

Chapter 2

Historical Context of Teacher Assessment and Evaluation

Abstract In this chapter, we present a brief history of reforms in the United States pertaining to education in general, and to teacher education specifically, beginning with *A Nation at Risk*. Fueled by poor performance on national assessments such as the National Assessment of Educational Progress (NAEP) and international comparisons of students such as the Programme for International Student Assessment (PISA), the *No Child Left Behind Act* ushered an era of increasing standardization in education, with frequent testing of students and other measures of student achievement. Teachers and teaching were also under scrutiny. Studies such as the 1995 and 1999 TIMSS video studies examined common teaching practices in mathematics and science in various countries and revealed that mathematics teaching in the United States focused on procedural understanding and the acquisition of skills, while higher performing countries emphasized conceptual understanding. Various reform movements are subsequently discussed. Criticisms of teacher education and historical recommendations for changes in teacher preparation are presented, including the recommendation for the development of “signature pedagogies” in teacher education. We conclude with how these developments set the stage for the policy of the mandated edTPA.

Keywords Teacher performance assessment • Professionalization • TIMSS • PISA • Teacher preparation • Education policy • *No Child Left Behind* • edTPA

Teacher assessment and preparation are fraught with questions about how teachers should be evaluated and according to what standards, and in the U.S., as in other countries, these standards are grounded in particular political and historical contexts. In 2002, the U.S. Department of Education asserted that “every child deserves highly qualified teachers” (n.p.). *The Secretary’s Fifth Annual Report on Teacher Quality* (Dept. of Education 2006) specified that “in order to be considered highly qualified under *No Child Left Behind* (NCLB), teachers must hold

a bachelor's degree, have full state certification, and demonstrate competency in the core academic subjects they teach" (p. 1). Therefore, public school educators' qualifications have historically been validated by the authority of the state (and sometimes city) in which they will practice, which certifies as teachers those who possess the knowledge and skills necessary to facilitate student learning. More recently, however, the private sector has assumed a greater role in teacher education and certification via partnerships between the government and private entities, whether they be philanthropies (Bill and Melinda Gates Foundation, The Fordham Foundation), not-for-profit agencies or for-profit companies such as Pearson.

In broad terms, highly qualified teachers approach methodology and curricula deliberately in order to optimize student engagement and learning. Regardless of the subject matter, high-quality teaching is cognitively, intellectually and developmentally appropriate for every student involved. It prepares students for the next level, whether that may be the next unit in the curriculum or the next grade level, and it also challenges all students to achieve beyond their comfort zone. Effective teaching is culturally appropriate and is characterized by mutual respect as well as a good rapport between teachers and students who engage each other in the learning process. Scholars and policymakers argue that there is a positive correlation between student achievement and teacher knowledge and qualifications (Darling-Hammond and Young 2002; Hill et al. 2005; Morris et al. 2009). However, these qualifications for teachers do not guarantee that high-quality teaching will take place in each and every classroom (Hiebert and Morris 2012). There are affective qualities and characteristics that only some otherwise qualified teachers have, making them successful with groups of students that other equally qualified teachers cannot reach. These individual qualities and skills are often attributed to personality, but they also reflect attitudes and perspectives about students and the teaching profession that can be cultivated through inquiry-based teacher learning (Levy et al. 2013), self-reflection (Giovannelli 2003), mentoring (Spangler 2013), and developmental approaches to teacher supervision (Danielowich and McCarthy 2013). A related issue is the difference between improving teaching (what happens during classroom interactions with students) and improving teachers, such as advanced degrees, more coursework, and other proxy measures (Hiebert and Morris 2012; Lewis et al. 2012), which we discuss later in this chapter.

According to Darling-Hammond (1997) and Darling-Hammond and Young (2002), there is a direct correlation between high quality teacher preparation and high quality teaching, and therefore what teachers learn in their preparation programs play a major role in their future success in classrooms and schools. For instance, they provide the opportunity to explore teachers' developing perspectives on many of the issues that educators deal with daily in their classrooms, such as teaching in diverse sociocultural and socioeconomic contexts. As many scholars have indicated for several decades (Banks 1993; Noguera 1995), the great majority of teachers in the US are White, monolingual, and middle class (Rogers 2013), while the great majority of students performing below grade level throughout the country are from different racial, ethnic, and socioeconomic backgrounds (Darling-Hammond and Young 2002). Like Delpit (2006), other scholars describe well-intentioned and professionally qualified colleagues who simply do not know

their students nor the communities in which they taught (Garmon 1998; Jones 2005; Milner 2005; Pollock 2004). For decades, resource and asset-based pedagogies such as culturally relevant and responsive pedagogies have been demonstrated to be more effective than mainstream approaches in which learning is assumed to be “neutral” and disconnected from students’ backgrounds (Ladson-Billings 1994; Gay 2000). Therefore, although the definition of teacher effectiveness is increasingly measured according to students’ scores in standardized exams (Achieve 2009), teachers must know and be able to incorporate the context of their students’ learning, or eliminate the possibility of true high-quality teaching.

Efforts to delineate high-quality teaching, and to professionalize teaching in the U.S., have resulted in the development of standards for teacher certification and licensure, alongside the problem of how to assess whether these standards for teachers have been met. In Roth’s (1996) prescient analysis of standards in teacher education, he labeled the current trends in teacher education at that time “the Era of Standards” (p. 242), and discussed the purposes of and problems with standards. Roth’s (1996) discussion of problems with paper-and-pencil test as measures of what teachers can do mentions the early shift to performance-based assessments, to better measure whether performance-based standards have been met, and to “evaluate more accurately what teachers actually do” (p. 254). Roth cited several problems with the operationalization of performance assessments, noting the formidable nature of their design and implementation, and raised the question of who assesses candidates’ work, since faculty assessing their own candidates might have a conflict of interest. While many view standards and exams as strategies that will strengthen the professionalization of teaching, that the private sector is playing such a significant role in addressing these particular problems raises concern among those who view the encroachment of the private sector as ultimately deprofessionalizing educators. This chapter serves to situate our discussion of the intersections between professionalization, performance assessment, policy, and privatization in historical context in the United States. Section “[Educational Reform and Teacher Performance Assessments: A Historical Perspective](#)” draws connections between current reform movements in education and their policy predecessor, *A Nation at Risk*, in framing students’ achievement, particularly in math and science, as a key to the nation’s economic progress and future international status. The urgency of this report translated into large-scale studies that informed educational projects, particularly in math and science, and eventually culminated in the more recent policy initiatives such as *No Child Left Behind* (NCLB) and *Race to the Top*. Section “[The Impact of National and International Studies on Policy in the U.S.: Toward Performance Assessment in Teacher Education](#)” makes the connection between these studies and the increasing presence and influence of accrediting bodies such as the National Council for the Accreditation of Teacher Education (NCATE), including their role in promoting performance assessment in education, particularly in teacher education, as a way to evaluate teachers’ performance in the classroom. Sections “[Issues in Connection to the Performance Assessment of Teachers](#)” and “[Connections to Research](#)” addresses some of the benefits and challenges of performance assessment in teacher education,

particularly with regard to the preparation needed to engage meaningfully with students in diverse sociocultural contexts, as exemplified by a prominent study of performance assessment in the field of social studies and other approaches to culturally relevant and critical education.

Educational Reform and Teacher Performance Assessments: A Historical Perspective

Many of the modern reform movements in education can be traced to *A Nation at Risk: The imperative for educational reform* (National Commission 1983), which warned that the economic competitiveness of the U.S. was at risk due to the low quality of education in the United States. Reforms in connection to teacher assessment, such as the nationally available *Teacher Performance Assessment* (edTPA) by the Stanford Center for Assessment, Learning, and Equity (SCALE) and its predecessor, *Performance Assessment for California Teachers* (PACT), are part of the larger historical trend in the U.S. of reform in K-12 public education generally, and teacher education specifically.

Although major events such as the launching of *Sputnik* in 1957 have sparked calls for educational reform across the nation in the 19th and 20th centuries (Kliebard 2004), we mainly begin our historical discussion with the 1983 publication of *A Nation at Risk* (National Commission 1983) due to the specific challenge it posed to the nation regarding the need for greater rigor in the curriculum and higher quality teaching (Bracey 2003). We look back briefly to the international mathematics and science studies that were conducted after *Sputnik* that were used to fuel the findings in *A Nation at Risk* (ANAR), and that evolved into the highly influential *Trends in International Mathematics and Science Study* (TIMSS). The seeds for many of the current initiatives in education and teacher assessment can be traced back to the findings of the international mathematics and science studies, the results of the National Assessment of Educational Progress (NAEP), and the Programme for International Student Assessment (PISA), along with ANAR. These initiatives include the standards movement and efforts to professionalize teaching (Clabaugh and Rozycki 1986) as well as documents such as *A Nation Prepared*, (Task Force 1986) which discussed teacher education and professionalization in light of ANAR. More recently, *No Child Left Behind* and *Race to the Top* added new requirements and policy mandates for students and teachers. In addition to yearly testing requirements for students, NCLB mandated that only “highly qualified” teachers be hired after the enactment of the law. Highly qualified teachers possess a bachelor’s degree, state certification, and proof that they know the subjects they teach. *Race to the top*, in addition to mandating the Common Core State Standards, required states to implement teacher evaluation systems using the tests mandated by NCLB. Further, NCLB created opportunities for privatization as private ventures attempted to prepare test preparation materials, and guide schools and districts in how they could best meet the new requirements of NCLB (Ravitch

2013) and *Race to the Top*. A discussion of these studies follows, with specific connections to current initiatives made later in the chapter. We begin with the history of the TIMSS studies.

What is now known as the *Trends in International Mathematics and Science Studies* (TIMSS) began in the 1960s as the “International Mathematics and Science Studies.” In the mid-1960s, likely fueled by Sputnik, the *First International Mathematics Study* (FIMS), and the *First International Science Study* (FISS) were both conducted. These initial studies initially were highlighted in *A Nation at Risk*, although their original purpose was not to influence policy, but rather to make international comparisons. These studies were not conducted at the same time, and had very different designs. FIMS consisted of an international survey of 8th grade and 12th grade students, mostly of the latter, with the purpose of identifying factors that influence student achievement. FISS was part of a larger international survey of six subjects (that did not include mathematics). The purpose of FISS was to determine knowledge of scientific facts and methods, and attitudes toward science, as measured by an international survey of 5th, 9th, and 12th graders. Although the results of this study were heavily drawn upon by the authors of *A Nation at Risk*, it should be noted that both had important design flaws, and readers were cautioned about generalizations and conclusions made from the studies. Not surprisingly, these studies intensified interest in international comparison in mathematics and science, which led to the *Second International Mathematics Study* (SIMS), and the *Second International Science Study* (SISS) (Medrich and Griffith 1992).

SIMS and SISS were conducted in the early 1980s, and were more ambitious attempts to use what was learned, both in terms of results and methodology, on their predecessors. Similar to their predecessors FIMS and FISS, these were separate studies with different methodologies and purposes, and were conducted at different times. Like FIMS, SIMS surveyed 8th and 12th graders mathematics knowledge, but also added questionnaires about student background and attitudes; teacher training, experience, and attitudes; and school demographics and other features. Similarly, SISS included a student achievement test, but added additional instruments, similar to SIMS. Again, there were issues with sample sizes, ages of participants, and other problems across countries for both studies, and conclusions were to be made with caution. Nonetheless, *A Nation at Risk* drew from these and other studies (Medrich and Griffith 1992).

At this stage, prompted by ANAR, the Task Force on Teaching as a Profession was established, which was comprised of governors, union leaders, chief state school officers, a teacher educator, among other stakeholders. Among the stated purposes of the Task Force were to assert the economy as problematic, assert education as the solution to economic problems in the U.S., and to “reaffirm that the teaching profession is the best hope for establishing new standards of excellence as the hallmark of American education” (Task Force 1986, p. 7).

The report of the Task Force (1986), entitled *A Nation Prepared: Teachers for the 21st Century* was a response to and extension of the portions of ANAR that specifically addressed the professionalization of teachers. This document delved into the profession of teaching, and how to improve it, noting that the plan for

improvement had looked to the professionalization of other professions, such as medicine, and reported a plan with several elements, many of which still resonate with current initiatives and policy debates. A recommendation to create a National Board for Professional Teaching Standards to establish high standards for teaching, to restructure schools to provide a professional environment for teachers, to restructure the teaching force to create “Lead Teachers,” and to develop a professional curriculum for graduate schools of teaching were all part of the report. In addition to the above were recommendations to improve teacher salaries, incentivize “minority youngsters” to enter the teaching profession, and to require a bachelor’s degree for all teachers, prior to entering a graduate school of teaching. With this renewed interest in teaching, the international mathematics and science studies continued, but with an additional focus on examining teaching of mathematics and science in different countries.

In 1995, the highly influential *Third International Mathematics and Science Study* was conducted. In addition to student mathematics and science assessments for students in fourth and eighth grade (and a small number in twelfth grade) the study included data on “schools, curricula, instruction, lessons, and the lives of teachers and students to understand the educational context in which mathematics and science teaching takes place” (NCES, n.d.). The most influential aspect of the TIMSS 1995 study was the Videotape Classroom Study, which examined eighth grade mathematics lessons in Germany, Japan, and the U.S.

One of the most important and influential findings of the videotape analysis was that there were certain features of the teaching of eighth grade mathematics that were common to each country (Stigler and Hiebert 1999). For example, mathematics lessons in Germany might be summed up as “developing advanced procedures,” in Japan, as “structured problem solving, and in the U.S. as “learning terms and practicing procedures” (Stigler and Hiebert 1999, p. 27). The lessons in the U.S. focused on procedural understanding and the acquisition of skills, while higher performing countries emphasized conceptual understanding and problem solving skills (Stigler and Hiebert 1999). Japan also incorporated lesson study, a form of collaborative professional development, (which will be discussed in greater detail in Chap. 3) that was highlighted by Stigler and Hiebert (1999) in their report of the TIMSS 1995 video study. At this point in the historical chronology, it should be mentioned that in 1998 California passed a law that mandated performance assessments for teacher certification (Hafner and Maxie 2006; Okhremtchouk et al. 2009; Pechione and Chung 2006), which will be discussed in greater detail later in the section.

During 1998–2000, an expansion of the TIMSS 1995 study was conducted, known as the TIMSS 1999 video study. The report for TIMSS 1999 describes how the 1999 study built upon the 1995 study. In particular, the major unexpected finding from the 1995 study, that teaching has distinct qualities in different countries, was used as a hypothesis for the 1999 study (Hiebert et al. 2003). The 1999 study also included more high-achieving countries, allowing for the examination of the possibility that high-achieving countries shared a particular set of approaches to teaching. This study examined videotapes of eighth grade lessons in both mathematics and science, in seven countries: Australia, the Czech Republic, Hong Kong, the Netherlands, Switzerland, Japan, and the U.S. (Hiebert et al. 2003).

An important result of the TIMSS 1999 video study is that there was no single feature of teaching that all of the high-achieving countries shared. An interesting result did, however, emerge. As part of this study, researchers compared the percent of problems presented to students that focused on procedures and that focused on conceptual understanding and making connections between concepts and procedures, which are now a crucial part of the CCSSM and the edTPA, as we discuss later in greater depth. Most countries, including the U.S., incorporated a relatively small percent of problems that afforded students the opportunity for conceptual understanding. The exception was Japan, where more than half of the problems had conceptual focus. What was important was not the percent of conceptual problems that were presented to students, but how the problems were implemented in the classroom. In the U.S., conceptual problems were not implemented as intended. That is, even though a problem had the potential for students to make connections among procedures and concepts, and was written for this purpose, that teachers in the U.S. intervened in such a way as to reduce the problem to simply practicing procedures, by telling the students what to do, or by giving a formula. By this measure, virtually all problems given to students in the U.S. as measured by the TIMSS 1999 video study required only procedures because of how they were implemented, even if some percentage of the problems required conceptual understanding as written (Stigler and Hiebert 2004). As a result of the TIMSS 1999 video study, recommendations to the field were made in order to improve student outcomes in mathematics: to focus on improving teaching itself, not teachers; to make efforts to change the culture of teaching; and to build a base of knowledge for teachers so that there are examples of good teaching for teachers to reference (Stigler and Hiebert 2004).

In addition to the video studies, there have been and continue to be international assessments and surveys as part of TIMSS, now referred to as *Trends in International Mathematics and Science Study*, which have been conducted every four years since 1995. At this writing, data are being collected for the TIMSS 2015 study. The studies that take place every four years are student assessments at grade four and eight, and sometimes at grade 12. The only video studies that have been conducted to date have been in 1995 and 1999.

Other highly influential studies are the *Programme for International Student Assessment* (PISA), which is an international comparative study conducted by the Organisation for Economic Co-operation and Development (OECD), and the National Assessment of Educational Progress (NAEP), which is a national study conducted in the U.S. PISA measures 15-year old students' reading, mathematics, and science literacy across 70 countries (OECD 2012). NAEP, which is referred to in the U.S. as "the nation's report card," (U.S. Department of Education 2009) is a periodic assessment of fourth, eighth, and twelfth grade students in mathematics, reading, science, writing, the arts, civics, economics, geography, and U.S. history. Results of the PISA study (OECD 2012) are consistent with poor TIMSS results. Students in the U.S. are better at procedures than concepts and applications. Although NAEP results in mathematics and reading have indicated a general trend upward, this trend is not increasing as quickly as officials would like.

ANAR also addressed teaching, and its professionalization, making recommendations to “improve the preparation of teachers” and to “make teaching a more rewarding profession” (Recommendation D). One part of this recommendation stands out in particular, which asserts that those preparing to teach should meet high standards, to “demonstrate aptitude for teaching,” and to be competent in an academic discipline. The recommendation goes on to say that teacher preparation programs should be “judged by how well their graduates meet these criteria” (Recommendation D-1).

As a result of these ongoing studies with poor results for students in the U.S., the early subject-specific standards movement began in the U.S., beginning with mathematics, and followed by English, social studies, and others, standards for learning, teaching, and assessment were established. This movement began with the release of the 1989 National Council for Teachers of Mathematics (NCTM) *Curriculum and Evaluation Standards* which were intended to be “statements of criteria for excellence in order to produce change” (p. 2). The evaluation standards discuss the need for multiple forms of assessment, including performance assessments for students. With the release of the NCTM Professional standards in 1991, which were intended to define the types of teaching that would support the recently released Curriculum and Evaluation standards (NCTM 1989), the mathematics education community established “a broad framework” (p. vii) to guide the teaching of mathematics, guided by a vision of teaching mathematics that is quite different than what most have experienced as students of mathematics. Other content areas followed suit (e.g., NCTE, NCSS) and had an important influence on the standards movement, which will be discussed in much greater depth in the respective content chapters of this work. The following section explores the impact of the abovementioned studies and trends, and examines their impact on teacher education.

The Impact of National and International Studies on Policy in the U.S.: Toward Performance Assessment in Teacher Education

Fueled by poor performance on national assessments such as NAEP, and international comparisons of students and educational systems such as PISA and the TIMSS studies described earlier, the *No Child Left Behind Act* (NCLB 2002) ushered an era of increasing standardization and privatization in education, with frequent testing of students and other measures. A role for the private sector grew for test preparation materials and consultation for meeting NCLB requirements. Many stakeholders had looked back to ANAR, and were concerned about how little had improved. Education was still considered disastrous, or mediocre at best. The sharpest critics of the increasing trend in standardization and accountability have argued that the current auditing culture in education is regulated by, and perhaps even created by, the interests of a testing regime, the language of the learning

sciences, and neoliberal policies and practices (Costigan and Grey 2014; Lipman 2011; Peters 2011; Taubman 2009). Solutions offered by the private sector include curricula and assessments, and the data collection means by which teachers' and students' performance on such assessments would be tracked.

As a result, teachers and teaching have continued to be under scrutiny, beginning with ANAR, with specific findings of the TIMSS 1995 and 1999 video studies seeming to have particular influence over the reform movement. Initiatives in mathematics emphasizing conceptual understanding, and the desire for critical thinking and other higher order skills in English and social studies, suggest that teacher candidates need to become accustomed to a greater focus on concepts, problem solving, and higher order thinking in their teacher education programs. In this context of increased public scrutiny on education, scholars sought to understand how teacher education programs could be more effective at preparing future teachers for the field, recommending collaborative approaches such as lesson study and other forms of communities of practice for improvement of teaching (e.g., Fernandez and Yoshida 2004; Lewis et al. 2012; Lewis and Tsuchida 1998).

For instance, Stigler and Hiebert (1999) recommended several changes for the preparation of teachers in the U.S., emphasizing a change in the culture of isolation that exists in the teaching profession and calling for the incorporation of collaborative approaches such as lesson study for both preservice and practicing teachers. Lesson study, a collaborative approach among teachers to plan, observe live teaching, and reflect collaboratively on observed lessons, in their discussion of the TIMSS video study, and recommend that lesson study be part of teacher education. Other researchers have echoed this call (e.g., Gurl 2010), and Shulman (2005) supports the call for lesson study (alongside the production of exemplary case materials) in his discussion of signature pedagogies for teachers, asserting that the language of lesson study exemplifies the language of signature pedagogies.

In Darling-Hammond et al. (2005) comprehensively examined many aspects of teacher education programs, focusing on the qualities of teacher education programs considered successful in enabling teachers to acquire knowledge, skills, and dispositions that will allow them to be effective. Darling-Hammond and colleagues also discuss the potential for collaborative growth that lesson study or other forms of communities of practice provide developing teachers. Some of these benefits include working with cooperating teachers who facilitate the pedagogical and content-area inquiries of novice teachers. Furthermore, Darling-Hammond et al. (2005) consider all of these approaches equally, as well as identify research that supports the benefits of participation in communities of practice.

Although teacher education scholars explored and developed several approaches, the strategies that stand out in light of current policy are those concerned with performance assessment such as microteaching, and in particular, performance tasks. As described, requirements for performance tasks may be determined by teacher education programs, or follow the model of the PACT assessment as implemented in the state of California. Stated benefits of such assessments include opportunities for analysis of teaching and analysis of student learning (Darling-Hammond et al. 2005), all of which foreshadow the

current structure of the edTPA. Many of these points were made earlier by Darling-Hammond et al. (2001), who emphasize the impact of high quality teachers as the biggest factor in student achievement. These authors survey teacher education programs that are successful in producing teachers who reach high standards with diverse learners. They suggest accountability for teacher education programs in the form of rigorous standards and external quality review from entities such as the National Council for Accreditation of Teacher Education (NCATE), which examines outcomes from teacher education programs, including job placement efforts, practices of graduates, and feedback from graduates and employers about satisfaction with level of preparation (Darling-Hammond et al. 2001).

NCATE also had an evolving role during this time. During the 1980s, accountability was located at the state level, and the states clearly controlled the process of accreditation and certification, although some states had already begun to form partnerships with NCATE. By the end of the 1980s, however, many states had adopted NCATE's standards (Bales 2006). Bales charts the shift in power over who has historically controlled the teacher certification process in the U.S., characterizing control over teacher education as a "long standing tug of war between state and national level policy makers" (p. 395). In 1986, one of the first performance assessments, the Beginning Educators Support and Training (BEST) assessment, was developed in Connecticut to identify areas of growth and guide recommendations for professional development for newly-certified teachers (Denton 2013).

In the 1990s, with the continued rise of large organizations like NCATE, a criticism for the lack of standardization and uniformity arose that focused more on national control through policy changes and mandates, raising questions about teacher quality and accountability in order to improve student achievement (Darling-Hammond 1999; Department of Education 2002; Lewis and Young 2013). In order to maintain federal funding, states began to comply with national mandates by conforming to the specifications of organizations such as NCATE, although this marginalized the needs of local education districts and infringed on the autonomy of teacher education programs (Johnson et al. 2005). Performance assessments such as the BEST were also considered in relation to teacher preparation and certification policies.

Continuing this trend, the 1998 California Law SB 2042 mandated performance assessments for teacher certification in the state of California (Hafner and Maxie 2006; Okhremtchouk et al. 2009; Pecheone and Chung 2006). The Performance Assessment for California Teachers (PACT), a precursor to edTPA, was a response to this law. Teacher education researchers and scholars have opposed generic standardized assessments (Pence and Alvine 2003); however, California education authorities initially contracted with the Educational Testing Service to develop a generic performance assessment instrument to be used for teacher certification in all grade levels and all subject areas; the state also offered teacher education programs the option of developing their own certification performance assessments provided they met state standards for validity and reliability. Drawing on the idea of grounding teacher education in the common experience of planning, teaching and analysis of a "teaching event," which was being developed concurrently by the Connecticut State Department of Education, the Interstate New Teacher Assessment and Support Consortium (InTASC) and the National Board,

12 colleges and universities formed the Performance Assessment for California Teachers in 2001 to develop subject and grade-level specific performance assessments centered around performances of the central components of teaching, avoiding a less meaningful generic assessment (Pecheone and Chung 2006).

More recently, however, accountability in teacher education has taken a different turn, and teacher educators have, in many cases, found themselves in defense of teacher education, or in some cases, rethinking it (Zeichner 2014), against aggressive opponents from both the private (and in some cases public) sectors. One prominent example is the National Council on Teacher Quality (NCTQ), an entity that, unlike NCATE, is comprised of a variety of stakeholders, some of whom are educators (or former educators) but many of whom represent the private sector (NCTQ 2013). NCTQ has publicly placed the blame for low student achievement on teacher education programs, arguing that education scholars and researchers reject in toto the notion that teachers need to be “trained” for the profession. This NCTQ and its reports have enjoyed extensive visibility in the mainstream media. For example, in June 2013, *U.S. News & World Report* released NCTQ’s report, which rates the 1,130 institutions that prepare 99 percent of the nation’s traditionally trained new teachers (p. 1). NCTQ’s claim that teachers are failing because of the reluctance to teacher education as a vocational endeavor (Greenberg et al. 2013) de-emphasizes teaching as an intellectual endeavor, de-skilling and de-professionalizing teachers. On the contrary, education researchers tend to view teacher preparation as a balance between practical and intellectual work (Zeichner 2012). Critiques of the NCTQ report include the fact that many schools of education did not participate due to concerns about the study design and methodology (Fuller 2014). Additionally, as the data were based solely on teacher education department syllabi and websites, with no other empirical or observational research, Darling-Hammond criticized the report as flawed, incomplete, and shockingly inaccurate (Strauss 2013). Nevertheless, NCTQ’s bold claims resonate with current discourses of teacher effectiveness and teacher quality in the increasingly standardized and high-stakes context of *No Child Left Behind* (2002) and *Race to the Top* (US Department of Education) that inform current state and national mandates in teacher certification, especially given its presentation in *U.S. News & World Report*. The edTPA and other elements for greater professionalization of teaching, which have been frequently likened to part of the process of board certification for physicians, has been one of the profession’s responses to this public and policy narrative (Mehta and Doctor 2013).

Issues in Connection to the Performance Assessment of Teachers

In an increasingly high-stakes context, the introduction of performance assessment raises many important questions about what good teaching looks like and how to accurately assess it in the context of practice. To highlight some of these questions

in relation to teacher preparation and assessment in general, we focus on a particular study that examined a performance assessment model as a formative tool for teacher development rather than a high-stakes requirement for initial teaching certification and licensing. In 1993, Wilson and Wineburg's analysis of Teacher Assessment Project (TAP) data about history teachers suggests that even rich performance assessment data pose "irreducible ethical and intellectual dilemmas" about what matters most in effective teaching (p. 762). Their analysis, coupled with continuously evolving research and scholarship on the interconnectedness of knowledge, context, and pedagogy (Wideen et al. 1998), suggests that the process of assessing teachers can be a meaningful venue for ongoing teacher development. But even the rich data yielded by Wilson and Wineburg's study fails to provide definitive answers about whom should pass or fail the assessment. The complex nature of effective teaching, as an interaction between students and teachers of different backgrounds in a variety of contexts, resists high stakes and standardized approaches. Unlike pass/fail evaluative exercises, formative performance assessments can be used to "adapt teaching and learning to meet student needs" (Boston 2002). In the same vein, assessing teachers' performance in the context of their practice, without high stakes repercussions, encourages a "critical self-reflexive practice" (Asher 2007, p. 65) that is most conducive to student achievement.

Wilson and Wineburg's (1993) model proposes a complex process in which teachers engage when planning curriculum and instruction, managing classrooms, and assessing students, and raises open-ended questions about what constitutes effective teaching. However, when assessments become generalized for all teachers, panels of educators must determine whether teachers should pass or fail based on a decontextualized performance. Who will choose the experts for the panels? How might the "ideological inheritance" (Gallagher 1999) of those individuals impact their perspectives on a given teacher's performance? Although these assessments seek to draw out the rich nature of teachers' work and move beyond canonical and definitive notions of content and pedagogy, the presence of external "experts" and the tension of high-stakes evaluation may serve to replicate power structures and privilege certain norms about good teaching.

Wilson and Wineburg (1993) also raise important issues inherent in the assessment of teachers, among them the contrast between conventional practices that have persisted for decades (Cuban 1993) and current methods inspired by constructivist theories of learning (Vygotsky 1978). However, they allude to the representative nature of the sample from which they drew their exercises, assuming, like Berliner (1986), that future studies may reveal emergent patterns among expert teachers. Furthermore, the study is grounded primarily on the educational background of the teachers and their performance in a given series of exercises; the authors do not consider additional factors that may impact the process, such as the context of testing, the cultural background of the teachers and evaluators, or the impact of their prior experience (Ladson-Billings 1999; Nieto 2000; Sleeter 1992, 2009).

Two decades prior to Wilson and Wineburg's (1993) study, the American Association of Colleges of Teacher Education (AACTE) adopted a policy statement, *No One Model American* (1973), that first placed attention to race, difference, and social justice on the national agenda. Yet, as Nieto (2000) notes,

teacher education programs have given little consideration to the growing diversity of classrooms, and “the slow pace of change has resulted in uneven efforts to transform the curriculum, programs, and clinical placements of preservice and practicing teachers” (p. 182). In her review on preparing teachers for diverse student populations, Ladson-Billings (1999) finds that the field of teacher education remains resistant to tackling issues of race, class, gender, and culture in ways that disrupt Eurocentric, middle-class knowledges and practices. Ladson-Billings concludes that few programs engage prospective teachers in the process of addressing dysconscious racism (King 2004). Teachers’ normative expectations, based on White middle class values and beliefs, yield explanations of low achievement that “locate the problem in the children themselves or in their families” (Cuban, as cited in Ladson-Billings 1999). Nieto (2000) proposes three ways in which teacher education programs must develop in order to better prepare teachers to work with culturally and linguistically diverse populations: “take a stand on social justice and diversity; make social justice ubiquitous in teacher education; and promote teaching as a life-long journey of transformation” (p. 182). These ends can be met, she argues, by offering prospective teachers course and fieldwork experiences in which they must challenge deficit notions about students of color and low income students as well as opportunities to “work collaboratively and in a spirit of solidarity” with peers and mentors (p. 186). However, many teacher education programs and policies perpetuate technicist approaches to teaching and leave deficit notions about marginalized students largely unexamined.

To expose some key barriers to these solutions, Milner sheds light on important issues in teaching and learning in the most underprivileged contexts that may be addressed in the formative assessment of teachers by using critical race theory (CRT) to pose race-related questions (Milner 2013). For example, Mr. Barnes, one of the two teachers selected for Wilson and Wineburg’s (1993) study, approaches remediation of a student’s writing by assigning more reading and writing, stating that reading and writing practice will naturally yield proficiency in mainstream and academic writing. Mr. Barnes seems unprepared to meet the needs of low-income students of color who have been shown to underachieve in mainstream learning environments (Morrell 2004; Oakes et al. 2006). In fact, having completed his teacher training and subject matter preparation over 30 years before, Mr. Barnes may propagate (and is perhaps a victim of) the miseducation of children of privilege (Ladson-Billings 1999; Milner 2013). Given that a majority of the teaching force in recent decades has been White, middle class, and middle aged (Lipman 2004), their training may not have prepared them to engage in current debates about learning and diversity (Wilson and Wineburg 1993). If teachers are to be accountable for the achievement of students from all backgrounds, should Mr. Barnes “pass” the assessment? Should teachers like him be penalized for practicing according to their training?

A formative approach to teacher assessment recognizes the need for ongoing dialogue between teachers, administrators, and teacher educators. Although it remains necessary to evaluate teachers’ subject matter competency and pedagogical knowledge for certification and licensure, preservice and in-service assessments are most generative when they engage teachers in the dynamic process of

refining and rethinking their “knowledge-*of*- practice” in the context of their teaching environment (Cochran-Smith and Lytle 1999). In a profession that has historically been constructed as technicist (Cannella 1999), and deskilled by the public’s perception that teaching is simply not that difficult (Ingersoll 2004), it is of paramount importance that teachers be trained and supported in a culture that recognizes the complexity of effective teaching. In keeping with their image of teacher knowledge as “constructed collaboratively by teachers, students, administrators, parents, and academics with the end of locally developed curriculum and more equitable social relations” (1999, p. 274), Cochran-Smith and Lytle might envision assessment as part of a continuum of “inquiry as stance” (p. 288) that will frame schools as “intellectual communities for exploring the social, cultural, and political dimensions of teaching and learning over time” (p. 285). They would insist on addressing the many interconnected challenges of constructing knowledge and practice in their own classrooms with their students. From this perspective, assessment serves little purpose if it does not enable teachers to cultivate relationships with students (Cammarota et al. 2012; Valenzuela et al. 2012), improve their sociopolitical and cultural understanding of pedagogy (Paris 2012), and contribute toward the development of a critical and inclusive curriculum in an increasingly multicultural and global society (Sleeter 2009).

Connections to Research

While teacher candidates’ preparation for the field will certainly be significantly impacted by the implementation of a new and nationally normed performance assessment, some elements of the edTPA are informed by prior research. There are several findings of the TIMSS video studies, and highlighted by PISA and NAEP, that can be directly linked to the requirements of the edTPA and other current reforms. As stated earlier, the focus in mathematics classes in the U.S., as opposed to higher achieving countries, is on procedural skills at the expense of concepts and connections to real-life applications. The edTPA in secondary mathematics, for example, places an emphasis on conceptual understanding and problem solving, in addition to procedural fluency. In fact, only the lowest rubric scores can be earned if a submitted lesson only focuses on procedures. Two of the five planning rubrics, and three of the five teaching rubrics, require a focus on concepts in addition to procedures. As TIMSS 1995 and 1999 found, Teachers in the U.S. are seen to intervene when students struggle with difficult problems, and since students were ultimately told what to do by their teacher, the implementation of problems that potentially dealt with concepts became procedural. The rubric that requires candidates to “deepen student understanding” might be an effort to remedy this tendency, since candidates are required to elicit and build on student responses. The common core state standard for mathematical practice that requires students to “make sense of problems and persevere in solving them” might also be a direct response to this finding.

Almost a decade ago, Hiebert et al. (2007) suggested a framework for teacher preparation programs that focuses on analyzing one's own teaching in terms of student learning. This framework involves four "skills," which include identifying goals for instruction, determining what students learned by examining their responses, identifying whether the teaching facilitated learning, and proposing improvements to teaching. These skills are consistent with the notion of improving teaching instead of teachers (Hiebert and Morris 2012), and are also reminiscent of the requirements of the edTPA planning for instruction and assessment, teaching, and analyzing teaching effectiveness.

The literature reveals a relatively new focus on the improvement of teaching as opposed to the improvement of teachers (Hiebert and Morris 2012; Lewis et al. 2012). Although for decades the requirements to become a teacher have been increased, such as grades, advanced coursework, advanced degrees, and other external measures, Hiebert and Morris (2012), argue that it cannot be assumed that acquiring characteristics of good teachers will mean that good teaching is taking place, and that note the "strange" assumption "that knowledge for teaching should be held in the heads of individual people rather than in artifacts" (Morris and Hiebert, p. 93). The edTPA might be viewed as an attempt to assess the teaching of a preservice teacher, rather than assess the characteristics of the teacher. Lewis et al. (2012) assert that lesson study improves teaching, but also improves teachers, by increasing their knowledge of content and pedagogical approaches.

In the complex context discussed above, this chapter sought to highlight chronologically some of the current debates in teacher education and assessment in the past several decades since ANAR in order to frame the discussion for the synthesis of how professionalization, performance assessment, policy, and privatization have become increasingly interrelated in the field of teacher education. In subsequent chapters, we consider what drives the privileging of performance assessments as a mandate for initial teacher certification and the extent to which collaborative approaches such as lesson study and other communities of practice have been considered. We then examine how the standardized implementation of mandated performance assessment impacts teacher education in general and in the content areas, and its relationship to privatization.

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