assessments (California Commission on Teacher Credentialing, 2006).

In the face of these statistics, one is entitled to wonder whether the system is appropriately balanced in its insistence on measuring teacher quality at the occupational threshold. Indeed, the intense interest in quality assurance we purport to demonstrate at the beginning of a teacher's career is not matched, even remotely in California or elsewhere, by a comparable concern over the course of

the teacher's career. This seeming paradox certainly raises a number of pivotal issues regarding teacher support, professional development, and evaluation. However, it poses a series of even more uncomfortable questions concerning the matter directly at hand: What is it that we are seeking to measure through entry-level examinations? What are the notions of teacher quality that underlie this process and structure of assessment? Are they really so diverse and disparate as to warrant the plethora of approaches that are taken across the country? The timeliness of these questions is highlighted by Loeb and Miller's (2006) finding that most states have not in any systematic fashion whatsoever evaluated their policies governing teacher preparation, certification, and tenure.

In this chapter, we place these questions in the context of exploring current barriers to a genuine profession of teaching. We place the issue of quality at entry into a larger continuum of teacher professionalism. We trace the lack of common ground—and confidence—in defining teacher quality to the absence of a professional culture in pre-K–12 education that recognizes expertise and embodies the essential knowledge, skills, and performance levels necessary for entry and advancement in the profession. We understand quality in terms of professional standards that define the knowledge base and identify effective practice and performance. We propose that core matters of instruction, encompassing both pedagogy and content knowledge, compose and anchor a singular focus in developing measures of teacher quality, and that these measures be differentiated for application at different points along a *learning to teach* continuum. Finally, we turn to the case of California, describe its initial efforts to institute a more satisfactory method of assessing readiness to teach, and suggest next steps along the way to professionalizing the occupation of teaching in a standards-based system.

The Hallmarks of a Profession and Their Relevance to Education

A profession is defined, in traditional sociological terms, as a formal social organization that controls entry to the organization through reference to a specified knowledge base and its implementation in practice. Professions qualify members and control entry based on knowledge and demonstrated competence in practice. Members are empowered by reason of their state-delegated political authority and because of their social status to set the parameters of acceptable professional practice. Central to this power is the predicate that there is an agreed-upon body of knowledge and effective practice, and that members of the profession subscribe to, augment, critique, and build this base collectively and in relationship with one another (Elmore, 2007). There is a strong connection between theory and practice, and the profession takes as its central function the cultivation of both, in

accordance with ethical norms, to more effectively solve problems and thereby serve the needs of its consumers, be they patients, clients or customers. We now discuss five distinguishing characteristics of a profession.

VALIDATED FRAMEWORK OF KNOWLEDGE AND SKILL AND A DISTINCTIVE WAY OF SEEING

There is a particular perspective, a specific way of viewing a situational set of facts, which defines a profession. The core is a validated set of skills and a body of knowledge around which professional training, practice, and experience are organized; these are then applied by the practitioner, as a matter of discretionary judgment, to the facts of a concrete case. There are important differences within variations across professions, but the measure and mark of professional success is matching a satisfactory solution to a problem presented. In the world of education, we often seek the solution for a particular case in a specific answer that we believe must be discovered rather than applied creatively by the practitioner. A lawyer analyzes the facts of a case and construes them according to governing principles in an effort to predict what a judge might conclude at the end of a similar process. What does it mean to think and act like an educator and to be trained and developed as an expert in teaching and learning? What is distinctive about the way we as educators see our world, approach its problems, and generate hypotheses about satisfying particular needs and demands? That there is little agreement on these matters should give pause to the claim of professional status (Burney, 2004; Hiebert, Gallimore, & Stigler, 2002; Stigler & Hiebert, 1999).

AUTHORITATIVE NORMS AND PROTOCOLS

David Garvin (2007) describes the sequence of professional steps through which problems are approached and solved. The first step involves analyzing the situation and precisely identifying the problem presented. The design step encompasses developing options and alternatives and formulating plans for their application to the individual circumstances at hand. Then comes the decision to proceed, which is followed by acts of implementation, including mobilizing resources and communicating direction. When a patient visits a physician to have a broken arm treated, the treatment is not unique to the individual doctor. The doctor uses professional skill in viewing the broken arm through an educated lens and then selecting techniques from a tool kit of knowledge for application to the facts of the case. There are documented protocols of medical procedure, much as there are rules of evidence in the practice of law. Similar guides and methodologies in education to facilitate a teacher's access to useful information are made conspicuous by their absence (Burney, 2004; Day, 2005).

*AUTONOMOUS INSTITUTIONAL AUTHORITY
TO DEFINE CORE ELEMENTS OF THE PROFESSION*

Other professional contexts have authorized institutional mechanisms to determine and enforce the values, norms, protocols, and requirements for entry and status within the profession. Government has granted autonomy to these bodies and boards and delegated to them the legal capacity to govern activities and define legitimacy within the sector. The contrast could not be greater with the status quo prevailing within education, in which the state itself performs these functions. The state is inserted directly into the licensing system that it controls and administers. Student achievement is measured by state-adopted tests of state-adopted curricular standards. Teachers, consequently, are deliverers of content that is defined by others. Their knowledge of the difficulties and complexities of delivering this content, following pacing guides that are not of their own making, is not valued or really even sought in the development of curriculum. The manner in which we teach and test English language learners illustrates this massive disconnect. In California, we test the vast majority of students in English, regardless of their level of experience with English or their primary language, and evaluate schools based on the outcome of such tests. No professional board would propose that we rest weight on that assessment alone. However, we do in the politics of education, which is more a function of ideology and power relations than mature professional judgment. The lack of documented, validated, authoritative expertise creates a vacuum in the first place and perpetuates the unsatisfactory state of affairs that follows in its wake.

*CONTINUUM OF PRACTICE, EXPERIENCE, AND
SPECIALIZATION WITHIN SYSTEMS OF SUSTAINED
MENTORING, COACHING, AND PEER REVIEW*

True professional practice is very much a team endeavor that takes advantage of differing skill, knowledge, and experience levels among its members. Blended talent and capabilities permit the team to allocate responsibilities in an economical, efficient, and equitable manner in order to attack a problem and devise a solution. Through and throughout the process of teamwork, coaching, mentoring, and feedback take place increasingly in a 360-degree method of peer review. This training and professional development are not so much independent events as they are features built into the work that occur routinely within the professional endeavor.

Again, the comparison with the field of education is not flattering. Practice is largely conducted in isolation, and the provision for mentoring and coaching remains incipient at best (Burney, 2004). Systems of evaluation are formal and bureaucratic, and capacity to give and take criticism is

limited. The methods of assigning teachers to classrooms are absurd. The head of a hospital staff would never request, let alone require, a recent medical school graduate to perform unassisted even the simplest of operations. A law firm's senior partner would never send a brand-new lawyer into a major, high-stakes trial alone. Yet school districts regularly assign the newest teachers to the most difficult and challenging classrooms in the inner cities and then wonder why they lose 50 percent of new teachers during their first five years of practice. Other professions avoid similar attrition rates by avoiding similar misassignments and preparing practitioners over time for taking on progressively more difficult cases. Nor do these professions confer tenure after only two or three years of practice. That we do this so regularly in education serves only to undermine the status of the accomplishment.

MARKETPLACE JUDGMENTS REGARDING QUALITY

In education, judgments regarding quality are endlessly debated by policymakers, school administrators, teachers, and others. References to quantitative and qualitative, or subjective versus objective, are traded back and forth in discussions of the subject. Because we lack anything approaching generally accepted accounting principles, our assessments are vulnerable to politicization and our discussions of them often adversarial in substance as well as tone. In other professions, much of the burden of determining quality is shifted to the marketplace to be measured by the outcome for and the satisfaction level of the consumer of the professional service. We steadfastly resist this in education and are protected in doing so by the complete disconnect between measures of student success and indicators of teacher success. Ultimately, at some point in the future, judgments of instructional quality in our field must be informed by student achievement results. Whether by value-added methods or randomized trials, we must align our views of school and teacher quality with whether the students in a particular school or classroom are getting a year's worth of educational value from a year's worth of seat time. No one in our field should pretend that this transition will be easy, nor should anyone deny that it is necessary for the growth of the profession.

Challenges to Professionalism in Education

The foregoing barriers to teaching as a profession are related and mutually reinforcing. The deficits they reflect in norms of knowledge, practice, and external validations of quality are substantial. Progress in dismantling the barriers and meeting the deficits will be uneven and incremental.

Moreover, such progress appears contingent on significant changes in the nature and extent of educational research, the preparation and training of teachers, and the labor market for them. Each of the following changes in and of itself embodies an enormous challenge to the field of education.

THE NATURE OF RESEARCH IN EDUCATION AND THE SCALE OF EDUCATIONAL RESEARCH

The undeveloped state of the knowledge base in the education occupation, our would-be profession, involves both research and craft knowledge regarding how to obtain desired professional outcomes (Burney, 2004; Day, 2005; Hiebert et al., 2002; Stigler & Hiebert, 1999). There is painfully little documented knowledge in education about how to diagnose learning issues and what we should do instructionally to improve student achievement. This is both a function of the complexities of the cognitive/emotional nature of the teaching and learning process and the predictable result of an investment deficit in building a research infrastructure adequate to the task. The resulting knowledge deficit handicaps us severely in solving problems both at the microlevel of the individual teacher and learner in the classroom and at the macrolevel of large-scale school districts. How can it be that we have no National Institute of Education that might produce in our field remarkable accomplishments similar to those of our National Institutes of Health? It should be a national embarrassment that we have so underfunded the research necessary to make the knowledge and develop the protocols that are so badly needed in education. Again, we in the education world should step up to shoulder our considerable share of responsibility for this situation as a prelude to remedying it.

In 2003, ETS centered its Invitational Conference around the issue of educational research. Ellen Lagemann (2005), historian and former dean of the Harvard Graduate School of Education, presented a paper titled "Toward a More Adequate Science of Education." She articulated, clearly and concisely, the issues that retard the education research enterprise in terms of methodology, rigor, purpose, and presentation. Deborah Stipek (2005), dean of the Stanford Graduate School of Education, has addressed with equal force the requirements of a more satisfactory standard for educational research. Absent the considerable effort required to make research meeting those standards the rule rather than the exception, we are likely to wait in vain for the dollar investment it will take to provide practitioners with the knowledge they need for their students and themselves to be successful.

THE REINVENTION OF SCHOOLS OF EDUCATION

Making the knowledge that will enable communities, in Bill Clinton's words, to "replicate excellence" in the educational context is the paramount

challenge confronting schools of education in the United States today. The task early on in the process is fundamentally intellectual: we have much knowledge to create and then make useful and useable by teachers. There are three dimensions to the work: (1) making new and useable knowledge by tightly coupling practice with research; (2) designing, developing, and implementing an infrastructure for educational leadership that will recruit, train, and support the next generation of education professionals on whose minds and shoulders rest the redemption, or not, of our global competitive position in education; and (3) reallocating resources to the nontraditional, cross-disciplinary collaborations on which the first two dimensions of the work almost certainly depend. As David Garvin (2007), quoting Derek Bok, noted in a presentation to the Harvard University Committee on Resources, "in the end, the most valuable contribution that any professional school can offer students is . . . to convey a systematic way of breaking down the characteristic problems of the profession so that they can be thought through in an effective, orderly, and comprehensive fashion" (p. 2).

The tough, hard work of figuring out all of this, and more, is at hand. We are at a turning point with schools of education in this country. Much like medical schools in the aftermath of Flexner's (1910) report, and business schools following the Graham-Simpson review in the 1950s, we are in the midst of a period of significant transition for schools of education. Institutionally speaking, inflection points like this one provide opportunities but also pose dangers. At such turning points, history is unforgiving to those who do not turn to meet the demands placed upon them.

THE CONDITION OF THE LABOR MARKET AND THE PREVALENCE OF INDUSTRIAL UNIONISM

There are deeply ingrained habits of mind in the field of education that have been deposited by history but that no longer are warranted by the circumstances that exist today. Each of them significantly affects the quality of teaching and learning, but none of them is shaped by that consideration so much as the labor market in which they unfold. There is an unacceptable tolerance of unskilled and unsuccessful practitioners in our field. The concept of an "emergency credential," for example, is unheard of elsewhere. Unqualified individuals, once identified, are not permitted to begin or continue practicing either in the operating room or in court, but this happens regularly in public schools. Our willingness to let this occur creates substantial barriers to increasing the rate of compensation for educators based on straightforward principles of labor supply and demand. Nor is there evidence of high levels of compensation in other professional fields in which the compensation is not linked, directly or indirectly, to significant productivity and successful outcomes for consumers such as students and their families.

Richard Kahlenberg's (2007) biography of Albert Shanker brilliantly details how important collective bargaining was to the public sector beginning in the

1960s; it also suggests that Shanker knew even then how increasingly inconsistent industrial unionism would be with a genuine profession of teaching. The requirement that obliges unions to defend the least effective of its members, single salary schedules that preclude differentiated compensation in almost every instance, a rigid seniority system that produces so many dysfunctional school district practices, and the chasm that exists between teaching and administration are all examples of how progressive innovations of one era are converted over time into a series of unanticipated consequences.

What Is to Be Done?

We are caught on the horns of a dilemma. An autonomous institutional capacity to create the required conditions for professionalism in teaching and education is necessary. However, society and government have not granted authority to educators adequate to the mission but rather have assigned to the state itself the functions and power situated elsewhere in the case of traditional professions. This has led some observers to argue that relief resides in a complete deregulation of teacher training and preparation and of teacher licensing. “Leave it to the market” are the watchwords of this point of view. We see the situation differently. To be sure, reforms that reduce the consequences of bureaucratization—delay, inefficiency, and nonresponsiveness—are always in order. However, the state holds the potential for jumpstarting the larger change required here through a process of resource allocation and legislative and administrative judgments. This is particularly true because the market in education remains nascent and immature. To realize this potential through harmonizing official judgments and actions in pursuit of the professional grail requires focus that must be supplied at the outset by purposeful regulation. We argue in the following section that there is evidence of this direction to be found in California, although we hasten to add that it should not be overstated.

California’s Credentialing System: An Attempt at Coherence

California is one of a minority of states with a professional standards board that oversees educator licensure. The oldest professional standards board for teachers in the country, the California Commission on Teacher Credentialing (CCTC) is a nineteen-member board with fifteen voting members appointed by the governor, representing education stakeholders

and members of the public. Following a decade and a half of reform work shaped by three key pieces of legislation,¹ the CCTC implemented major changes in the system of standards, assessments, and requirements governing teacher licensure. The prior “system” of credentialing requirements and procedures was considered cumbersome and lacking in coherence for candidates, preparation programs, and policymakers. Requirements for preparation in reading, health, technology, and other areas were mandated by the state legislature, incorporated in a piecemeal fashion over a period of several years, and treated independently rather than as part of an overall strategy for teacher development. In 1998, the CCTC and the California legislature enacted a comprehensive reform intended to bring coherence to this troubled area of state policy. The new system was developmental in nature, following what were considered to be the natural stages and phases of learning to teach, and included the following elements (Sandy, 2006).

SUBJECT MATTER PREPARATION

Prospective teachers begin their preparation to teach with an intensive development of subject matter knowledge. They complete a baccalaureate degree in a major that meets state standards or pass a test demonstrating their mastery of subject matter content. Individuals seeking a credential to teach elementary grades are required to pass a test of content knowledge, pursuant to No Child Left Behind. All candidates are also required to pass a basic skills proficiency test prior to earning their first teaching credential.

PROFESSIONAL PREPARATION

Pedagogical training is built on a subject matter foundation and focuses on effective teaching of content. Just under 100 colleges, universities, and school districts in California are accredited by the CCTC and offer student teaching-based (“traditional”) preparation programs or alternative certification programs. Close to 20,000 multiple subject, single subject, and special education teachers are credentialed in California each year (CCTC, 2007a). As teachers move into the profession, their second phase of preparation is grounded in mentored practice.

STANDARDS

All phases of learning to teach (subject matter preparation, professional preparation, induction, assessment) are governed by standards developed and informed by the profession, and maintained and enforced by the CCTC. Subject matter and professional preparation standards for teachers

are explicitly aligned with the standards and frameworks that govern the K–12 public school curriculum, textbooks, and assessments. All routes into teaching are held to the same standard.

ASSESSMENT OF TEACHING COMPETENCE

Formal assessment of teaching performance is conducted in valid and reliable ways prior to a teacher beginning professional practice. The 1998 reform package added a Teaching Performance Assessment (TPA) to the array of required licensure tests, which include the California Basic Educational Skills Test, the California Subject Examination for Teachers, the Reading Instruction Competence Test (RICA), and formative assessments such as the California Formative Assessment and Support System for Teachers, which are used during induction. TPAs are embedded in professional preparation programs, administered by sponsors of preparation programs, and governed through accreditation procedures based on standards adopted by the CCTC.

LICENSE TO BEGIN TEACHING

Teachers who complete subject matter preparation and professional preparation, pass all required tests, and demonstrate through a TPA their readiness to begin teaching earn a preliminary (Level 1) credential. This authorizes the holder to serve as a teacher of record while completing a required induction program.

INDUCTION INTO TEACHING

A professional (Level 2) credential is conferred once a teacher has served for two years as a teacher of record and completed a program of beginning teacher induction. Induction in California is built on the Beginning Teacher Support and Assessment Program, established as a voluntary professional development program by the state in 1992, and includes structured mentoring and formative assessment of teaching practice.

ONGOING PROFESSIONAL DEVELOPMENT

In 2006, the California legislature removed specific programmatic renewal requirements for the teaching credential from statute. There is an expectation that the California Standards for the Teaching Profession

Table 3.1 California's Teacher Preparation and Credentialing System

	<i>Preparation</i>	<i>Credential issued</i>	<i>Assessments</i>	<i>Ongoing professional development</i>
Level 1	<ul style="list-style-type: none"> • Baccalaureate degree • Verification of subject matter competence (program or test) • Multiple program routes into teaching: traditional student teaching program, internship/alternative certification program • All programs held to the same standards, aligned with the California Standards for the Teaching Profession (CSTP) and K–12 student content standards • All teacher education programs include a valid teaching performance assessment 	<p>Preliminary Teaching Credential</p> <p>Authorizes service as a teacher of record during required induction program</p>	<ul style="list-style-type: none"> • California Basic Educational Skills Test or approved alternative • California Subject Examination for Teachers • Reading Instruction Competence Assessment • Teaching Performance Assessment 	<p>No programmatic requirements for licensure renewal</p> <p>Expectation that the CSTP will guide ongoing professional development</p>
Level 2	<p>Induction program of one- or two-year duration that includes the following:</p> <ul style="list-style-type: none"> • advanced curriculum preparation • formative assessment and support • frequent reflections on practice • individualized induction plan • application of prior learning <p>Based on the CSTP</p>	<p>Professional Teaching Credential</p> <p>Authorizes unrestricted service as a teacher of record</p>	<p>Formative assessment instruments approved by the state</p> <ul style="list-style-type: none"> • California Formative Assessment and Support System for Teachers • The New Teacher Center Formative Assessment System 	

(CCTC, 1997) will guide professional development over the course of a teacher's career and that specific areas of need for professional development will be determined by individual teachers and their employers.

Elements of the new system that distinguished it from prior state practice include the introduction of valid and reliable performance assessments, new teacher induction, a two-tiered credential structure with required preliminary (Level 1) and professional (Level 2) credentials, and use of a single set of standards to guide all facets of preparation and routes into teaching. All aspects of the system are keyed to the California Standards for the Teaching Profession (CCTC, 1997), which align to various national standards, including the National Board for Professional Teaching Standards, as well as the state-adopted curriculum standards for students (Sandy, 2006). Standards and assessments developed as a result of this reform effort represent the first steps toward orienting one state's credentialing system to the elements of the *instructional core* (Cohen, Raudenbush, & Loewenberg Ball, 2003; Elmore, 2007). We argue in the next sections of this chapter that this orientation is essential to the professionalization of teaching and that through its credentialing system California has taken fundamental steps in this direction.

Focus on the Instruction Core

If one of the challenges to measuring teacher quality at the point of entry into the profession is the absence of a truly professional culture, another is the absence of clarity about what constitutes effective teaching. States have approached this question from a variety of starting points spanning a continuum that runs from professional consensus on one end to student performance on the other. The professional consensus end of the continuum defines teacher quality based on agreements among practicing teachers and researchers about the domains of knowledge and skill thought to be important to the job of teaching. This approach is rooted in a mixture of theory and practice, and the notion that if sufficient numbers of experienced practitioners and education researchers reach agreement about a definition of quality and effectiveness, then that definition has some level of validity. At the other end of the continuum, teacher quality is defined in terms of student performance. This approach is grounded not in consensus or perception about the quality or effectiveness of teachers, but in the outcomes of teaching as defined by student learning gains (NRC, 2001). Neither approach enjoys the universal support of the research or broader teaching community, in part because neither adequately accounts for the complexity

of teaching and learning. Cohen et al. (2003) articulate a theory of instruction that begins to capture this complexity:

Instruction consists of interactions among teachers and students around content, in environments. . . . “Interaction” refers to no particular form of discourse but to teachers’ and students’ connected work, extending through days, weeks, and months. . . . Instruction is a stream, not an event, and it flows in and draws on environments, including other teachers and students, school leaders, parents, professions, local districts, state agencies, and test and text publishers. . . . [T]eaching is not what teachers do, say or think. . . . Teaching is what teachers do, say and think with learners, concerning content, in particular organizations and other environments, in time. (pp. 122, 124)

Elmore (2004) expands on this framework in what he defines as the core of educational practice: “How teachers understand the nature of knowledge and the student’s role in learning, . . . how these ideas . . . are manifested in teaching and class work. The ‘core’ also includes structural arrangements of schools . . . student grouping practices, teachers’ responsibilities for groups of students, as well as processes for assessing student learning and communicating it to students, teachers, parents” (p. 8).

Ultimately, our understanding of teacher effectiveness must take into account the wisdom of practice and research as well as impact on student growth. If we accept Cohen et al.’s (2003) definition of instruction as interaction, the implications for measurement of teaching quality are significant and profound. Paper-and-pencil tests of content and pedagogical knowledge cannot effectively examine a prospective teacher’s management of instruction thus defined. A careful examination of teaching performance focusing on the instructional core is essential. Measurement of teaching quality that supports teaching as a professional endeavor must recognize and adequately account for this complexity. The TPA systems that have been developed in California hold great promise in their ability to measure teacher facility with the instructional core and establish norms for instructional practice that are fundamentally professional in their orientation.

California’s Teaching Performance Assessments

One of the most ambitious and innovative aspects of California’s recent credentialing reform effort is the requirement that all institutions that prepare teachers in the state embed within their programs a state-approved TPA that meets standards of validity and reliability. Sponsors of teacher preparation programs may implement a state-designed assessment or design their own system and submit it for

review and approval by the CCTC. Two systems have been developed and adopted for this purpose: the California Teaching Performance Assessment (CA TPA), designed for the CCTC by ETS, and the Performance Assessment for California Teachers (PACT), designed by a consortium of California colleges and universities, including all campuses of the University of California, Stanford University, and several campuses of the California State University. Both systems evaluate evidence from intern or student teaching practice to obtain a measure of teacher quality for licensure. Although both systems are designed to inform a decision about candidate readiness to begin teaching, the PACT system is scored in a manner that provides a diagnostic score report to candidates as well as aggregated data that sheds light on the strengths and weaknesses of preparation programs.

The PACT consists of a Teaching Event (TE), which is administered by all PACT users, and Embedded Signature Assessments (ESAs), which are assignments or sets of related curriculum-embedded and standards-based assessments customized within individual programs. For the TE, candidates respond to a series of queries organized around a unit of instruction or a learning segment that occurs during student teaching. Candidates provide the following:

- a description of their teaching context
- a planning overview and a rationale for a focused, multilesson learning segment
- one or two videotapes of instruction from these lessons, with commentary describing the instruction that took place each day and in these videotaped excerpts
- an assessment plan and an analysis of samples of student work from one assessment given during the learning segment
- written reflections on instruction and student learning

This collection of teacher and student artifacts is based on a Planning, Instruction, Assessment, Reflection, and Academic Language model in which candidates use knowledge of students' skills and abilities—as well as knowledge of content and how best to teach it—in planning, implementing, and assessing instruction (Pechone & Chung, 2006).

The CA TPA is structured differently than the PACT system and includes four distinct tasks that are completed by candidates over a period of several months during their teacher education programs:

- Task 1 requires candidates to write short constructed responses to a number of scenarios that relate to content-specific and developmentally appropriate pedagogy.
- Task 2 requires candidates to connect instructional planning to student characteristics for academic learning.

- Task 3 relates to classroom assessment. Candidates are provided a set of prompts to guide the selection and planning of an assessment, the implementation of the assessment, and an analysis of evidence of student learning collected with the assessment.
- Task 4 focuses on academic lesson design, implementation, and reflection after instruction. Candidates are provided a six-step set of prompts to guide the planning, implementation, and analysis of a lesson. Candidates submit information on a class and two focus students, information on classroom environment and an instructional plan, adaptations to the plan for the focus students, a videotape of teaching, an analysis of the lesson and student learning, and reflection on the lesson (CCTC, 2003; Sandy, 2005).

Both systems treat teaching as a complex, multilayered endeavor and require prospective teachers to attend to the content and the students they are teaching. In this attention to complexity, California's TPAs embody an approach to measuring teacher quality at the point of entry into teaching that is fundamentally consistent with the instructional core. Further, the TPA, in the context of California's credentialing system, addresses in some way most of the hallmarks of a profession set forth at the beginning of this chapter.

VALIDATED FRAMEWORK OF KNOWLEDGE AND SKILL AND A DISTINCTIVE WAY OF SEEING

One of the early steps taken by the CCTC in building the framework for the TPA was to conduct a job analysis and construct Teaching Performance Expectations (TPEs) that represent the knowledge and skill deemed by educators, researchers, and stakeholders to be essential for effective teaching (CCTC, 2001). TPEs were built and validated through this process and became the essential knowledge and skill base assessed on TPAs. The validation process involved representative samples of credentialed teachers contributing to and evaluating the TPEs. Although the TPEs did not percolate up from teachers in an organic way, they did have to meet the consensus of professional educators in order to be adopted by the state for assessment purposes. In addition, they incorporate the CSTP as a framework, adding detail for assessment purposes while maintaining a link to standards that were generated by the California teaching profession.

AUTHORITATIVE NORMS AND PROTOCOLS

Both the PACT and the CA TPA follow a pattern that incorporates planning, analyzing the context of teaching, adapting instruction based on learning needs, assessing students, reflection, and application. This process

Table 3.2 Performance Assessment for California Teachers

Purpose	To evaluate a candidate's teaching based on teaching practice and to provide evidence for a credential recommendation.
Structure	Includes two assessment strategies designed to capture both the formative development of teachers' knowledge and skills throughout the year and a summative assessment during student teaching.
<i>Embedded Signature Assessments</i>	Each institution using the PACT system develops signature assessments to complement the Teaching Event and to provide evidence of candidate readiness to begin teaching.
<i>Teaching Event</i>	The Teaching Event addresses four categories of teaching: planning, instruction, assessment, and reflection. Candidates plan and teach a three-to five-lesson learning segment; videotape and analyze student learning; and reflect on their practice, organized around the following five tasks:
1. Context for learning	<ul style="list-style-type: none"> • Provides evidence of candidate's knowledge of students • Assesses ability to identify and summarize important factors related to candidate's students' learning and the school environment
2. Planning instruction and assessment	<ul style="list-style-type: none"> • Assesses candidate's ability to organize curriculum, instruction, and assessment to help students meet the standards for the curriculum content and to develop academic language related to that content • Provides evidence of candidate's ability to select, adapt, or design learning tasks and materials that offer students equitable access to curriculum
3. Instructing students and supporting learning	<ul style="list-style-type: none"> • Illustrates how candidate works with students to improve their content skills and strategies during instruction • Provides evidence of candidate's ability to engage students in meaningful content-specific tasks and monitor their understanding
4. Assessing student learning	<ul style="list-style-type: none"> • Assesses candidate's ability to select an assessment tool and criteria that are aligned with his or her central instructional focus, student standards, and learning objectives • Assesses candidate's ability to analyze student performance on an assessment in relation to student needs and the identified learning objectives • Assesses candidate's ability to use this analysis to identify next steps in instruction for the whole class and for individual students
5. Reflecting on teaching and learning	<ul style="list-style-type: none"> • Provides evidence of candidate's ability to analyze his or her teaching and students' learning to improve teaching practice
Scoring	The Teaching Event is scored by trained assessors using multiple rubrics. Assessors may be faculty, K–12 teachers, administrators, mentors, supervisors, induction support providers, or other education professionals.

SOURCE: PACT Consortium, 2007.

Table 3.3 California Teaching Performance Assessment

Purpose	To assure that teacher candidates have the knowledge, skills, and abilities required of a beginning teacher in California public schools.
Structure	Four increasingly complex performance tasks embedded in teacher education coursework and supervised field experience, administered and scored by program sponsors.
<i>Task 1: Subject-specific pedagogy</i>	<ul style="list-style-type: none"> • Assesses candidate's ability to understand how information about students is used to (1) prepare instruction in particular content areas and (2) develop and adapt student assessment plans based on the content being taught • Candidate responds to case studies rather than actual students.
<i>Task 2: Designing instruction</i>	<ul style="list-style-type: none"> • Assesses ability to <ul style="list-style-type: none"> ○ identify and analyze student characteristics and plan instruction based on student learning needs ○ develop and adapt instruction for English learners and students with other special needs • Candidate works with students in field placements to complete this task.
<i>Task 3: Assessing learning</i>	<ul style="list-style-type: none"> • Assesses candidate's ability to <ul style="list-style-type: none"> ○ plan student assessments based on learning goals ○ administer assessments and evaluate student learning ○ adapt assessment for English learners and special needs students ○ reflect on assessment • Candidate works with students in field placements to complete this task.
<i>Task 4: Culminating teaching experience</i>	<ul style="list-style-type: none"> • Assesses candidate's ability to integrate strands of the previous three tasks, focusing on <ul style="list-style-type: none"> ○ planning instruction and assessment based on the learning needs of students and the content to be taught ○ adapting instruction and assessment for English learners and special needs students ○ teaching and administering assessment, analyzing instruction and assessment results to plan further instruction ○ reflecting on the lesson, instruction, learning results, and his or her effectiveness as a teacher • Candidate works with students in field placements to complete this task and submits a video recording of the classroom instruction.
Scoring	Assessors are trained in the use of rubrics. Each task is scored on its own rubric, and scores range from a high of 4 to a low of 1. Candidates must score at least 12 across all tasks and no lower than 2 on any task. Assessors may be teacher education faculty, K–12 teachers, administrators, mentors, supervisors, induction support providers, or other education professionals.

SOURCE: California Commission on Teacher Credentialing, 2007b.

represents a set of norms or protocols that organize a teacher's approach to—or way of viewing—teaching and learning in a consistent manner. What is consistent is the analytical framework. What is dynamic and ever changing is the situation in which this framework, and ultimately teaching expertise, is applied. Teaching differs from other professions in this dimension. In the professions of law, accounting, and medicine there are often strongly recommended steps to take in practice, and others not to take. Although this is true in education at a macrolevel, the nature of instruction as interaction offers teachers greater latitude than is available in other professions.

AUTONOMOUS INSTITUTIONAL AUTHORITY TO DEFINE CORE ELEMENTS OF THE PROFESSION

California is ahead of many other states with regard to this aspect of professionalism. The licensing function has been delegated to a professional standards board (the CCTC) rather than to the lay members of the State Board of Education. The standards board enjoys a majority of practitioners (teachers and administrators) in voting seats, alongside representatives from the school boards and the public. The members are appointed by the governor, however, and the board operates as an agency of state government. Unfortunately, this political orientation reduces the commission's independence and autonomy as a professional standards board. The governing board for the State Bar, in contrast, is made up of representatives elected by its members. Politics are present in any organization, but the ability of the members to select their representation and the ability of a representative board to operate without undue deference to political or governmental authority are critical aspects of professionalization.

CONTINUUM OF PRACTICE, EXPERIENCE, AND SPECIALIZATION WITHIN SYSTEMS OF SUSTAINED MENTORING, COACHING, AND PEER REVIEW

California's credentialing system is organized in such a manner that each phase of preparation leads into the next and builds on the former. With fine tuning and intensive focus on transitions, the system has the potential to provide an effective continuum of mentored practice for entering teachers. The TPA is expected to yield diagnostic information that new teachers can use to tailor and focus the mentoring they receive as they begin practice. The use of seasoned teachers as mentors and coaches for the incoming workforce has the potential to alter the dominant culture of isolation. What is still much needed in California, however, is a radical departure from the practice of assigning the newest teachers to the most

challenging classrooms as well as ongoing support and professional development of teachers over the life of their careers.

MARKETPLACE JUDGMENTS REGARDING QUALITY

We argue earlier in this chapter that if teaching were a true profession, then the outcomes of teaching (student achievement) would be a critical variable in determining teacher quality. California currently lacks data systems that enable it to match teachers to their students and examine “value-added” in any systematic way. Such data systems are under construction and may well enable policymakers, parents, teachers, administrators (i.e., the market) to examine the outcomes of teaching in ways that inform our collective understanding (judgments) of teacher quality in the future. As these data systems come online, we will have the opportunity to examine the predictive validity of TPAs as indicators of a prospective teacher’s potential to positively impact student learning. If a positive relationship between performance on a TPA and performance in the classroom (student outcomes) can be established, then TPAs will provide a sound basis for evaluating teacher quality at the point of entry into the profession and will frame the dimensions of teacher quality that should be fostered over the course of a teacher’s career.

California’s credentialing reforms have been in implementation for only a few years. TPAs have been developed and piloted and will be required for licensure beginning in 2008, and it is too early to tell what impact these assessments will have on teacher quality and effectiveness. The implementation of TPAs at scale in California, where approximately 20,000 novice teachers are licensed annually, will enable a whole new generation of research to emerge. The predictive validity of TPAs with respect to student learning gains is one area of research that will be critical to develop.

What Might a More Coherent System Look Like?

Early indicators regarding the success of California’s reform efforts suggest that the system could be further streamlined. First, there continue to be too many tests required at the point of entry into teaching. We argue that with the California High School Exit Examination, the SAT and ACT series, and college placement tests in reading and mathematics, the rest of the education system incorporates enough testing of basic reading and writing skills to support removal of the basic skills test from the testing program for teachers. Further, California led the nation in the late 1990s in establishing a freestanding test of teachers’ ability to teach reading, a

reform that brought needed attention to a critical area of teacher competence. Currently 98% of the teachers who take the RICA pass the test, suggesting that the test does not serve as a screen of any kind (CCTC, 2007b). This could be a result of a low passing standard, though the CCTC and its testing contractor conduct standard-setting studies in a manner consistent with industry norms. High pass rates could also be a direct result of preparation for the test, insofar as all candidates are required to take coursework and pass the test. We argue that the TPAs could (and already do) include a particular focus on a prospective teacher's ability to teach reading and that RICA could be eliminated as a required, stand-alone test. The state should focus its testing program for teachers on subject matter and pedagogy, and reduce the costs and burdens of an overbuilt testing program on teachers.

Second, there are needless redundancies in the system, particularly in the new teacher induction program, that need to be tightened. The state should rely more on instructional performance and effectiveness than highly structured requirements and paper-driven accountability systems. A shift to performance, however, will require longitudinal data systems and further development and use of value-added instruments to assist in judgments of teacher quality and effectiveness. These data systems are currently under development and expected to be online within the next three to five years.

Third, for all of its innovation in establishing and linking licensure to a *learning to teach* continuum, California's licensing system does not recognize or support teacher development beyond the early years of teaching. Indeed, there are critical aspects of teacher professionalism and professional development that fall outside the scope of the state licensing board and should fall instead to the emerging "profession." The state can serve as a proxy, in the absence of an independent and autonomous body with the authority of the profession, and use its regulatory and legislative authority to establish conditions that support the emergence of teaching as a profession. How might the licensing system be structured such that teacher competence is recognized and teacher authority is expanded over time? We propose for consideration and dialogue a career ladder for teachers that includes levels of certification driven by a single standard, or vision of teacher competence, and incorporates and moves beyond early preparation and practice. Levels of credentialing within this structure might include the following:

Level 1: An Intern Credential is issued based on completion of a baccalaureate degree and demonstrated knowledge of the subject matter to be taught, authorizing service as an intern² for candidates who choose this route into teaching. Interns should be required to do sheltered teaching, paired with a master teacher in the classroom, with a developmental plan for increasing classroom responsibilities.

Level 2: An Associate Teaching Credential is issued based on completion of a teacher preparation program and passage of a teaching performance assessment, authorizing service as a teacher of record during a two- or three-year induction period.

Level 3: A Professional Teaching Credential is issued based on completion of an induction program, passage of an advanced teaching performance assessment, and student performance results based on multiple measures, authorizing service as a teacher of record with no restrictions. This credential should inform the district-based tenure decision.

Level 4: A Teacher Leader Credential is issued based on specialized training and assessment of leadership knowledge and skill (e.g., National Board for Professional Teaching Standards certification), authorizing service in a recognized coaching or mentoring capacity (e.g., induction support provider, subject matter pedagogy coach).

Level 5: A Master Teacher Credential is issued based on nomination, selection, and training for role, authorizing service in a recognized or new supervisory or leadership capacity (e.g., department or grade level chair, staff developer, and instructional leader).

Such a structure would help move toward professionalization by recognizing higher levels of teacher competence and providing recognized opportunities for teachers to serve in leadership capacities in schools. Currently, these roles do not exist in formal ways. Although teachers currently serve as induction support providers and master teachers, the credential structure remains essentially flat, and advanced levels of performance are neither recognized nor privileged.

Actions that lawmakers could take, which fall outside the scope of the teacher standards board but which, if implemented, would represent additional milestones toward establishing a professional culture in teaching, include conducting annual evaluation of teachers, including measures based on student performance and administrator/mentor/peer review; lengthening the teacher tenure track beyond two years; undertaking compensation reform with a link to professional and instructional effectiveness results; embracing a rational approach to teacher assignment; and increasing interstate portability of teaching credentials. One of the most significant steps the state could take would be to delegate authority for teacher licensure to a fully independent and autonomous standards board. The state should move in this direction in concert with implementing the other changes called for here to ensure adequate, professional accountability for student success in the system.

Conclusion

We have endeavored here to place teacher quality in the context of a larger transformation of professional practice and the struggle of an occupation to become a profession. We submit that both are necessary to meet the central challenges of public education in our country. Professionalizing the occupation of teaching, we believe, is calculated to improve the quality of

instruction and accelerate student achievement in ways that the perennial search for a “silver bullet of educational reform” will never match. Assuring informed professional judgment in our classrooms through teachers capable of diagnosing and solving the instructional problems presented by their students is the aim. Structuring the process to assess teacher quality and to assign novice teachers appropriately at entry is a crucial step in the professional direction. We have argued that the California licensing system, imperfect as it is, has taken an important stride with the Teaching Performance Assessment that creates a glide path, built on previous reforms, for accelerated progress in the direction we seek. If this proves the case, then managing the quality issue effectively at entry could precipitate other changes critical to the overall enterprise of professionalizing the occupation of teaching. In doing so, it could provide the decisive momentum we need to develop capacity at scale to implement an effective standards based system of education for all of our students.

Notes

1. Senate Bill 1422 (Chapter 1245, Statutes of 1992, Bergeson), Senate Bill 2042 (Chapter 548, Statutes of 1998, Alpert and Mazzoni), and Senate Bill 1209 (Chapter 517, Statutes of 2006, Scott).

2. In California, and under the provisions of No Child Left Behind, an intern may serve as the teacher of record while he or she completes preparation for a full credential. Interns hold a baccalaureate degree, have met the state’s basic skills and subject matter requirements, and are supervised and mentored while in these programs.

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