

Falling Flat: Certification as an Insufficient Indicator of Teacher Quality

Patricia Hanna

The Ohio State University
hanna.200@buckeyemail.osu.edu

Belinda Gimbert

The Ohio State University
gimbert.1@osu.edu

This policy analysis examines recent debates on teacher quality in light of the Renee v. Duncan (2010) decision, the Congressional response to the ruling through the Continuing Resolution bill, H.R. 3082 §163, and President Obama's Blueprint for Reform. Using equity as a framework for the teacher quality debate, the authors explore policy configurations of teacher quality with particular emphasis on inspecting the teaching certificate as a valid and reliable indicator of teacher quality. Additionally, the authors review educational research highlighting the strengths of alternative certification programs and consider how these strengths might be used to leverage policy-making that targets teacher quality reform.

Please contact the first author for all correspondence regarding the content of this article.

Introduction

This policy analysis examines teacher quality in light of recent judicial activity targeting the equity aims of the No Child Left Behind Act of 2001. Using educational equity as a lens, the authors dissect the *Renee v. Duncan* (2010) decision and Congress's response to that holding in the Continuing Resolution Bill, H.R. 3082. Finding that the central debate presented by these two policies hinges definitions of highly qualified teachers on those teachers' pathways to certification, the authors explore configurations of teacher quality in educational policy with particular emphasis on examining the teaching certificate as a valid and reliable indicator of teacher quality.

Specifically, the authors problematize a stringent reliance on certification as a superior indicator of teacher quality. Instead, the authors explore the following:

1. Given the history of alternative certification in the United States, what dimensions of quality do alternative pathway teachers uniquely offer the teaching profession?
2. Given the current status of alternative certification in the United States, what dimensions of quality do alternative pathway teachers uniquely offer the teaching profession?
3. Given the depth and breadth of the roles and responsibilities of the professional educator, how well does the certificate measure teacher quality?
4. How can educational research and policy assist in the development of better constellations of teacher quality?

Applying Bardach's (2005) approach to policy analysis, the authors define the policy problem by using equity as a lens to discuss recent case law and educational policies pertaining to configurations of highly qualified teachers. Next, the authors assemble evidence in favor of non-traditionally prepared teachers by conducting two literature reviews highlighting the strengths of non-traditionally prepared teachers as well as the strengths of non-traditional preparation programs in light of comparative educational research. Subsequently, the authors evaluate current policies that hinge highly qualified status on full-state certification by discussing the measurement limitations of the teaching certificate and highlighting strengths of non-traditional teacher preparation programs as they pertain to teacher quality. Finally, the authors offer policy recommendations relevant to constellations of teacher quality in state and federal policy.

Background of the Problem: The Current Policy Landscape of Teacher Quality

In fall of 2010, the United States Court of Appeals for the Ninth Circuit issued a decision in *Renee v. Duncan* that captured the attention of school leaders and teacher preparation programs. Citing various portions from the No Child Left Behind Act (NCLB) of 2001¹ and the Secretary of Education's subsequent regulations intended to make clear the guidelines for certifying highly qualified teachers, the court sought to disentangle the federal statute and the federal regulation, illuminating their contradictory language. The key controversy in this case from California concerned policy configurations of the *highly qualified teacher* in state level statutes and state and federal level regulations and whether or not they met the threshold of teacher quality required by NCLB.

¹ 20 U.S.C. § 6301

Since its implementation in 2002, NCLB has charged states receiving federal funding to ensure the quality of their teachers, defining a minimum threshold of quality as: having obtained full state certification, having passed a rigorous state licensure exam, and having obtained a baccalaureate's degree or its equivalent in the content area to be taught². Within the original statute, Congress included that alternatively certified teachers, or teachers who had achieved full state certification through a program other than a traditional four-year teacher preparation program at an institution of higher education, could be considered highly qualified under NCLB. NCLB specified among its criteria that a teacher is highly qualified if, "the teacher has obtained full State certification as a teacher (including certification obtained through alternative routes to certification)."³ It is precisely the Congressional intent behind full state certification obtained through alternative pathways to licensure that came into dispute in the *Renee v. Duncan* (2010) decision. In the case, students, parents, the Californians for Justice Education Fund (CFJ), and the California Association of Community Organizations for Reform Now (ACORN) brought suit against the federal Department of Education for its regulations, alleging that the regulations violated Congressional intent under NCLB. Appellants' hinged their argument on distinctions between two words in the language of the federal statute as they pertain to full state certification, "has obtained," and two words as they pertain to full state certification in a federal regulation issued by the U.S. Department of Education, "progress toward."⁴

It is necessary to mention that appellants not only opposed the U.S. Department of Education's federal regulation, but also challenged California's state level regulation that resembles the federal guidelines. California's state regulation allows a teacher to satisfy quality thresholds under NCLB as long as that teacher "is currently enrolled in an approved intern program for less than three years *or* has a full credential."⁵ While California's regulation imitates the federal by including both traditionally prepared and alternative pathway teachers, appellants argued that it deviates from the quality threshold of NCLB by equating interns with teachers who have obtained full state certification.

In *Renee v. Duncan* (2010), appellants argued that federal and state regulations contradict NCLB by allowing a separate lower threshold for teacher quality than that mandated by Congress. They asserted that such regulations overstep Congressional authority by granting highly qualified status to a teacher who is participating in an alternative certification program but has not yet achieved full state certification. The federal regulation grants highly qualified status to such teachers provided that they:

1. Receive high-quality professional development;
2. Participate in a program of intensive supervision;
3. Assume functions as a teacher only for a specified period of time not to exceed three years; and
4. Demonstrate satisfactory progress toward full certification as prescribed by the State.

² 20 U.S.C. § 7801

³ 20 U.S.C. 7801 (23) A

⁴ 34 C.F.R. § 200.56(a)(2)(ii)(A)(4)

⁵ Cal. Code Regs. tit. 5, § 6110(2)

Similarly, the state level regulation imitates the federal and confers highly qualified status upon a teacher who is “currently enrolled in an approved intern program for less than three years.”⁶ Thus, appellants

object[ed] to characterizing as a “highly qualified teacher” an alternative-route teacher who has not yet obtained full state certification, but who merely “demonstrates satisfactory progress toward full certification.” Appellants contend[ed] that such teachers are not ‘highly qualified’ within the meaning of § 7801(23) [NCLB]. (*Renee v. Duncan*, 2010)

Concluding that teachers who are making satisfactory progress toward full state certification through participation in alternative certification programs fail to meet the teacher quality threshold of NCLB, appellants sought judicial relief. According to appellants, teachers who are in route to full state certification through an alternative certification pathway are disproportionately hired to teach in their California public schools, resulting in equity issues as students at such schools are disproportionately being taught by teacher interns who lack full state certification.⁷

The Ninth Circuit Court of Appeals agreed with the appellants. It ruled that the federal regulation was “invalid” (*Renee v. Duncan*, 2010) and that the state regulation clearly indicates teachers who are currently participating in an approved intern program are not fully state certified, and therefore do not meet quality thresholds established by NCLB. Such a holding was of primary interest to students, parents, teachers, administrators, institutions of higher education, alternative certification programs, and policy makers for at least three reasons.

First, as a ruling from the Ninth Circuit Court of Appeals, *Renee v. Duncan* (2010) constituted binding primary authority for every state in the Ninth Circuit: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington (Statsky, 1999; Aquila, 2008). Thus, any of the aforementioned states that emulated the federal regulation in their own state level regulations for teacher quality were now out of compliance with NCLB. The perils of such a situation would produce tremendous human resources pressure on local schools as they faced the threat of federal funding penalties for employing teachers that did not meet NCLB’s quality thresholds.

Second, as a Ninth Circuit Court of Appeals case, *Renee v. Duncan* (2010) carried highly persuasive value in all other federal appellate circuits (Statsky, 1999). In the absence of any other federal appellate level decisions, courts in other jurisdictions that may have resided over similar disputes at equal or lower court levels were likely to rely heavily on *Renee v. Duncan* in deciding their own cases. The persuasive value of *Renee v. Duncan* would have then carried the potential

⁶ Cal. Code Regs. tit. 5, § 6110(2)

⁷ According to evidence presented in court, “forty-one percent of interns in California teach in the twenty-five percent of schools with the highest concentrations of minority students. In contrast, two percent of interns in California teach in the ten percent of schools with the lowest concentration of minority students. Interns are similarly concentrated in schools serving low-income communities, with sixty-two percent of interns teaching in the poorest half of California’s schools” (*Renee v. Duncan*, 623 F.3d 787, 2010)

to affect schools not only in the Ninth Circuit, expanding the threat of noncompliance and loss of federal funding to schools across the country.

Third, because *Renee v. Duncan* (2010) had been decided by a federal appellate court, only one forum remained for ongoing disputes about this issue: the United States Supreme Court. Because *Renee v. Duncan* represented a crucial equity issue in education, a dispute over a federal statute and a subsequent federal regulation, and a decision with acute ramifications for all educational stakeholders, there was an increased likelihood that the Supreme Court would accept the case (Cordray & Cordray, 2008). In such a scenario, the Supreme Court's ruling would have been binding primary authority for every state, resulting in a landslide of teacher quality compliance issues, particularly in high-need and hard-to-staff urban and rural schools.

However, in a controversial move, Congress quietly intervened by inserting a piece of legislation into a finance bill during the late 2010 continuing resolution sessions to avoid government shut down (Affeldt, 2010; Chorneau, 2011; Ebner & Hauss, 2011; Strauss, 2010). The legislation altered NCLB's definitions of teacher quality to match those of the 2002 federal regulation that the court struck down in *Renee v. Duncan*. When the continuing resolution bill passed in December, 2010, the new definition of highly qualified teacher became:

A "highly qualified teacher" includes a teacher who meets the requirements in 34 CFR 200.56(a)(2)(ii), as published in the Federal Register on December 2, 2002. This provision is effective on the date of enactment of this provision through the end of the 2012–2013 academic year.⁸

After the continuing resolution became law, numerous organizations⁹ signed letters of protest to Congress, alleging that the new definition of highly qualified teacher violated the original intent of NCLB, failed to protect the most vulnerable student populations from being taught by the least qualified teachers, and did not represent the will of the people (Affeldt, 2010; Chorneau, 2011; Ebner & Hauss, 2011; Strauss, 2010). In addition to registering these complaints, organizations such as the National Education Association and the American Association of Colleges for Teacher Education called for Congress to reverse the changes made to definitions of highly qualified teachers in the continuing resolution bill (Anderson & Kusler, 2010; Ebner & Hauss, 2011).

In response to such adverse reactions, the Chairman of the Senate Committee that oversees education issued a statement declaring that "There is broad, bipartisan agreement among members of Congress and the Obama administration that it is the intent of Congress for alternative-route teachers to be considered highly qualified, consistent with the regulation that has been in place for several years" (Strauss, 2010). The Chairman also indicated that the changes to NCLB's definitions of highly qualified teacher were temporary solutions to the policy conundrum created by *Renee v. Duncan* (2010). Moreover, he emphasized the urgency of developing a more comprehensive solution to address definitions of the highly qualified teacher in the re-authorization of the Elementary and Secondary Education Act (ESEA). He stated,

⁸ Continuing Resolution, H.R. 3082 §163

⁹ For a list of organizations, see Ebner & Hauss, 2011

“Maintaining current practice is a temporary solution, and underscores the need to act quickly and reauthorize ESEA early in the next Congress” (Strauss, 2010).

At first glance, it is tempting to reduce the policy conflicts presented in the *Renee v. Duncan* (2010) decision, the Congressional response in the continuing resolution bill, and the protests that ensued to polarized arguments about the validity, credibility, and quality of alternatively certified teachers and the programs that prepare them. However, to arrive at such a conclusion is to bypass the opportunity that these policy conflicts present: the opportunity to interrogate anterior conceptions and configurations of teacher quality in state and federal policy. The justices who ruled in *Renee v. Duncan* pointed to this opportunity when they stated that:

In adopting NCLB, Congress decided that teachers with “full State certification” are, in the aggregate, better teachers than those without such certification. We recognize that it is debatable whether Congress was correct in deciding that teachers with “full State certification” are in fact better than teachers without such certification...but that is not for us to decide. (2010)

Such a declaration captures the sentiments expressed by both the Senate committee and the organizations that have protested Congress’s decision to bestow highly qualified status upon alternative pathway teachers who are in progress toward full licensure. In light of such conflicts, a key question emerges: What criteria will decide what constitutes teacher quality?

Answers to this question have indisputable impacts on schools and educational leaders. While propositions for improving anterior configurations of teacher quality are not new, recommendations have emphasized rigorous teacher preparation¹⁰ and attempts to isolate key teacher level variables that impact student achievement as primarily measured through standardized testing.¹¹ Despite these ardent pursuits, educational research on teacher quality yields mixed results, and consensus about how to improve nuances of teacher quality remains obscured. One item, however, seems clear: the current debate about teacher quality pivots on certification as a paramount indicator of teacher quality. We submit that current political debates must move beyond certification and into new territories that better measure the explicit skills and practices indicative of quality teaching and learning. The proceeding analysis sheds light on the insufficiency of the teaching certificate as an indicator of teacher quality.

We first establish an analytical framework of equity. Doing so allows us to situate the teacher quality conflict within a policy lens capable of revealing the gravity of its implications. Next, we engage scholarly literature about alternative pathway teachers from both a historical and a contemporary perspective. Then, we interrogate the certificate as a valid mechanism for measuring teacher quality. In doing so, we seek to articulate the risks involved in policies that rely too heavily on certification as an indicator of teacher quality.

¹⁰ See American Association of Colleges for Teacher Education, 2009; Darling-Hammond & Bransford, 2005; Darling-Hammond, 2006; Darling-Hammond, 2010a; Gimbert, Cristol, & Sene, 2007; Wineburg, 2006

¹¹ See Boyd, Goldhaber, Lankford, & Wyckoff, 2007; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Croninger, Rice, Rathbun, & Nishio, 2007; Darling-Hammond, 1999; Dee & Cohodes, 2008; Ferguson & Brown, 2000; Hanushek & Rivkin, 2007; Hanushek & Rivkin, 2010; Imig & Imig, 2006; Rice, 2003

Defining the Problem: Equity and the Role of Effectiveness in Teacher Quality

NCLB directly connected equity in education with equitable access to quality teaching by mandating that schools receiving federal funding hire only highly qualified teachers on and after academic year 2002-2003, and ensure that all teachers achieve highly qualified status by academic year 2006.¹² NCLB leaves no doubt about the crucial role that quality teaching plays in equitable educational opportunity and attainment. Yet, attempts to assess the inherent equity of a political situation require careful consideration. In order to distill key notions of equity applicable to the policy analysis at hand, we turn to Stone (2002) and canonical case law for guidance.

Equity is a political construct that deals with distributions of goods or resources, and education is arguably both. Although the current political climate may be exacerbating what has always been a blurry line between education as a private good and education as a public good (Levin, 1987; Labaree, 1997), since the common school movement and the implementation of compulsory attendance laws, a basic education has historically been preserved as a public good legitimized through legally constituted rights to its access (Tyack, 2003). As a public good, equal distribution of educational resources is a central policy issue.

Stone (2002) pointed out the challenge that disputes about distribution present, noting the myriad definitions of equity that result from the unique subject positions of recipients of a good or resource. Such an illustration highlights the conflicts involved in distribution disputes: access to resources and recipients' notions of fairness. In light of such conflicts about access and fairness in the distribution of resources, Stone (2002) suggested there are three fundamental considerations that require attention in order to analyze a policy conflict about equitable distributions: (1) the perspective of the recipients, (2) the nature of the item being distributed, and (3) the process of distributing that item. Addressing each of these items proves fruitful for highlighting how the teacher quality dispute is in fact a controversy about equity.

In *Renee v. Duncan* (2010), appellants positioned themselves as the recipients of public education. Their primary complaint pivoted on unequal distribution of a crucial educational item, highly qualified teachers. Following NCLB and citing full state certification as the benchmark for assurances of teacher quality, appellants grieved the large number of interns who teach in their schools and noted that their lower income districts disproportionately hire such interns. Their grievance sought to ensure that their schools were staffed with the same high quality, fully licensed teachers as that of children in wealthier districts.

Moreover, to illustrate how the teacher quality debate revolves around issues of equity, we turn to Stone's (2002) assertion that attempts to correct for inequities often involve efforts to redistribute the items in question. According to Stone, one common strategy for redistribution is to broaden the "boundaries of the item", making it more inclusive (p. 49). Stone elaborates that "Expanding the definitional boundaries of the item is always a redistributive strategy, because it calls for using the more narrowly defined item to compensate for inequalities in a larger sphere" (p. 49). The statutes and regulations under contention in *Renee v. Duncan* (2010) and the continuing resolution bill clearly represent such an attempt to broaden the definition of a highly qualified teacher and make it capable of including an alternative pathway intern who has not yet

¹² 20 U.S.C § 6301 et seq.

obtained full state certification. Thus, the teacher quality debate satisfies Stone's (2002) equity framework: it is a policy conflict that deals with the distribution of an educational resource, highly qualified teachers, and the policies and processes that produce and define configurations of teacher quality.

Additionally, a brief case law comparison solidifies how equity provides the best lens for interpreting the issues at stake in the teacher quality debate. In *Brown v. Board of Education of Topeka* (1954), the Supreme Court ruled that segregation based on race, even when all other educational resources are distributed equally, constitutes a deprivation of equal educational opportunity. It reasoned:

Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other "tangible" factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe that it does. (*Brown v. Board of Education of Topeka*, 1954)

Such a statement has direct connections to the teacher quality issues presented in *Renee v. Duncan* (2010). In *Brown v. Board of Education of Topeka* the court placed heavy emphasis on all other educational resources being equally distributed and still concludes that segregation based on race alone constitutes a violation of equal educational opportunity. It can be argued that the court ruled differently when, as the appellants in *Renee v. Duncan* assert, the distribution of at least one educational resource, highly qualified teachers, was not being apportioned equally. Arguably, teachers are a tangible resource in the educational environment, and the equal educational opportunities standard set forth in *Brown v. Board of Education of Topeka* suggests that equal access to such resources is a vital component of a child's right to an equal educational opportunity. The current federal education administration would seem to concur. In *A Blueprint for Reform* (2010), the U.S. Department of Education has recognized that equal access to quality teaching is crucial to educational reform, declaring that it will "call on states and districts to track equitable access to effective teachers and principals, and where needed, take steps to improve access to effective educators for students in high-poverty, high-minority schools" (p. 5).

Finally, in order to complete our analytical framework, we must clarify how we conceptualize the term *highly qualified teacher*. Discussions of teacher quality quickly result in a quagmire of semantic debates. In attempting to converse about teacher quality, are we talking about teacher effectiveness vis-à-vis gains in standardized test scores? Are we talking about dispositional attributes capable of leveraging student interest? Are we talking about technology skills, programs of preparation, or credentials? We suggest that teacher quality is all these things and likely more. Current trends seek to replace notions of teacher quality with notions of teacher effectiveness, arguing that teacher quality is a nebulous term that lacks operational capacity. While the term teacher effectiveness may be more suggestive of measurable characteristics, there is also a danger in allowing teacher quality to be entirely subsumed by teacher effectiveness. The danger is one of collapsing the expertise, skills, roles, and responsibilities of the professional educator into a solitary measure of quality: gains in standardized test scores. Such a move results in an overly simplistic reduction of the teaching profession that fails to fully capture realms of teacher quality not represented by student performance on standardized tests. Therefore, we retain the notion of teacher quality, and we recognize teacher effectiveness as one dimension of it. In taking such a stance, we seek to shed light on additional dimensions of teacher quality that may be capable of providing more holistic assessments of quality in teaching and learning.

Analysis

Having thus positioned the teacher quality debate within a framework of equity in education, we now turn toward the bedrock of our analysis. First, we consult literature that provides favorable perspectives on non-traditional pathways to teaching, acknowledging the unique dimensions of quality that alternative pathway teachers have historically brought to the profession. In doing so, we aim to create speculation about the certificate as an accurate indicator of teacher quality. Second, we invite comparative educational research into dialogue with current trends in alternative licensure programs. We hope that such dialogue proves useful for stimulating fresh thinking about the unique advantages of alternative teacher preparation programs, particularly vis-à-vis recruitment. Finally, we explore the nature of the teaching certificate in an effort to critique its capacity for measuring teacher quality. Following our analysis, we conclude with policy recommendations and implications for educational research.

Historical Perspectives on Alternative Pathways to Teacher Certification

In the United States, alternative pathways to full teacher certification developed in tandem with shifts in educational policy and prognostic warnings of teacher shortages from educational research. Over the past thirty years, quintessential policy documents and initiatives such as *A Nation at Risk*¹³, the *Goals 2000: Educate America Act*¹⁴, and the *No Child Left Behind Act of 2001*¹⁵ emphasized the important role of securing quality teachers to affect evasive gains in student achievement (Chifeng, Sindelar, Denslow, Dewey, & Rosenberg, 2007; Darling-Hammond, 2010a; Dial & Stevens, 1993; Gatlin, 2009; Labaree, 2010). Concurrently, findings from educational research began to warn of impending teacher shortages due to retirement, attrition, increasing student enrollments, and insufficient recruitment into the profession (Committee on the Study of Teacher Preparation Programs in the United States, 2010; Feistritzer, 1993; Henke, Chen, Geis, & Knepper, 2000; Hussar, 1999; Johnson, Birkeland, & Peske, 2005). In partial response to the intersection between escalating calls for accountability in teacher quality and the approaching shortage of qualified teaching candidates, states began to develop non-traditional pathways to teacher certification. It was hoped that alternative pathways into teaching could alleviate the human resources pressures placed on schools and assuage teacher shortages by attracting into the classroom high quality professionals from outside of education.

Feistritzer (1993) explained the primary rationale for states' initial support of alternative pathways to licensure, stating, "As the threat of looming shortages of teachers grew, some states saw alternative routes for certifying teachers as a way of getting more teachers certified more quickly" (p. 19). In fact, since the inception of alternative pathways to licensure, 48 states have embraced some form of a non-traditional pathway into teaching (National Center for Alternative Certification, 2010). In part, this proliferation of certification pathways has in fact opened the teaching profession to individuals who received their initial career training in a field other than education. Historically, such individuals have represented career changers and second career individuals with substantial professional experience outside of the classroom.

¹³ National Commission on Excellence in Education. (1983). *A Nation at Risk: The Imperative for Educational Reform*.

¹⁴ Goals 2000: Educate America Act. (1993-1994). 103rd Congress. Public Law Number: 103-227

¹⁵ 20 U.S.C § 6301 et seq.

Given the historical proliferation of alternative pathways into teaching for professionals who received their initial career preparation in a field other than education, it becomes important to consider what educational research has revealed about the unique dimensions of quality that career changers and second career individuals bring with them into their new careers as teachers. Understanding what second career educators uniquely have to offer is crucial for informing dimensions of teacher quality that such individuals bring to their professional roles and responsibilities. In seeking to shed light on the beneficial characteristics and skills unique to second career teachers who participate in alternative pathways to licensure, we hope to expand conceptualizations of teacher quality. Such expansions may create a space for recognizing how policies that exclude such individuals from highly qualified status may work against equity aims in education.

Previous findings have highlighted the unique attributes of career changers and second career individuals, suggesting the advantageous nature of their content expertise, real world professional experiences, and maturity in comparison to traditionally prepared first career teachers (Chambers, 2002; Dill & Stafford-Johnson, 2002; Mayotte, 2003; Ng & Thomas, 2007; Powers, 2002; Tigchelaar, Brouwer, & Vermunt, 2010). Mayotte summarizes these assets stating, “In the move to teaching, career switchers often bring an articulated sense of mission and agency, a strong sense of commitment, maturity and professionalism” (p. 681). Chin and Young’s (2007) research supports these findings and adds that among many alternative pathway teachers a dedication to service and educational reform motivates their commitment to teaching. Similarly, research suggests that career changers and second career individuals tend to: (a) be more intrinsically motivated, (b) share a strong passion for their content area, (c) express genuine concern for children, and (d) view teaching as an avenue for making a longstanding contribution to society.¹⁶

As the preceding literature review shows, alternative certification programs have historically attracted second career individuals with distinct dimensions of personnel quality: commitment to children, conviction for building the foundations of society through education, maturity, seasoned professional experiences, content expertise, and rich real-world applications of their disciplines. Such attributes are indicative of the skills and attitudes that make for a quality employee, particularly within the context of globalization. Globalization has pushed the need for instructional strategies that target creativity, collaboration, and problem-solving skills that connect content to real-world applications (Christensen, 2008; Futrell, 2010; Wagner, 2008). Arguably, the dimensions of quality that a second career teacher brings to the classroom would seem to align well with the educational outcomes necessary for success in the 21st century. It reasonably follows that such an individual may bring dimensions of teacher quality into the teaching profession that cannot be evaluated by certification. Meanwhile, a traditionally prepared individual who has earned full state certification but who lacks commitment, initiative, conviction, confidence, and the ability to bring content expertise to bear upon real-world applications betrays notions of teacher quality. To bestow highly qualified status upon such an individual merely because she has earned full state certification contravenes the equity thrust of NCLB, the *Brown v. Board of Education of Topeka* (1954) decision, and even the plaintiffs’ own

¹⁶ See Chambers, 2002; Crow, Levine, & Nager, 1990; Dieterich & Pantan, 1996; Freidus & Krasnow, 1991; Powers, 2002; Proweller, & Mitchener, 2004; Richardson & Watt, 2005; Tigchelaar et al., 2010

argument in the *Renee v. Duncan* (2010) decision. The logical extension of the plaintiffs' argument in *Renee v. Duncan* suggests that somehow full state certification assures students, parents, administrators, and policy makers that a highly qualified individual is serving in the classroom. However, as we have just discussed, certification itself makes no such guarantee, and placing policy bets on teacher quality based on certification may frequently fall short of achieving the equity standard of *Brown v. Board of Education*.

Contemporary Perspectives on Alternative Pathways to Teacher Certification

Having examined the unique dimensions of quality that career changers and second career teachers have historically brought to the teaching profession, we now consider how specific strategies developed by alternative pathway programs secure other unique dimensions of quality. Specifically, we explore how some alternative pathway programs leverage rigorous recruitment strategies, support systems, and meaningful professional development to identify and nurture teacher talent. Such an exploration furthers our claim that quality in teaching is much more multi-dimensional than current policy configurations of teacher quality permit. Moreover, a comparative juxtaposition of the dimensions of teacher quality being developed in alternative pathway programs and the successful teacher quality strategies incorporated in an international context will show how current trends in some alternative pathway programs favorably align with successful teacher preparation strategies used in Finland and Singapore.

However, before proceeding, we find it necessary to acknowledge what early certification researchers were quick to point out: when it comes to both traditional and alternative teacher preparation programs, there is tremendous variation in programmatic rigor. Feistritz (1994) summarized the dilemma well, stating that:

“Alternative certification” has been called everything from a way to save American schools to an oxymoron. The term has been used to refer to every avenue to becoming licensed to teach, from emergency certification to very sophisticated and well-designed programs that certify the growing population of degree-bearing adults with considerable life experience who want to become teachers. (p. 132)

While we take note of such a dilemma, it need not prohibit us from moving forward with our analysis. However, we take this opportunity to clarify that with respect to alternative pathway programs, we move forward by focusing on the strategic initiatives of some alternative pathway programs and how their practices align with the successful strategies of other countries.

First, we submit that regarding teacher recruitment, some alternative pathway programs have better secured quality recruits whereas traditional preparation programs struggle to do so. Comparative educational research may be honing in on a threshold for building quality capacity through teacher recruitment strategies. Specifically, cross-national comparisons suggest that recruiting from the top third of college cohorts secures teachers with the academic expertise to influence gains in student learning (Auguste, Kihn, & Miller, 2010; Darling-Hammond, 2008; Darling-Hammond, 2010b; Hargreaves & Shirley, 2009; Ingersoll & Consortium for Policy Research in Education, 2007). In taking cues from Finland, Darling-Hammond (2010b), elaborates:

Prospective teachers are competitively selected from the pool of college graduates - only 15 percent of those who apply are admitted - and receive a three-year graduate-level teacher preparation program, entirely free of charge and with a living stipend. Unlike the United States, where teachers either go into debt to prepare for a profession that will pay them poorly, ... Finland made the decision to invest in a uniformly well-prepared teaching force by recruiting top candidates and paying them to go to school. Slots in teacher training programs are highly coveted and shortages are virtually unheard of. (p. 34)

Yet, traditional teacher preparation programs have struggled to procure such recruits. Instead, educational research suggests that traditional teacher preparation programs are more likely to attract individuals that hail from the bottom third of college cohorts (Henke et al., 2000; Gitomer & Latham, 1999; Guarino, Santibañez, & Daley, 2006). However, some alternative pathway programs have targeted and successfully recruited a substantial number of new teacher recruits from the top third of graduating college cohorts. Teach for America stands out as an obvious exemplar of such selective recruitment.

Auguste, et al. (2010) explained that:

Teach for America has shown it is possible to create energy and excitement around the mission of serving disadvantaged students, and to create a selective “brand” for a slice of the profession that is sufficiently appealing to top-third plus students to draw them to the classroom, at least for a two-to-three year stint. (p. 14)

Regardless of criticism about Teach for America’s longitudinal retention rates, it is difficult to dispute their top tier approach to recruitment. Such strategies align well with effective recruitment strategies utilized abroad.

Moreover, Auguste, et al. (2010) also noted how effective recruitment practices abroad not only recruit from the top third of college cohorts, but also filter pools of teacher candidates for qualities that they find crucial to teacher success. They stated, “After recruiting from the top third, [Singapore, Finland, and South Korea] rigorously screen students on other qualities they believe to be predictors of teaching success, including perseverance, ability to motivate others, passion for children, and organizational and communications skills” (p. 9). Interestingly, we find that the characteristics mentioned here and targeted by screening practices abroad parallel the unique dimensions of quality that career changers and second career individuals bring into the classroom.

The lessons gleaned from cross-national comparative analyses of teacher recruitment support a rationale that as traditional and alternative pathway programs in the United States develop tighter entry criteria and screening processes for incoming teacher candidates, both may achieve great gains in at least two dimensions of teacher quality: strong academic competence and adequate professional skill sets. In light of the various dimensions of teacher quality that have surfaced in this analysis, we now turn toward our third analytic inquiry: how well does the teaching certificate measure teacher quality?

The Usefulness of the Certificate as an Indicator of Teacher Quality

The teaching certificate may be too flat to serve as a reliable indicator of teacher quality. While certification has demonstrated positive correlations to student achievement in specific studies (American Association of Colleges for Teacher Education, 2009; Boyd et al., 2007; Boyd et al., 2009), it is by no means a singular predictor of student achievement. A variety of teacher level variables such as participation in meaningful professional development, out-of-field teaching, and performance on licensure exams have also shown correlations with student achievement (Angrist & Guryan, 2004; Dee & Cohodes, 2008; Ferguson & Brown, 2000; Guskey & Yoon, 2009). Thus, while such findings contribute valuable pieces to the teacher quality puzzle, we find limits to the aforementioned studies that link certification to student achievement. As previously noted, confining measures of student learning to that which can be measured by standardized test scores fails to capture the depth and breadth of student learning. Without more comprehensive and holistic models for measuring student learning, researchers and policy makers should proceed with caution before wholeheartedly supporting policy changes based too heavily on research that evaluates the effects of teacher certification using narrowly defined measures of student achievement. In fact, we suggest that hinging constellations of teacher quality heavily on the type of certification that a teacher has obtained and how they have obtained it produces myopia around issues of teacher quality for at least two reasons.

First, by design the teaching certificate is not an instrument capable of measuring anything. On the contrary, the teaching certificate is a flat credential. As a credential it is only capable of assuring that a preparation program has been completed. It neither speaks to the quality of the preparation program completed nor assesses an individual's ability to execute the skills he has developed while training during the program. It cannot evaluate whether or not the program, once completed, yields effects in the classroom. By its nature, the credential is not designed to measure. Rather, it is designed to authenticate a personal accomplishment: program completion.

Second, if we accept the premise that quality teaching encompasses much more than completing a program of study and much more than leveraging gains in students' standardized test scores, then a rationale for using the teaching certificate as an indicator of teacher quality quickly dissolves. In fact, it may be an outdated approach. Hill¹⁷ addressed this, suggesting that heavy reliance on the teaching certificate may be an "antiquated" approach. Hill stated that:

We have been certifying teachers for many, many years. Essentially that measure only assures that a person has completed some kind of a preparation program. It may include an assessment such as a state certification test, but it does not assure quality...It simply says that you've met a minimum. And, we've used the same minimum for a long, long time. We've never really put much thought into: Is this a worthwhile measure? That's why it is antiquated. (personal communication, March 28, 2011)

¹⁷ Personal communication: Interview with Dr. David Hill on March 28, 2011. Dr. David Hill is the Director of Educator Preparation at the Georgia Professional Standards Commission. The interview was recorded and transcribed for inclusion in this paper. Dr. Hill provided written permission for the interview to be included in this manuscript.

Hill's rationale points toward the need to examine how we think about and evaluate teacher effectiveness.

Re-positioning the teacher quality debate allows us to re-visit the strand of argumentation that provided the basis for the plaintiffs' complaint in *Renee v. Duncan* (2010). While the equitable distribution of highly qualified teachers represents a valid policy concern, the logic underpinning their definition of a high quality teacher may not have been sound. Plaintiffs hung their argument on full state certification as an assurance for teacher quality, but this analysis has suggested that such a move provides no such guarantee. If certification, as a credential, is incapacitated for the purposes of measuring teacher quality, then how do we make progress toward ensuring that all children have access to high quality teachers?

Discussion

Our analysis suggests that alternative pathways to teaching have historically attracted second career individuals who contribute distinct dimensions of work force quality to the field of education. We have argued that the unique skills and attitudes of second career teachers comprise dimensions of teacher quality not measurable by certification. Similarly, we have highlighted how contemporary developments in alternative pathway programs represent a separate dimension of teacher quality: exemplary screening and recruitment. In addition, we have suggested that cross-national comparisons indicate that such recruitment strategies have yielded tremendous gains in educational outcomes in an international context. In this analysis, we have advocated for including the dimensions of quality that alternative pathway teachers bring to the profession in configurations of teacher quality. We have also challenged the ability of the teaching certificate to measure teacher quality. Given such advocacy, how do we as educational researchers and policy influencers now envision the role of teacher certification vis-à-vis teacher quality? In efforts to further discussion on this matter, we provide two points worthy of consideration.

First, abolishing teacher certification altogether would be unbeneficial and counterproductive. Hargreaves and Shirley (2009) discuss Finnish approaches to sustaining quality in Finland's educational work force, highlighting the elevated status and high professional standards required for earning a Finnish teaching credential. They state:

Finns control for teacher quality at the point of entry. They get high quality teachers and know how to keep them by giving teachers status, support, small classes, and considerable autonomy. Contrast this with U.S. policies that have advocated 'tearing down the wall' of teacher certification by making it easy for applicants to circumvent university-based systems for preparing new teachers. U.S. policymakers, it seems, want to *raise* the bar in *learning* by *lowering* the bar in *teaching!* (p. 88-89)

A beneficial solution is unlikely to be found by lowering teacher certification standards or abolishing certification altogether.

Second, while certification may be antiquated and incapable of measuring teacher effectiveness, in specific instances, it has influenced gains in standardized test scores. It seems that efforts to move forward from here must somehow pioneer new conceptualizations of teacher quality and teacher effectiveness. In fact, we suggest that when debates about certification are

removed from the teacher quality matrix, we are actually in a better position to develop more mindful constellations of teacher quality.

Policy Recommendations and Implications for Educational Research

In order to push educational reform momentum in the direction of more comprehensive, holistic, and mindful configurations of teacher quality, we submit the following policy recommendations:

1. Reconsider policies that rely too heavily on types of teacher certification and how they are obtained as an assurance of high quality teachers.
2. Advocate for expanded definitions of teacher quality and student learning. While standardized test scores may represent once piece of the quality puzzle, they are not comprehensive.
3. Instill more stringent recruitment and screening processes in all teacher preparation programs, both traditional and alternative.

Of these three recommendations, the third is foundational and perhaps precedes the other two. Absent deliberative conversations about how to approach quality teaching, policymakers are likely to default to anterior methods for measuring student learning and teacher quality regardless of their validity and reliability. Hill (personal communication, March 28, 2011) asserted that:

Part of our problem in education is that we allow politicians to dictate what the measures [of teacher quality] will be. Under No Child Left Behind, for the first time in education we were forced to disaggregate data. So, as long as we continue to allow politicians to dictate what we do in terms of measuring effectiveness, then we are going to get low-level measures. It is time for educators to take control of our profession, and we need to be tough on ourselves. We need to create the measures that will make a difference.

Following Hill's line of thinking, we submit the following initiatives for educational researchers:

1. Educational researchers must identify and define dimensions of teacher quality.
2. Educational researchers must develop instruments capable of measuring dimensions of teacher quality.
3. Educational researchers must develop and test models of teacher quality that account for the multi-dimensional nature of teaching and learning.

Ferguson and Brown (2000) hinted at the difficulties of defining and measuring models of teacher quality. They stated:

Ideal assessments of teacher quality would involve directly measuring what teachers contribute to student learning. Unfortunately, since such measures are infeasible, we must resort to various approximations [using]: (1) teachers' test scores, (2) observers' ratings of teachers' professional classroom practice, and (3) students' achievement gains. (p. 134)

It has been over a decade since Ferguson and Brown put forth these three dimensions of teacher quality. Clearly, the field of educational research is overdue for identifying new dimensions and models of teacher quality.

The U.S. Department of Education recognizes this need, declaring in *A Blueprint for Reform* (2010) that it will require states and districts to publish reports on key indicators of teacher effectiveness, defining such indicators as:

teacher qualifications and teacher and principal designations of effectiveness; teachers and principals hired from high-performing pathways; teacher survey data on levels of support and working conditions in schools; the novice status of teachers and principals; teacher and principal attendance; and retention rates of teachers by performance level. States will also be required to report on the performance of teacher and principal preparation programs by their graduates' impact on student growth and other measures, job placement, and retention. (p. 16)

What we see clearly in *A Blueprint for Reform* are categories of data that will be collected about teachers: their qualifications, the level of state-defined effectiveness, their program of preparation, their perceptions about working conditions, and their effect on gains in student achievement. What remains obscure is how state level policy makers will construct definitions of effectiveness and student growth. It is precisely this ambiguity that should urge the field of educational research to become involved in developing models of teacher quality capable of capturing the multi-dimensional nature of teaching and learning.

On this note, Hoy and Tartar's (2011) proposed research agenda encourages provocative approaches to measuring teacher quality using innovative variables. In addition to several previously studied variables such as efficacy and trust, Hoy and Tartar also encourage the development of research instruments capable of measuring new dimensions of effective educator attributes such as "zest", "high quality connections", and "resilience" (p. 437-438). This proposed research agenda may provide an intriguing starting point as educational researchers begin to expand models that seek to predict teacher effectiveness.

Conclusion

The *Renee v. Duncan* (2010) decision raised important equity issues about the distribution of highly qualified teachers. Children's rights to equitable educational experiences have their foundation in both case law and statutory law. However, plaintiffs' argument in *Renee v. Duncan* pivoted on full state certification as a threshold indicator of teacher quality. While this case brought to the surface discrepancies between federal and state regulations, such discrepancies were addressed by Congress when it passed the continuing resolution bill that granted highly qualified status to alternative pathway teachers still pursuing full state certification.

Subsequently, protests over Congress's changes to NCLB's configuration of the highly qualified teacher and ongoing debate about teacher quality create an opportunity to interrogate policy configurations of the highly qualified teacher that rely heavily on full state certification as an indicator of teacher quality. Our analysis suggests that alternative pathway programs have historically attracted individuals that bring unique dimensions of teacher quality to the

classroom. Similarly, a comparative juxtaposition between successful screening and recruitment strategies employed abroad and those used by some alternative pathway programs in the United States suggests that some alternative pathway programs are doing a better job at recruiting from top tier college cohorts than their traditional preparation counterparts. Such successes align with effective educational reform movements abroad.

Additionally, the teaching certificate is a flat credential, not an instrument. As such, the only dimension of teacher quality that it is capable of assessing is program completion. In order to push the field forward and achieve the equity aims of educational reform, policymakers must reconsider and reconfigure definitions of teacher quality that are overly reliant on types of certification and how they are obtained. Similarly, educational researchers must develop and test models of teacher quality that are comprehensive and holistic instead of narrowly reliant upon standardized test scores.

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References

- A Blueprint for Reform*. (2010). Washington, D.C.: U.S. Department of Education, Office of Planning, Evaluation and Policy Development.
- Anderson, K., & Kusler, M. (2010). Letter to the United States senate. Washington, DC: National Education Association. Retrieved from www.educationvotes.nea.org/wp-content/.../CR-HQT-shortcut-letter.pdf
- Affeldt, J. (2010). Congress lowering standards for teachers; hiding truth from poor, minority parents. *Huffpost Education*. Retrieved from http://www.huffingtonpost.com/john-affeldt/congress-lowering-standar_b_799523.html
- American Association of Colleges for Teacher Education (2009). *Teacher preparation makes a difference*. Washington, DC: Author.
- Angrist, J. D., & Guryan, J. (2004). Teacher testing, teacher education, and teacher characteristics. *The American Economic Review*, 94(2), 241-246.
- Aquila, F. D. (2008). *School law for K-12 educators: Concepts and cases*. Thousand Oaks, CA.: Sage Publications.
- Auguste, B., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching*: New York, NY: McKinsey & Company.
- Bardach, E. (2005). *A practical guide for policy analysis: The eightfold path to more effective problem solving*. Washington, DC: CQ Press.
- Boyd, D., Goldhaber, D., Lankford, H., & Wyckoff, J. (2007). The effect of certification and preparation on teacher quality. *Future of Children*, 17(1), 45-68.
- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis*, 31(4), 416-440.
- Brown v. Board of Education of Topeka, 347 U.S. 483 (1954).
- Cal. Code Regs. tit. 5, § 6110(2)
- Chambers, D. (2002). The real world and the classroom: Second-career teachers. *The Clearing House*, 75, 212-217.
- Chifeng, D., Sindelar, P., Denslow, D., Dewey, J., & Rosenberg, M. (2007). Economic analysis and the design of alternative-route teacher education programs. *Journal of Teacher Education*, 58(5), 422-439.
- Chin, E., & Young, J. W. (2007). A person-oriented approach to characterizing beginning teachers in alternative certification programs. *Educational Researcher*, 36(2), 74-83.

- Chorneau, T. (2011). Congress applies temporary fix to “highly qualified” teacher issue. *SIA Cabinet Report*. Retrieved from <http://www.siacabinetreport.com/home.aspx>
- Christensen, C. (2008). *Disrupting class*. New York, NY: McGraw Hill.
- Committee on the Study of Teacher Preparation Programs in the United States. (2010). *Preparing teachers: Building evidence for sound policy*. Washington, DC: National Research Council.
- Continuing Resolution Bill, H.R. 3082
- Cordray, M. M., & Cordray, R. (2008). Strategy in supreme court case selection: The relationship between certiorari and the merits. *Ohio State Law Journal*, 69(1), 1-51.
- Croninger, R. G., Rice, J. K., Rathbun, A., & Nishio, M. (2007). Teacher qualifications and early learning: Effects of certification, degree, and experience on first-grade student achievement. *Economics of Education Review*, 26(3), 312-324.
- Crow, G. M., Levine, L., & Nager, N. (1990). No more business as usual: Career changers who become teachers. *American Journal of Education*, 98(3), 197-223.
- Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*. Retrieved from <http://epaa.asu.edu/ojs/article/view/392>
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2008). A future worthy of teaching for America. *Phi Delta Kappan*, 89(10), 730-733.
- Darling-Hammond, L. (2010a). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 1-2.
- Darling-Hammond, L. (2010b). They're number one. *NEA Today*, October/November, 30-36.
- Dee, T., & Cohodes, S. (2008). Out-of-field teachers and student achievement. *Public Finance Review*, 36(1), 7-32.
- Dial, M., & Stevens, C. J. (1993). Introduction: The context of alternative teacher certification. *Education and Urban Society*, 26(1), 4-17.
- Dieterich, C. A., & Panton, C. L. (1996). Motivations of post-baccalaureate students seeking teacher certification: A context for appropriate advising strategies. *Journal of Career*

Development, 22(4), 249-259.

Dill, V. S., & Stafford-Johnson, D. (2002). A different road. *American School Board Journal*, 189(11), 44-46.

Ebner, T., & Hauss, W. (2011). Dozens of groups protest lowering of teacher standards: Organizations join forces in urging Obama administration, congress to reverse course. *Feature Article of the American Association of Colleges for Teacher Education*. Retrieved from <http://aacte.org/index.php?/Media-Center/Feature-Articles/dozens-of-groups-protest-lowering-of-teacher-standards.html>

Feistritzer, C. E. (1993). National overview of alternative teacher certification. *Education and Urban Society*, 26(1), 18-28.

Feistritzer, C. E. (1994). The evolution of alternative teacher certification. *The Educational Forum*, 58(2), 132-138.

Ferguson, R. F., & Brown, J. (2000). Certification test scores, teacher quality, and student achievement. In D. Grissmer & J. M. Ross (Eds.), *Analytic issues in the assessment of student achievement* (pp. 133-156). Washington, DC: National Center for Educational Statistics.

Freidus, H., & Krasnow, M. (1991). *Second career teachers: Themes and variations*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Futrell, M. H. (2010). Transforming teacher education to reform America's p-20 education system. *Journal of Teacher Education*, 61(5), 432-440.

Gatlin, D. (2009). A pluralistic approach to the revitalization of teacher education. *Journal of Teacher Education*, 60(5), 469-477.

Gimbert, B. G., Cristol, D., & Sene, A. M. (2007). The impact of teacher preparation on student achievement in algebra in a "hard-to-staff" urban preK-12-university partnership. *School Effectiveness and School Improvement*, 18(3), 245-272.

Gitomer, D. H., & Latham, A. S. (1999). *The academic quality of prospective teachers: The impact of admissions and licensure testing*. Princeton, N.J.: Educational Testing Service.

Goals 2000: Educate America Act. (1993-1994). 103rd Congress. Public Law Number: 103-227

Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208.

- Guskey, T. R., & Yoon, K. S. (2009). What works in professional development? *Phi Delta Kappan*, 90(7), 495-500.
- Hanushek, E. A., & Rivkin, S. G. (2007). Pay, working conditions, and teacher quality. *The Future of Children*, 17(1), 69-86.
- Hanushek, E. A., & Rivkin, S. G. (2010). Generalizations about using value-added measures of teacher quality. *The American Economic Review*, 100(2), 267-271.
- Hargreaves, A., & Shirley, D. (2009). *The fourth way: The inspiring future for educational change*. Thousand Oaks, CA: Corwin Press.
- Henke, R. R., Chen, X., Geis, S., & Knepper, P. (2000). Progress through the teacher pipeline: 1992-93 college graduates and elementary/secondary school teaching as of 1997. *Education Statistics Quarterly*, 2(1), 91-98.
- Hoy, W. K., & Tarter, C. J. (2011). Positive psychology and educational administration: An optimistic research agenda. *Educational Administration Quarterly*, 47(3), 427-445.
- Hussar, W. J. (1999). *Predicting the need for newly hired teachers in the U.S. to 2008-2009*. Washington, DC: National Center for Educational Statistics.
- Imig, D., & Imig, S. (2006). The teacher effectiveness movement. *Journal of Teacher Education*, 57(2), 167-180.
- Ingersoll, R.M., & Consortium for Policy Research in Education. (2007). *A comparative study of teacher preparation and qualifications in six nations*. Consortium for Policy Research in Education. Philadelphia, PA: University of Pennsylvania.
- Johnson, S., Birkeland, S., & Peske, H. (2005). Life in the fast track: How states seek to balance incentives and quality in alternative teacher certification programs. *Educational Policy*, 19(1), 63-89.
- Labaree, D. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, 34(1), 39-81.
- Labaree, D. (2010). Teach for America and teacher ed: Heads they win, tails we lose. *Journal of Teacher Education*, 61(1-2), 1-2.
- Levin, H. M. (1987). Education as a public and private good. *Journal of Policy Analysis and Management*, 6, 628-641.
- Mayotte, G. A. (2003). Stepping stones to success: Previously developed career competencies and their benefits to career switchers transitioning to teaching. *Teaching and Teacher Education*, 19(7), 681-695.

- National Center for Alternative Certification. (2010). *Introduction and overview*. Retrieved from <http://www.teach-now.org/overview.cfm>
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform: A report to the nation and the Secretary of Education, United States Department of Education by the National Commission on Excellence in Education*, Washington, DC.
- No Child Left Behind. (2001). 20 U.S.C § 6301 et seq.
- Ng, J., & Thomas, K. (2007). Cultivating the cream of the crop: A case study of urban teachers from an alternative teacher education program. *Action in Teacher Education*, 29(1), 3-19.
- Powers, F. W. (2002). Second-career teachers: Perceptions and mission in their new careers. *International Studies in Sociology of Education*, 12, 303-318.
- Proweller, A., & Mitchener, C. P. (2004). Building teacher identity with urban youth: Voices of beginning middle school science teachers in an alternative certification program. *Journal of Research in Science Teaching*, 41(10), 1044-1062.
- Renee v. Duncan, 623 F.3d 787 (2010).
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Richardson, P. W., & Watt, H. M. G. (2005). 'I've decided to become a teacher': Influences on career change. *Teaching and Teacher Education*, 21(5), 475-489.
- Statsky, W. P. (1999). *Legal research and writing* (5th ed.). Albany, NY: West Legal Studies.
- Stone, D. (2002). *Policy paradox*. New York, NY: Norton & Company.
- Strauss, V. (2010). Congress approves weird definition of 'highly qualified' teachers. *The Washington Post*. Retrieved from <http://voices.washingtonpost.com/answer-sheet/teachers/congress-passes-weird-definiti.html>
- Tigchelaar, A., Brouwer, N., & Vermunt, J. D. (2010). Tailor-made: Towards a pedagogy for educating second-career teachers. *Educational Research Review*, 5(2), 164-183.
- Tyack, D. B. (2003). *Seeking common ground*. Cambridge, MA: Harvard University Press.
- Wagner, T. (2008). *The global achievement gap*. New York, NY: Basic Books.
- Wineburg, M. (2006). Evidence in teacher preparation. *Journal of Teacher Education*, 57(1), 51-64.